Cape Light Compact

The Cape Light Compact

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VIA HAND DELIVERY AND ELECTRONIC MAIL

August 2, 2010

Mr. Mark D. Marini, Secretary
Department of Public Utilities
One South Station, 2nd Floor
Boston, MA 02110

Mr. Philip Giudice, Commissioner
Department of Energy Resources
100 Cambridge Street, Suite 1020
Boston, MA 02114

Re: The Cape Light Compact 2009 Annual Report on Energy Efficiency Activities

Dear Secretary Marini and Commissioner Giudice:

I am pleased to enclose for filing with the Department of Energy Resources (DOER) and the Department of Public Utilities (DPU) the Cape Light Compact's *2009 Annual Report on Energy Efficiency Activities*. This report is also being submitted electronically by e-mail to the DPU and to Larry Masland of the DOER.

If you have any questions or comments regarding this report, please feel free to contact me or the Compact's Energy Efficiency Program Manager, Kevin Galligan directly at (508) 375-6828.

Sincerely,

Bob Mahoney

Robert Mahoney
Chairman
Cape Light Compact Governing Board

Enclosure

Cape Light Compact

Annual Report on Energy Efficiency Activities in 2009

Submitted to the
Massachusetts Department of Public Utilities
and the Massachusetts Department of Energy Resources

August 2, 2010

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Table of Contents

I. Executive Summary

A. Introduction

Since July 2001 the Cape Light Compact has delivered energy efficiency programs to all member towns on Cape Cod and Martha's Vineyard. This Annual Report provides detailed information on the Compact's energy efficiency activities and savings during the course of calendar year 2009.

The Compact's 2009 Energy Efficiency Plan (referred to henceforth as the "2009 EEP") was approved on May 29, 2009. Using the 2009 funding as approved by the Department, the Compact implemented the following set of efficiency programs and non program-related pilots in 2008:

- The Residential ENERGY STAR® New Construction Program, which provides home buyers, home builders, and construction trade allies with technical assistance and financial incentives to increase the efficiency of homes that are newly built or undergo major renovations. Results of this program are shown in the Residential Lost Opportunity row of Table 2 and in Section III. Results of the Low-Income New Construction Program, which provides low-income housing development agencies and residential construction trade allies with incentives to increase the home energy rating of new low-income housing, are also included.

  Green Affordable Housing Initiative: In 2007, the Massachusetts Technology Collaborative approved a $1.5 million grant to the Cape Light Compact in support of the Green Affordable Housing Initiative. $1.2 million of the total funds are earmarked for renewable energy systems to be installed on newly constructed affordable homes. The remainder of the funds is for advanced building technology. The Compact was one of six grantees throughout the state.

  The grant funds are for new construction homes that are designated affordable, consistent with the state guidelines. This program builds on the Cape Light Compact's already successful Residential New Construction Demonstration Pilot, which supported four homes built to "green" standards in Chatham, Orleans, and Falmouth in 2003-2004. The Compact's program will help affordable housing developers find ways to shrink the "environmental footprint" of homes and result in lower greenhouse gas emissions, including the cost of energy for those homes. The Green Affordable Housing Initiative aims to catalyze the affordable housing financing, development, and builder communities to include more green design and renewable energy in future developments.

  Between 2008 and 2010, the program is expected to help build as many as 55 affordable housing units on Cape Cod and Martha's Vineyard. While there were no home completions in 2009, the Compact worked on 39 units over the course of the year.

Major Renovations Pilot: In December 2007, the Cape Light Compact began working with a homeowner who expressed interest in an addition that was eligible for neither the ENERGY STAR® Homes program nor the single-family retrofit program. To address this gap in program offerings, Cape Light Compact worked with a local HERS rater to identify measures in existing and new home programs that would address the structure. As a result of this effort, the major renovations pilot, addressing additions affecting 500 sq. ft or more, was created in 2008 and formalized in 2009. One test home was completed in 2008, and four were completed in 2009. The pilot has now extended to the other electric program administrators in Massachusetts, and the EPA has developed protocols for a renovation program based on the experience in Massachusetts.

- Residential High Efficiency Central Air Conditioning Program, which was reintroduced in 2009 (the Cape Light Compact closed the program in March 2006 due to budget constraints), promotes the purchase and installation of ENERGY STAR® qualified central air conditioning systems in new construction and market conversion of older heating, ventilation and air conditioning ("HVAC") units. The program also is designed to increase the number of trained technicians in the state and to improve the quality of installations. Results of this program are shown in the Residential HVAC row of Table 2 and in Section III.

- The Residential Mass Save® Program, which provides all interested residential customers with energy savings education, the opportunity for a home energy audit and financial incentives for numerous electric and non-electric efficiency measures. Results of this program are shown in the Residential Retrofit 1-4 row of Table 2 and in Section III.

  Deep Retrofit Pilot: In 2009, Cape Light Compact investigated the potential of achieving approximately 30% to 50% in energy savings through a pilot program focusing on deep retrofits of existing residential buildings.

  The goal of the pilot program was to assess the costs and benefits of deep energy retrofits in Massachusetts residences. The design included a plan to support deep retrofits and to gather information on customer satisfaction, behavior modification, and energy savings. The pilot was designed to help the Commonwealth begin to develop information on appropriate measures for deep retrofits, approaches for different housing types, ways to educate customers and appropriate marketing materials, and the types of financing mechanisms and incentive levels to drive participation. Additionally, the Commonwealth would gain experience modeling the energy savings and training energy-retrofit contractors. Pilot program services were delivered through the existing Mass Save® network, with possible energy modeling and other assistance provided through the Residential New Construction Program.

  The Compact's participation goal was to reach out to and engage 3 homeowners who were planning to undergo major exterior renovations (e.g., siding and/or window replacements). The Compact received 12 inquires on the pilot from

October 2008 through December 2009 and had one project move forward in December 2009 with work to begin in the spring of 2010. The difficulties inherent in getting interested parties to participate in this pilot program include the fact that homeowners need to commit a considerable amount of upfront capital to the project and major renovation timeframes are homeowner-driven. As a result, program results will likely be available in conjunction with 2010 reporting.

- The Residential ENERGY STAR® Lighting Program, which seeks to increase the availability and use of ENERGY STAR® qualified lighting. This program is used to implement the Northeast Energy Efficiency Partnership ("NEEP") initiatives and other regional market transformation efforts. Results of this program are shown in the Residential Lighting row of Table 2 and in Section III.
- The Residential ENERGY STAR® Appliances Program, which seeks to increase the availability and use of ENERGY STAR® qualified appliances, including: room air conditioners, dehumidifiers and refrigerators as well as consumer electronics such as Advanced Power Strips. This program is used to implement the Northeast Energy Efficiency Partnership ("NEEP") initiatives and other regional market transformation efforts. Results of this program are shown in the Residential Appliances row of Table 2 and in Section III.
- Non Program-Related Pilots, which seek to investigate new approaches and measures. The following non program-related pilots were conducted in 2009:

  Smart Home Energy Monitoring Pilot: Cape Light Compact designed and implemented a Residential Smart Energy Monitoring Pilot program in 2009 to evaluate potential energy savings from in−home energy monitoring systems, gain insight to behavioral aspects of energy use, and inform future residential Smart Grid projects. This pilot program was evaluated in 2009 and results are discussed in Section III. Evaluation of the pilot is ongoing through the end of calendar year 2010, at which point further information regarding the persistence of the identified energy savings will be further measured and evaluated. As a result of the findings in the report, Cape Light Compact will expand the pilot by offering Phase 2 which will include residential and commercial participants. An RFP for Phase 2 will be available in August 2010.

  Additional results are available in a report that is available at http://www.capelightcompact.org/reports.html. Click on the report titled, Residential Smart Home Energy Monitoring Pilot Final Evaluation Report, dated March 31, 2010.

  Energy Pay and Save Pilot: The Massachusetts program administrators, including the Cape Light Compact, designed and implemented a Energy Pay and Save Pilot program in 2009 to determine the extent to which on-bill financing motivates customers to install energy efficiency measures. This pilot program was evaluated in 2009 and results are discussed in Section III.

- The Low-Income Single Family Program, which provides low-income customers in single-family dwellings with assistance in installing efficient lighting, appliances, and weatherization measures. These services are similar to, but more extensive in ability to leverage program benefits and offer higher incentives to eligible customers, than in the Mass Save® program. Results of this program are shown in the Low-Income Retrofit 1-4 row of Table 3 and in Section III.
- The Low-Income Multi-Family Program, which provides owners and managers of low-income multi-family dwellings with assistance in purchasing and installing efficient lighting, appliances and space heating measures. Results of this program are shown in the Low-Income Retrofit Multi-Family row of Table 3 and in Section III.
- The Commercial and Industrial New Construction Program, which provides technical assistance and financial incentives to increase the efficiency in the construction, renovation, and/or remodeling of all commercial, industrial, government and multi-family housing facilities. Results of this program are included in the C&I Lost Opportunity row of Table 4 and in Section III.
- The Medium and Large Commercial and Industrial Retrofit Program, which provides technical and financial assistance to medium and large commercial and industrial ("C&I") customers seeking to do discretionary replacements of existing operating equipment and processes in their facilities with high-efficiency alternatives. Results of this program are included in the C&I Large Retrofit row of Table 4 and in Section III.
- The Small Commercial and Industrial Retrofit Program, which provides technical assistance, financial incentives and direct installation to small C&I customers to replace existing operating equipment and systems with high-efficiency equipment. Results of this program are included in the C&I Small Retrofit row of Table 4 and in Section III.
- The Government Agencies Program, which provides technical assistance and financial incentives[1] to all government facilities, including municipal, state and federal facilities. For the purposes of reporting the results of this program in this Annual Report, in Table 4 and in Section III, the results of efficiency activities with small government customers are included in the C&I Small Retrofit row, while the results of efficiency activities with large government customers are included in the C&I Large Retrofit row. The results of government new construction activities are included in the C&I Lost Opportunity row.
- The Commercial and Industrial Products and Services Program, which seeks to increase the availability and use of more efficient motors, lighting designs, and HVAC systems. This program is used to implement NEEP and other regional

[1] Unlike the Compact's other C&I Programs, where a customer co-pay is required, the Government program covers the entire cost of eligible energy efficiency services resulting from an audit up to a cap of $150,000 per project.

market transformation initiatives. The results of this program are included in the C&I Lost Opportunity row of Table 4 and in Section III.

B. Report Organization

This Executive Summary provides an overview of the Compact's energy efficiency programs' (referred to as BCR Activities) benefits and costs. For each sector there are tables summarizing the lifetime energy savings, lifetime capacity savings, the non-electric benefits (NEBs), and the dollar values of the total benefits[2] and the total costs.

The savings data are presented in terms of both "preliminary" and "reported" data.

- The preliminary data refers to savings estimates that are based on the evaluation impact factors that were used in the 2009 EEP.[3]
- The reported data refers to savings estimates that are based on evaluation impact factors from all of the program evaluations that have been prepared since the 2009 EEP was filed. Thus, the reported data presents our best estimate of the efficiency savings, based on all the evaluation information available at this time.

Section II of this Annual Report provides a discussion of the methodology that is used for program monitoring and evaluation. It presents a brief summary of the types of evaluations that are used, and a description of the methodology for estimated net energy savings. It also includes a list of the evaluation studies that were used to prepare the 2009 reported efficiency savings results. These evaluation studies are also used to inform program design and delivery.

Section III of this Annual Report provides more detailed results of the program activities. The tables in this section include information regarding the number of program participants, the annual efficiency savings and non-electric benefits, the benefit-cost ratio of the program, and the savings impacts by type of end-use (lighting, HVAC, motors, refrigeration, hot water, and end-user behavior). This section also summarizes recent evaluation report findings where relevant.

Finally, the Appendices provide more detail regarding program design and implementation, monitoring and evaluation results and the program savings. The following is a list of the Appendices and the content available in each Appendix:

Appendix 1 provides a glossary of terms and abbreviations;

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[2] The Compact is submitting benefit-cost ratios for its 2009 energy efficiency programs with additional capacity and energy benefits in the form of a demand reduction induced price effect ("DRIPE"). This is consistent with its 2009 EEP (see page 12 stating, "On average, all of the Compact's efficiency programs in the Proposal combined are estimated to have a benefit-cost ratio of roughly 3.82 (using the TRC test without adders) and 4.14 (taking into account capacity and energy Demand Reduction Induced Price Effects). Exhibit B, Appendix A5.) and other Program Administrators practice in 2009.

[3] D.P.U. 07-47, The Cape Light Compact's Proposed Second Amendment to its Approved Energy Efficiency Plan: 2007-2012 (the "2009 EEP").

Appendix 2 provides tables showing the impact factors used to calculate reported savings by sector, program, and measure;

Appendix 3 provides greater detail on program budgets, savings and benefits;

Appendix 4 provides a comparison of planned and reported outsourced and in-house expenditures;

Appendix 5 provides a calculation of the Program Administrator's incentive;[4]

Appendix 6 provides the executive summaries as well as full reports for all of the evaluation studies that are applicable to this program year;

Appendix 7 provides performance metrics-related documents and reports;[5]

Appendix 8 provides the detailed inputs into the savings calculations;

Appendices 9 and 10 are new to the 2009 Annual Report. In 2009, the Department of Public Utilities (D.P.U.) requested the following in conjunction with the 2009 Annual Report filing:[6] 1) "progress reports and updates" on a number of initiatives and 2) "sections identifying (1) all programs for which savings, costs, or benefits vary by more than 20 percent from planned values; (2) all programs with a benefit/cost ratio less than one; and (3) all programs that the Program Administrator intends to discontinue."

Appendix 9 provides the Progress Report Updates on Compliance Items Consistent with the Department's Order in D.P.U. 09-119 for the Progress Report;

Appendix 10 provides the Variance Analysis Consistent with the Department's Memorandum dated June 22, 2010 for the Variance Analysis;

Appendix 11 is also new to the 2009 Annual Report. During the Cape Light Compact's 09-119 proceeding, the D.P.U. requested that the Cape Light Compact submit the Year End 2009 Town Program Activity Reports with the 2009 Annual Report. Therefore, Appendix 11 provides these reports.

C. Summary of Results

Table 1 provides a summary of the program expenses and savings. It also presents the percent change between the final reported results and (a) the preliminary reported results, and (b) the estimates of expenses and savings targets in the 2009 EEP. The values in the "Amount" column are the 2009 results, based on all evaluations available at this time.

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[4] As the Cape Light Compact does not receive a performance incentive, there is no content in this Appendix.

[5] As the Cape Light Compact does not receive a performance incentive, there is no content in this Appendix.

[6] Hearing Officer Memorandum, RE: 2009 Annual Reports, June 22, 2010.

TABLE 1				
SAVINGS AND EXPENSES FOR 2009				
Measurement	Amount	Units	Percent Change Comparison	
			(Report-Pre)/Pre	(Report-Plan)/Plan
Prorgram Implementation Expenses	$8.726	$ - Millions	0%	-10%
Total Expenses	$8.901	$ - Millions	0%	-12%
Annual Energy Savings	14.079	GWh	-24%	-32%
Annual Summer Demand Savings	2.788	MW	-9%	-25%
Annual Winter Demand Savings	4.581	MW	-18%	3%
Lifetime Energy Savings	163.637	GWh	-16%	-21%
Lifetime Demand Savings	41.587	MW-Years	-4%	-23%
Total Resource Cost Test	3.85	Benefit / Cost	-9%	-7%
Performance Incentive - After Taxes	-	$ - Millions	0%	0%

Program implementation expenses include all of the costs incurred by the Compact, except for monitoring and verification costs. Total expenses include program implementation costs, plus monitoring and verification costs, plus customer contributions.

The Compact's 2009 program implementation expenses were roughly 10% lower than the budgets in the 2009 EEP. The lower program implementation expenses were due to lower marketing, incentives, and sales, technical assistance and training costs, despite higher program planning and administrative costs.

- The lower marketing, incentives, and sales, technical assistance and training costs were due to delays in plan approval and RGGI fund receipts. As a result of these delays, the Compact did not have enough time to ramp up the programs and thus expend all of the funds in 2009.
- The higher program planning and administrative costs were due to additional legal and technical support services. The 2010-2012 Statewide & Individual Plans required greater legal and technical support services than planned.

The Compact's 2009 total expenses were roughly 12% lower than the budgets in the 2009 EEP. The lower total expenses were due to lower evaluation costs, in addition to lower marketing, incentive, and sales, technical assistance, and training costs.

- The lower evaluation costs were due to the continued benefits of shared costs among all program administrators participating in joint statewide and regional studies.

The annual and lifetime energy savings achieved in 2009 were lower than those estimated in the 2009 EEP (by 32% and 21%, respectively). The annual summer and lifetime capacity savings achieved in 2009 were lower than those estimated in the 2009 EEP (by -25% and -23%, respectively). The annual winter capacity savings achieved in 2009 were slightly higher (3%) than those estimated in the 2009 EEP. This was due to a greater uptake of measures with annual winter capacity savings, relative to measures with annual summer capacity savings.

Savings declines were primarily experienced in the Residential Lost Opportunity, ENERGY STAR® HVAC, Residential Lighting, and Low-Income Retrofit Multi-Family programs. Please see Appendix 10 (Variance Analysis Consistent with the Department's Memorandum dated June 22, 2010) for more details on the variance in expenditures, savings and benefits relative to the 2009 EEP and reasons for this variance.

The benefit-cost ratio of the 2009 programs in total was 3.85, including capacity and energy DRIPE. This indicates that the Compact's programs in total are highly cost-effective, where every $1.00 spent reduces the net cost of electricity by $3.85.

D. Summary of Results by Sector

1. Residential Programs

Table 2 presents the lifetime energy savings, lifetime capacity savings, and lifetime non-electric benefits for each of the residential programs. It also presents the total cumulative benefits and costs, in 2009 present value dollars. These total benefits and costs are used to determine whether each program is cost-effective, based on the total resource cost (TRC) test.

TABLE 2
SUMMARY OF RESIDENTIAL BCR ACTIVITIES

Benefit-Cost Ratio	Lifetime MWH		Lifetime kW		Lifetime $ NEB		TRC Values	
Activity	Preliminary	Report	Preliminary	Report	Preliminary	Report	$-Benefits	$-Costs
A02a Residential Lost Opportunity	2,023	2,023	942	942	$710,143	$710,143	$1,163,373	$443,560
A02b Residential HVAC	498	498	704	704	$0	$0	$264,201	$62,539
A03a Residential Retrofit 1-4	29,838	29,838	14,522	14,522	$6,510,300	$6,510,300	$13,745,762	$3,334,379
A03b Residential Retrofit Multifamily	NA	NA	NA	NA	NA	NA	NA	NA
A03c Residential Load Response	NA	NA	NA	NA	NA	NA	NA	NA
A04a Residential Lighting	43,165	12,885	2,829	958	$322,614	$111,745	$1,775,504	$412,799
A04b Residential Appliances	4,684	4,684	405	405	$971,454	$971,454	$1,513,556	$228,457
Total	80,208	49,928	19,403	17,531	$8,514,511	$8,303,642	$18,462,396	$4,481,734

Figures 1 through 4 present the same information as Table 2. They indicate that most of the residential energy and capacity savings are obtained from the Residential Retrofit 1-4 and Residential Lighting programs; that most of the non-electric benefits come from the Residential Retrofit 1-4 program; and that all residential programs are cost-effective.

The Results of the Multistate CFL Modeling Effort[7] based on 2009 program results and Residential Lighting Markdown Impact Evaluation[8] based on 2008 program results had the following impact on the Residential Lighting program results:

- Reduced the reported lifetime MWh savings relative to the preliminary lifetime MWh savings;
- Reduced the reported lifetime kW savings relative to the preliminary lifetime kW savings; and,
- Reduced the reported lifetime non-energy benefits relative to the preliminary lifetime non-energy benefits.

This is due to the fact that the in-service rate changed from 117% to 40%, gross annual kWh savings changed from 57 to 47, and gross annual kW savings changed from 0.049 to

[7] *Results of the Multistate CFL Modeling Effort*, NMR Group, Inc., February 4, 2010.

[8] *Residential Lighting Markdown Impact Evaluation* by Nexus Market Research, RLW Analytics, Inc, and GDS Associates, January 20, 2009.

0.046. Please see section III.A.3 for the Results of the Multistate CFL Modeling Effort study within the Residential ENERGY STAR® Lighting Program for more details.

FIGURE 1
RESIDENTIAL LIFETIME MWH

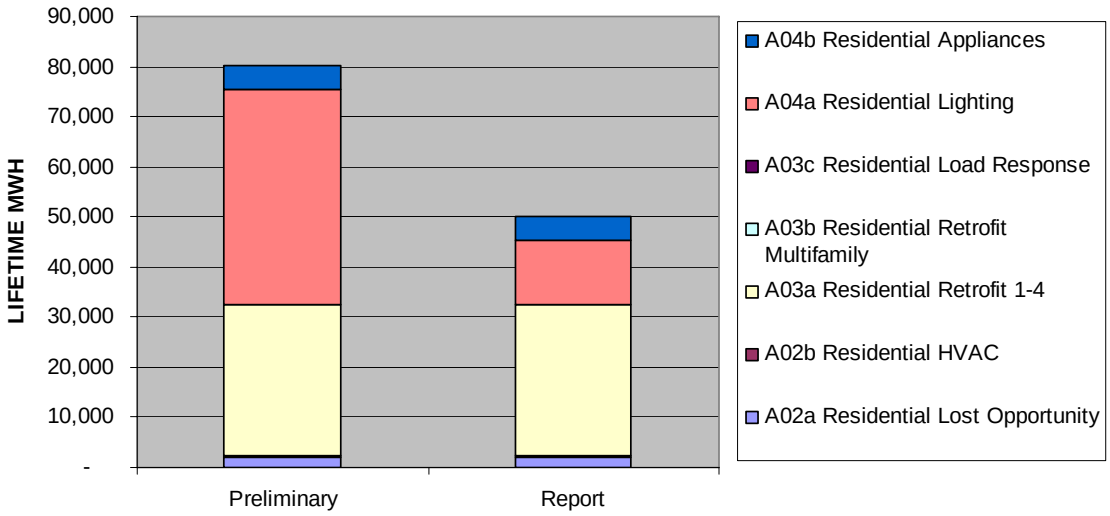
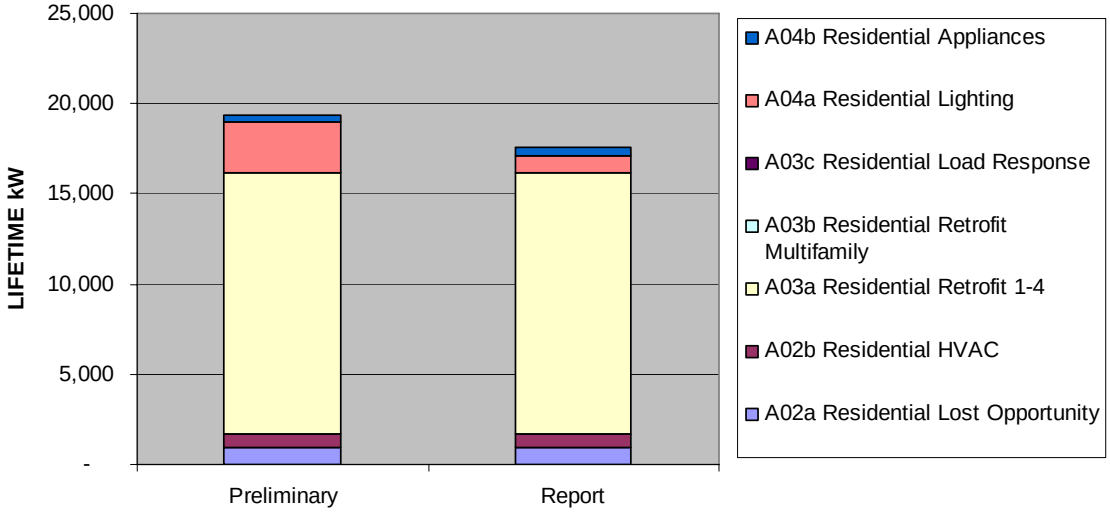
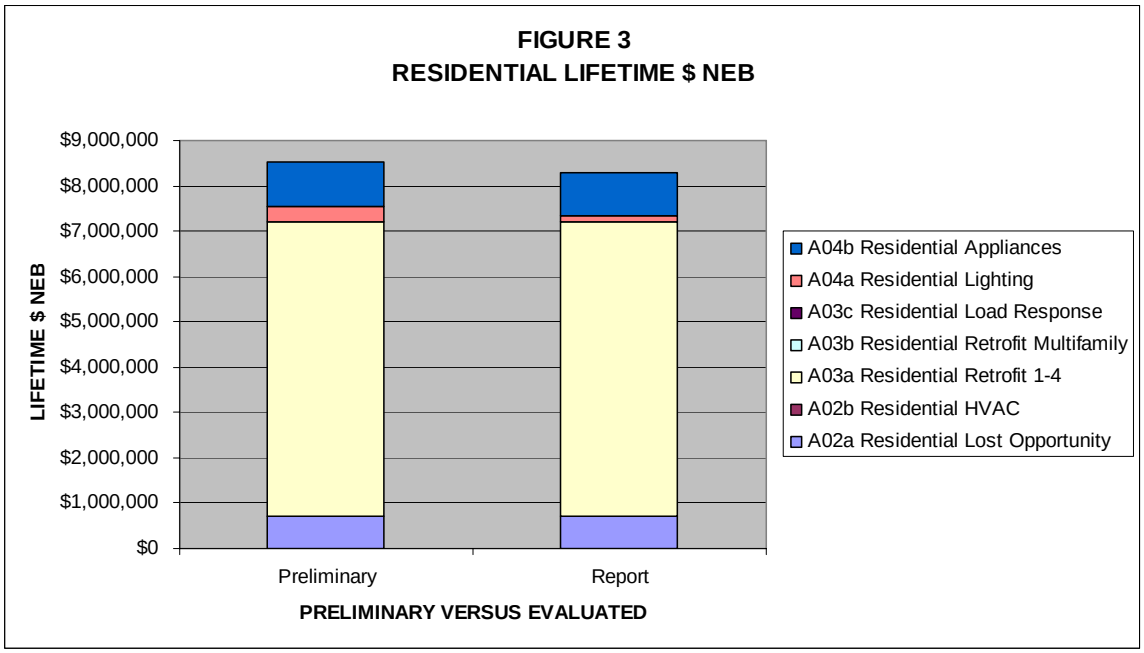
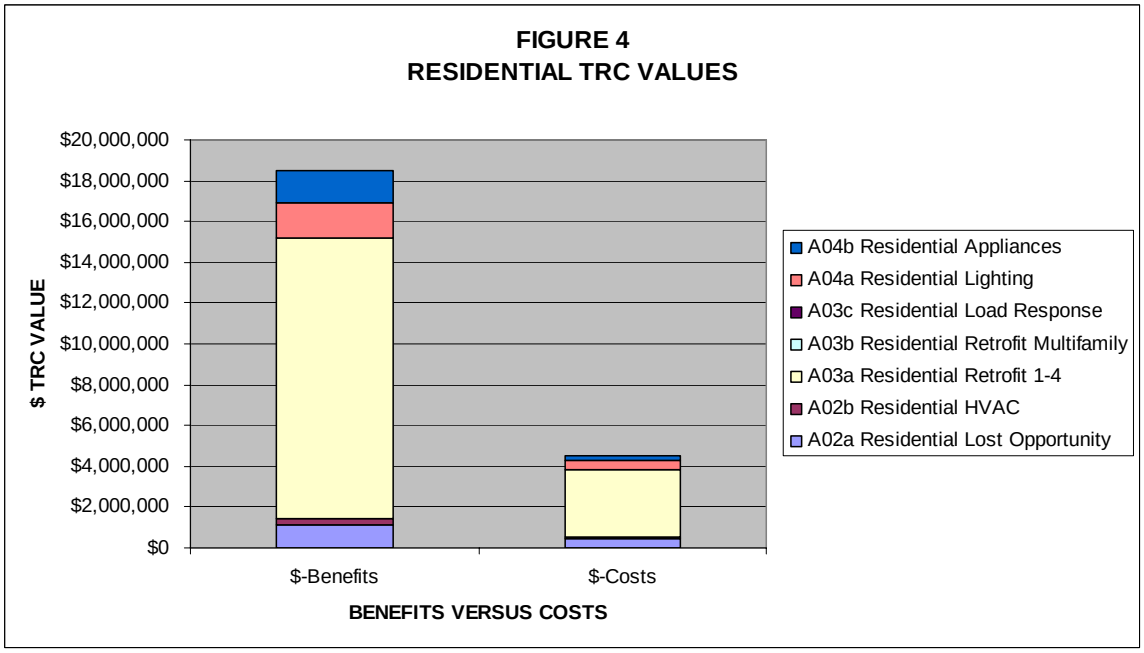


FIGURE 2
RESIDENTIAL LIFETIME kW







2. Low-Income Programs

Table 3 presents the lifetime energy savings, lifetime capacity savings, and lifetime non-electric benefits for each of the low-income programs. It also presents the total cumulative benefits and costs, in 2009 present value dollars. These total benefits and costs are used to determine whether each program is cost-effective, based on the total resource cost test.

TABLE 3								
SUMMARY OF LOW-INCOME BCR ACTIVITIES								
Benefit-Cost Ratio	Lifetime MWH		Lifetime kW		Lifetime $ NEB		TRC Values	
Activity	Preliminary	Report	Preliminary	Report	Preliminary	Report	$-Benefits	$-Costs
B02a Low-Income Lost Opportunity	NA	NA	NA	NA	NA	NA	NA	NA
B03a Low-Income Retrofit 1-4	4,259	4,259	1,642	1,642	$2,556,586	$2,556,586	$3,454,183	$824,610
B03b Low-Income Retrofit Multifamily	193	193	11	11	$889,419	$889,419	$909,542	$169,814
Total	**4,451**	**4,451**	**1,654**	**1,654**	**$3,446,006**	**$3,446,006**	**$4,363,725**	**$994,424**

Figures 5 through 8 present the same information graphically as listed in Table 3. They indicate that most of the energy and capacity savings and non-electric benefits are coming from the Low-Income Retrofit 1-4 program and all of the programs are cost-effective. There is no difference between the reported and preliminary results for Low-Income programs since there were no updates from evaluation studies this year.

FIGURE 5
LOW-INCOME LIFETIME MWH

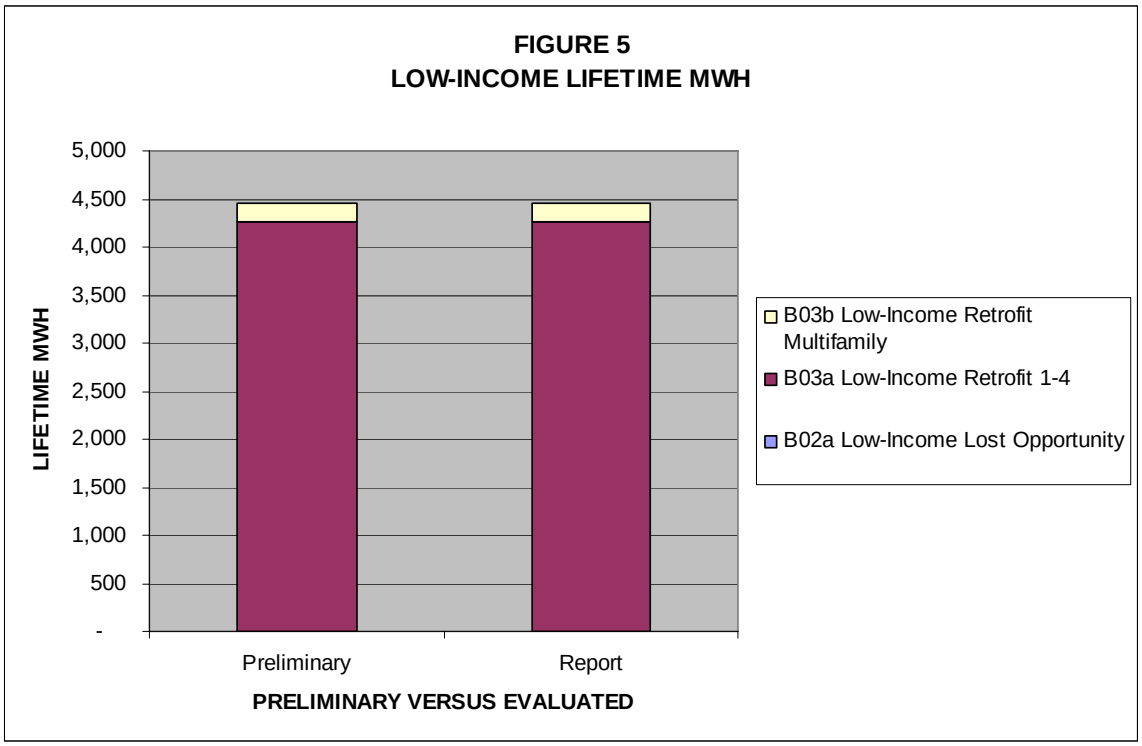


FIGURE 6
LOW-INCOME LIFETIME kW

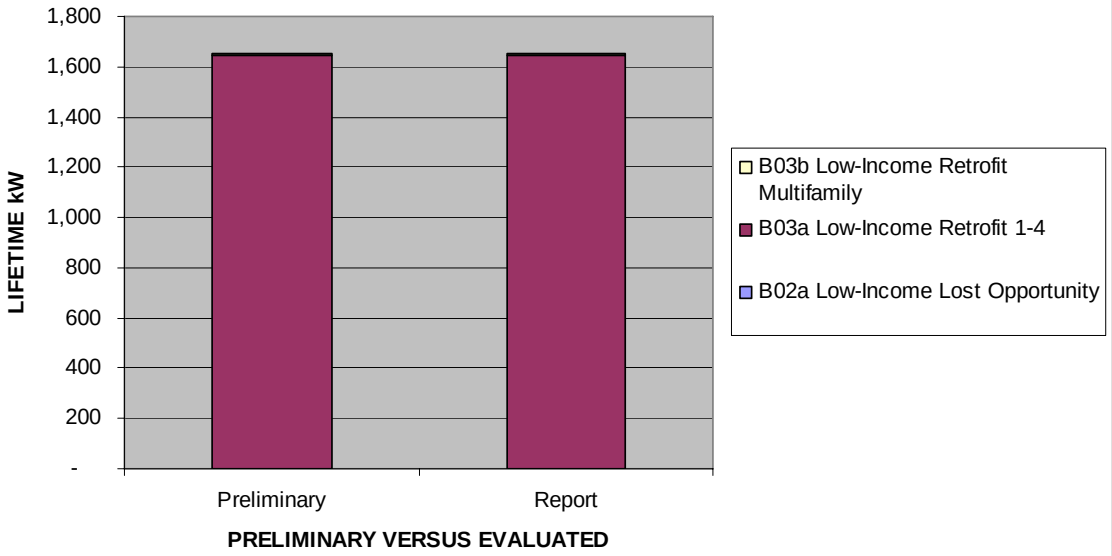
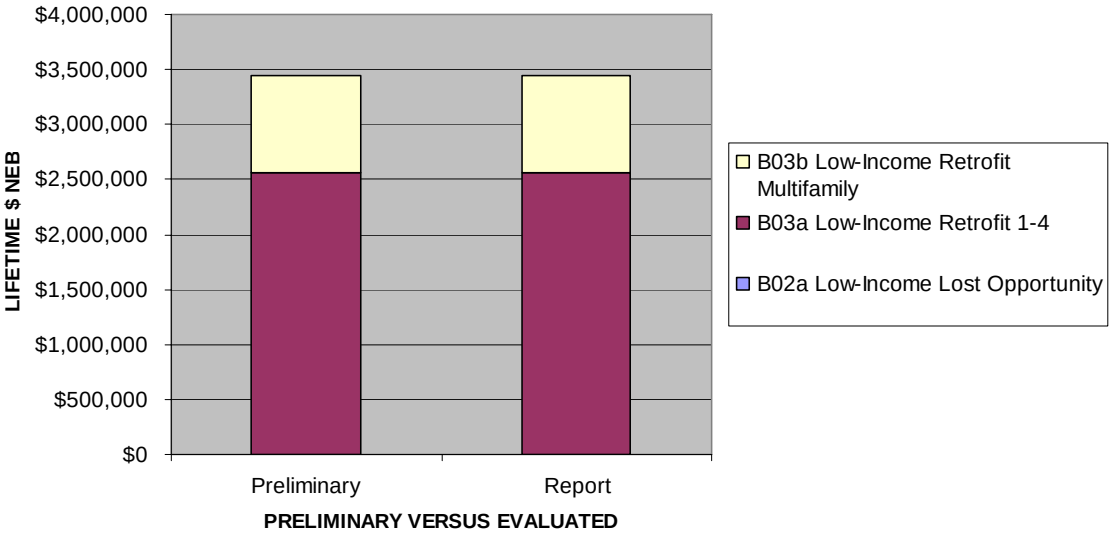
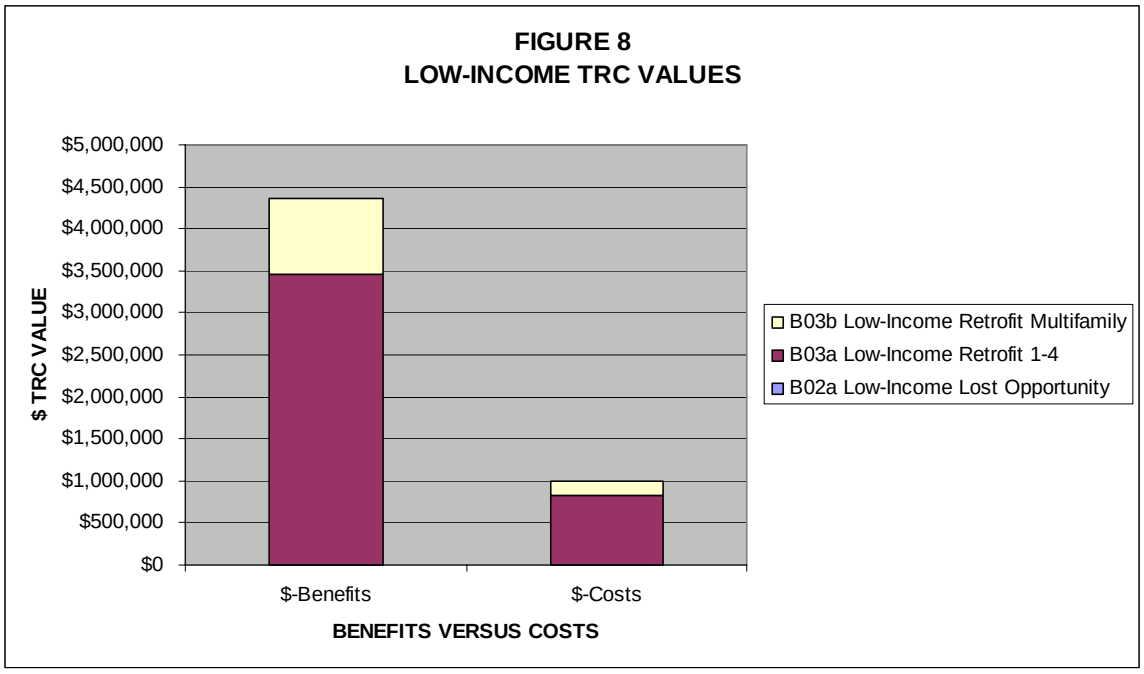


FIGURE 7
LOW-INCOME LIFETIME $ NEB





3. Commercial & Industrial Programs

Table 4 presents the lifetime energy savings, lifetime capacity savings, and lifetime non-electric benefits for each of the Commercial & Industrial programs. It also presents the total cumulative benefits and costs, in 2009 present value dollars. These total benefits and costs are used to determine whether each program is cost-effective, based on the total resource cost (TRC) test.

TABLE 4
SUMMARY OF C&I BCR ACTIVITIES

Benefit-Cost Ratio Activity	Lifetime MWH		Lifetime kW		Lifetime $ NEB		TRC Values	
	Preliminary	Report	Preliminary	Report	Preliminary	Report	$-Benefits	$-Costs
C02a C&I Lost Opportunity	14,425	14,425	3,992	3,992	$17,083	$17,083	$2,716,446	$469,945
C03a Large C&I Retrofit	35,170	35,170	4,844	4,844	$11,137	$11,137	$5,098,054	$1,248,429
C03b Small C&I Retrofit	59,663	59,663	13,565	13,565	$117,242	$117,242	$10,178,248	$3,394,506
Total	**109,258**	**109,258**	**22,402**	**22,402**	**$145,462**	**$145,462**	**$17,992,748**	**$5,112,881**

Figures 9 through 12 present the same information as Table 4. They indicate that much of the energy and capacity savings and non-electric benefits come from the Small C&I Retrofit program; and that all of the programs are cost-effective. There is no difference between the reported and preliminary results for C&I programs since there were no updates from evaluation studies this year.

FIGURE 9
C&I LIFETIME MWH

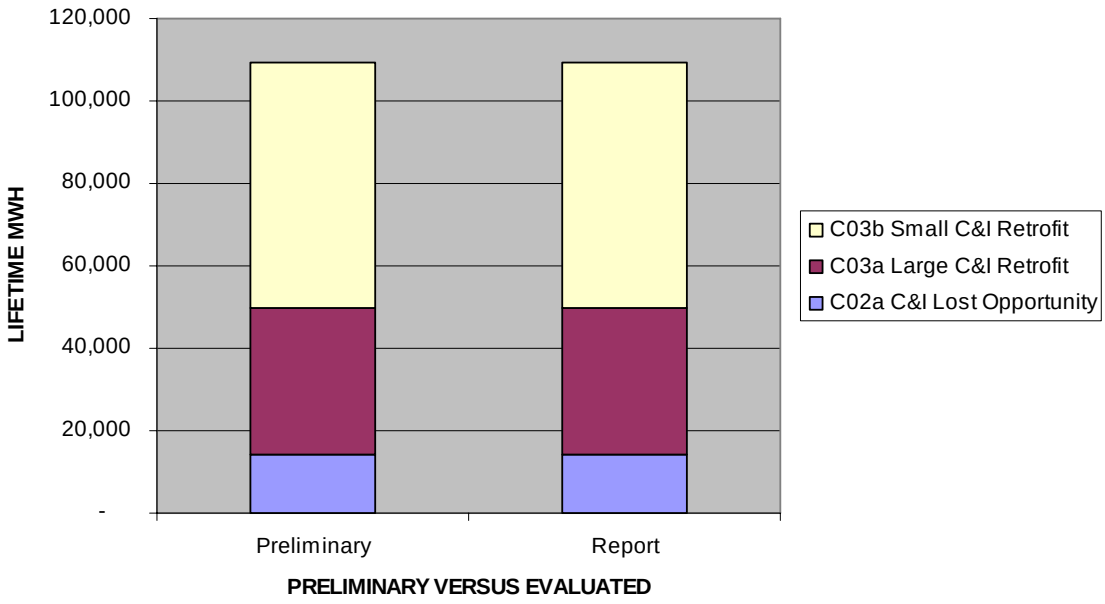
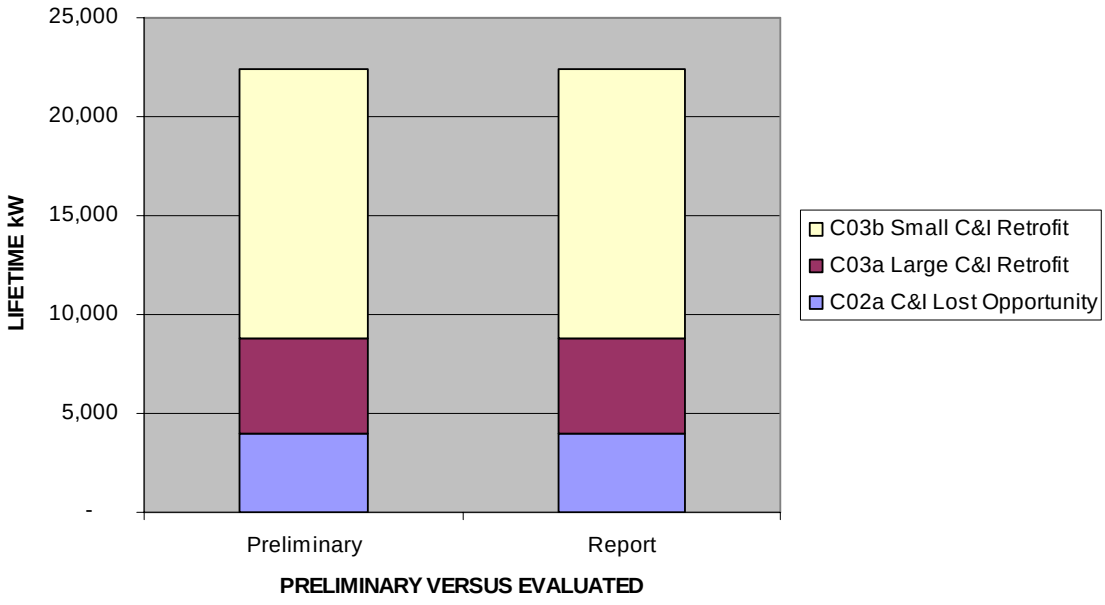
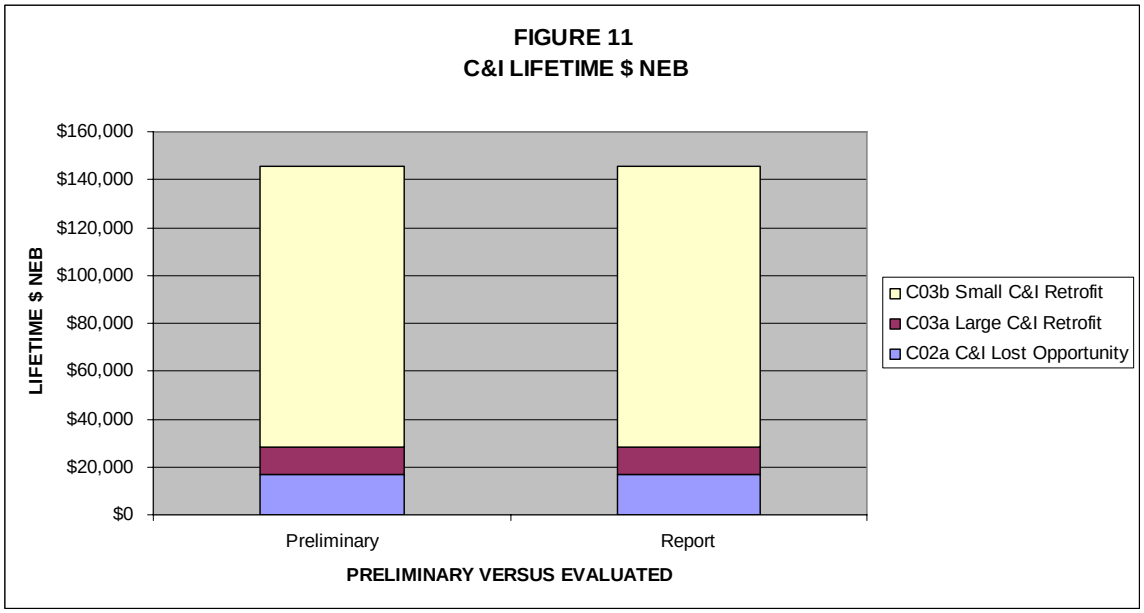
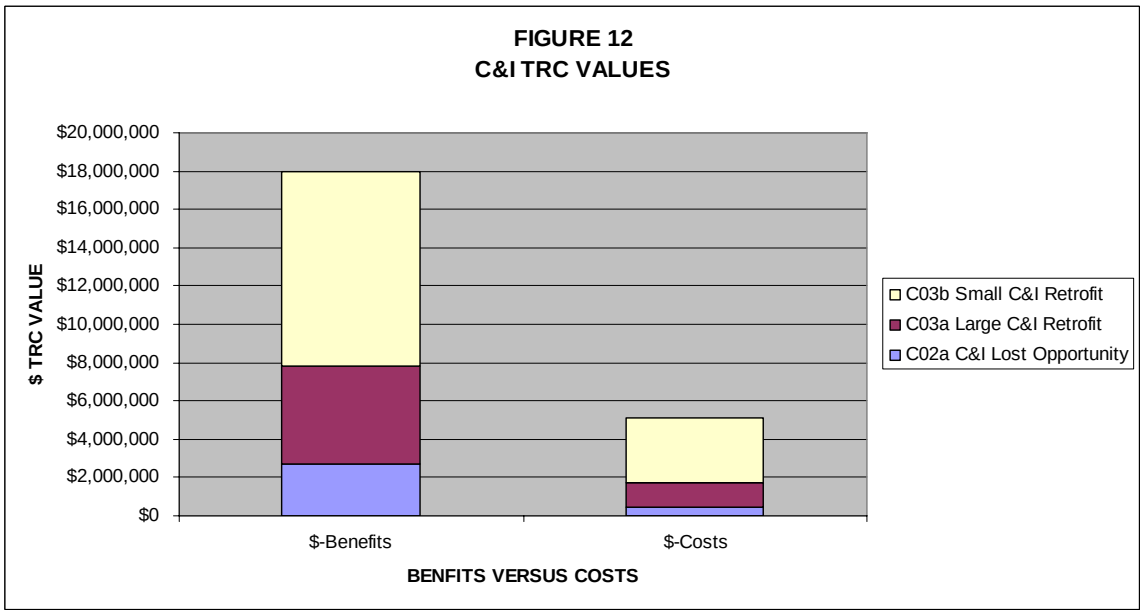


FIGURE 10
C&I LIFETIME kW







II. Overview of Evaluation Methodology

Preliminary versus Reported Results

As noted above, the savings data in this report are presented in terms of both "preliminary" and "reported" data.

- The preliminary data refers to savings estimates that are based on the evaluation impact factors that were used in the 2009 EEP.[9]
- The reported data refers to savings estimates that are based on evaluation impact factors from all of the program evaluations that have been prepared since the 2009 EEP was filed. Thus, the reported data presents our best estimate of the efficiency savings, based on all the evaluation information available at this time.

Evaluation Studies Used in Preparing 2009 Reported Results

Since its inception in July 2001, the Compact has participated in many statewide and regional monitoring and evaluation studies, along with other energy efficiency Program Administrators. The Compact has also conducted several evaluation studies specific to its own programs. It is common for energy efficiency program evaluators to update parameters on a multi-year cycle, unless significant program changes warrant more frequent study.

The evaluation studies completed in 2009 that were used to update impact factors or to inform the process of program delivery are listed below. In 2009, the studies included a mix of process and impact evaluation and other research. The executive summary and full versions of these reports are included in Appendix 6.

1. Evaluation of the Massachusetts New Homes with ENERGY STAR® Program 2009 Findings and Analysis, NMR Group Inc., May 26, 2010. Executive Summary.

   Evaluation of the Massachusetts New Homes with ENERGY STAR® Program 2009 Findings and Analysis, NMR Group Inc., May 26, 2010. Full Report.

2. Massachusetts New Homes with ENERGY STAR® 2009 COOL SMART Quality Installation Verification Evaluation Report, ICF International, February 24, 2010. Executive Summary.

   Massachusetts New Homes with ENERGY STAR® 2009 COOL SMART Quality Installation Verification Evaluation Report, ICF International, February 24, 2010. Full Report.

3. Energy Savings Analysis for the Massachusetts New Homes with ENERGY STAR®, ICF International, June 4, 2010. Executive Summary.

   Energy Savings Analysis for the Massachusetts New Homes with ENERGY STAR®, ICF International, June 4, 2010. Full Report.

4. The Massachusetts New Homes with ENERGY STAR® Program, 2009 Progress Report, Dorothy Conant, May 26, 2010. Executive Summary.

[9] D.P.U. 07-47, The Cape Light Compact's Proposed Second Amendment to its Approved Energy Efficiency Plan: 2007-2012 (the "2009 EEP").

The Massachusetts New Homes with ENERGY STAR® Program, 2009 Progress Report, Dorothy Conant, May 26, 2010. Full Report.

5. Residential Central AC Regional Evaluation, ADM Associates, Inc., October 2009.

6. Energy Pay and Save Pilot Program Survey & Analysis, Black & Veatch, March 2010.

7. 2009 Massachusetts Multi-Family Program Assessment, Nexus Market Research, Inc., October 16, 2009.

8. The Market for CFLs in Massachusetts, NMR Group, Inc., January 28, 2010.

9. Results of the Multistate CFL Modeling Effort, NMR Group, Inc., February 4, 2010.

10. Market Assessment and Best Practices for Delivering Plug-Load Energy Efficiency in Business-Final Report, PA Consulting Group, June 14, 2010.

11. Cape Light Compact Residential Smart Energy Monitoring Pilot, PA Consulting, March 31, 2010.

Types of Evaluations

The evaluation of 2009 energy efficiency program impacts reflects the Compact's efforts to apply appropriate methodologies and adjust them for individual program characteristics. The diverse nature of the programs, including the magnitude of preliminary kW and kWh impacts, the number of customers served, and the end uses affected, calls for the adoption of different evaluation approaches. Evaluations of some programs use several methodologies to develop overall impact results and provide meaningful feedback on program delivery and direction. Some of these methodologies are briefly described below.

Survey-Based Impact Parameter Studies. Survey-based impact parameter studies focus on the analysis of information collected through customer surveys. They are generally used to measure free-ridership and spillover. These studies provide timely feedback to program managers as well as input to the impact evaluations.

- The California Public Utilities Commission, the New York State Energy Research and Development Authority (NYSERDA), Wisconsin Public Service Commission, Consumers Energy in Michigan, Connecticut Energy Conservation Management Board, Connecticut Light and Power, Northeast Utilities, The United Illuminating Company, Cape Light Compact, NSTAR, National Grid (NGRID), Unitil, Western Massachusetts Electric Company (WMECO) and Xcel

Energy in Colorado funded a study to summarize a multi-state CFL modeling effort[10] to determine a net-to-gross ratio (NTG) for lighting products. This net-to-gross ratio was implemented within the Massachusetts Residential ENERGY STAR® Lighting Program.

Billing Analyses. Billing analyses involve the analysis of billing data, combined in some cases with survey data, to determine impacts for programs where a large number of participants install similar measures. Since billing data are available for all customers, billing analysis techniques may include representative samples of both participants and non-participants in an evaluation.

- The Massachusetts electric program administrators jointly funded an evaluation of the Energy Pay and Save Pilot[11], to determine the extent to which on-bill financing motivates customers to install energy efficiency measures. While this study was primarily survey-based, it included a billing analysis.

Site Specific Measurement Analysis. Impact evaluations for many of the end uses and programs covered in this report rely on engineering estimates that are based on site-specific metering and on-site telephone assessments of measure performance and persistence. All of the following studies were conducted in 2010.

- The Joint Management Committee (JMC) completed an evaluation report focused on investigating the relationship between HERS ratings and energy savings in the Residential ENERGY STAR® New Construction Program.[12]
- The Joint Management Committee (JMC) completed an evaluation[13] of the quality of installations for central air conditioning (CAC) systems as well as adherence to the Massachusetts New Homes with ENERGY STAR® guidelines in a select number of homes.
- NSTAR Electric and Gas Corp., National Grid in Massachusetts and Rhode Island, Connecticut Light & Power, and United Illuminating jointly funded a study[14] to assess energy savings and demand impacts resulting from the installation of efficient central air conditioning (CAC) systems and collected baseline data on duct leakage and infiltration rates of houses.

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[10] *Results of the Multistate CFL Modeling Effort*, NMR Group, Inc., February 4, 2010.

[11] *Energy Pay and Save Pilot Program Survey & Analysis*, Black & Veatch, March 2010.

[12] *Energy Savings Analysis for the Massachusetts New Homes with ENERGY STAR®*, ICF International, June 4, 2010.

[13] *Massachusetts New Homes with ENERGY STAR® 2009 COOL SMART Quality Installation Verification Evaluation Report*, ICF International, February 24, 2010.

[14] *Residential Central AC Regional Evaluation*, ADM Associates, Inc. October 2009.

- The Massachusetts electric program administrators jointly funded an evaluation of the Energy Pay and Save Pilot[15], to determine the extent to which on-bill financing motivates customers to install energy efficiency measures.

Process and Market Progress Evaluation Studies. Process evaluations review energy efficiency program design and implementation, and recommend modifications to program delivery. The scope of these evaluations includes all aspects of the program including administrative efficiency, the quality of service provided, and the databases used for program tracking and reporting. Process evaluations assess the early stages of energy efficiency programs. They specifically provide an assessment of (a) whether actual operations resemble the intended program design and operation plan, and (b) whether real-world experience shows that the original program design and implementation plan are appropriate given the existing field conditions. All of the following studies were conducted in 2010.

- The Joint Management Committee (JMC) completed the following two evaluations of the Residential ENERGY STAR® New Construction Program.
    - An evaluation[16] was conducted to develop a proposed attribution mechanism for codes and standards for Massachusetts, develop recommendations for streamlining the process by which builders participate in the program, document lessons learned from the Zero Energy Challenge Pilot, and investigate other approaches to estimating whole house savings for homes undergoing major renovations or additions.
    - A 2009 Progress Report[17] was prepared, to summarize 2009 Program activity.
- The Cape Light Compact funded an evaluation of its Smart Home Energy Monitoring Pilot[18], to understand customer interest and satisfaction with the pilot as well as energy savings.
- The Massachusetts electric program administrators jointly funded an evaluation[19] to understand the current market conditions and possible new program approaches for common and specialty CFLs in the Residential ENERGY STAR® Lighting Program.

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[15] *Energy Pay and Save Pilot Program Survey & Analysis*, Black & Veatch, March 2010.

[16] *Evaluation of the Massachusetts New Homes with ENERGY STAR® Program 2009 Findings and Analysis*, NMR Group Inc., May 26, 2010.

[17] *The Massachusetts New Homes with ENERGY STAR® Program, 2009 Progress Report*, Dorothy Conant, May 26, 2010.

[18] *Cape Light Compact Residential Smart Energy Monitoring Pilot*, PA Consulting, March 31, 2010.

[19] *The Market for CFL's in Massachusetts*, NMR Group, Inc., January 28, 2010.

- The Massachusetts electric program administrators jointly funded an evaluation[20] to characterize the market for plug-load efficiency, including maximum achievable potential energy savings, and to identify best practices to deliver those savings within the Small Commercial and Industrial Retrofit Program.

Economic Modeling and Analysis Studies. The benefits and cost-effectiveness of energy efficiency programs are based on modeling and analysis that values energy efficiency in relation to the avoided costs of energy supply projected over the life of the programs and measures installed. Avoided costs are typically projected based on forecasting models.

- The Massachusetts electric and gas program administrators jointly funded a multi-family evaluation[21] to confirm or deny the findings of an April workshop, assess progress in overcoming barriers and identify strategies to make targeting, program design, and program implementation for Residential, Low-Income and Commercial and Industrial customers more successful.
- The Residential Central AC Regional Evaluation[22] also included an economic modeling analysis.

Generic Impact Equations

The general form of the impact equation for most of the measures installed is:

Net Impacts = Gross Impacts * Realization Rate*(1-Free-Ridership + Spillover) * Persistence Factor.

Realization Rates are study-specific parameters, which typically compare the energy or demand performance of installed equipment to initial estimates of performance. They are typically based on engineering or billing analysis.

Free-ridership includes both partial and pure free-ridership, where such information is available, as required by D.T.E 98-100.

In energy efficiency programs, spillover may occur among both participants and nonparticipants. Both participant and nonparticipant spillover were used in the calculation of savings for commercial and industrial programs, consistent with D.T.E. 98-100. The nonparticipant spillover impact used in this report is based on the combined results of National Grid[23] and Compact surveys[24].

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[20] *Market Assessment and Best Practices for Delivering Plug-Load Energy Efficiency in Business – Final Report,* PA Consulting Group, June 14, 2010.

[21] *2009 Massachusetts Multi-Family Program Assessment,* Nexus Market Research, Inc., August 19, 2009.

[22] *Residential Central AC Regional Evaluation,* ADM Associates, Inc. October 2009.

[23] *National Grid, Cape Light Compact, United Illuminating 2005 Commercial and Industrial Programs Free-ridership and Spillover Study.* Revised Final Report. PA Consulting Group. September 1, 2006.

[24] *Cape Light Compact 2007 Commercial and Industrial Programs Free-ridership and Spillover Study.* Final Executive Summary. PA Consulting Group. June 23, 2008.

Persistence indicates the continued presence of savings over time as indicated by follow-up surveys that confirm the measure remains installed, and verify it is operating as intended. As defined by the 2005 Measure Life Study[25], "Savings persistence is the percent change in expected savings due to changed operating hours, changed process operation, and/or degradation in equipment efficiency relative to the baseline efficiency option".

Measure lives are applied to net annual kW and kWh to calculate lifetime kW and kWh. As defined by the 2005 Measure Life Study[26], measure life is "The median number of years that a measure is installed and operational. This definition implicitly includes equipment life and measure persistence, but not savings persistence….In addition, this definition conforms in letter or in spirit with the definition of measure life used by most national utilities."

Performance Metrics

As a not-for-profit inter-governmental organization, the Compact does not require shareholder performance incentives, and thus does not need to monitor or track any form of performance metrics.

III. Impacts by BCR Activity

A. Residential

1. By BCR Activity

Table 5 presents a summary of the number of customers served, the annual savings, the lifetime savings, and the costs incurred for the residential programs. It also presents the benefit-cost ratio, based on the total resource cost test. The costs and benefits used to derive this ratio are the same as those presented in Table 2.

The Residential Retrofit 1-4 and Residential Lighting Programs provide the greatest annual energy and capacity savings. All of the residential programs are cost-effective.

[25] *Measure Life Study Report* prepared for the Massachusetts Joint Utilities by Energy Resource Solutions (ERS), October 10, 2005.

[26] *Measure Life Study Report* prepared for the Massachusetts Joint Utilities by Energy Resource Solutions (ERS), October 10, 2005.

TABLE 5 IMPACT BY RESIDENTIAL BCR ACTIVITIES											
Benefit-Cost Ratio		Annual				Lifetime			Cost		Benefit-Cost
Activity	Participant	kWh	kWh per Cust	kW	$-NEB	MWH	kW	$-NEB	Activity	per Cust	TRC
A02a Residential Lost Opportunity	127	157,074	1,237	42.74	$29,622	2,023	942	$710,143	$443,560	$3,493	2.62
A02b Residential HVAC	107	27,644	258	39.09	$0	498	704	$0	$62,539	$584	4.22
A03a Residential Retrofit 1-4	3,959	3,269,252	826	772.88	$319,050	29,838	14,522	$6,510,300	$3,334,379	$842	4.12
A03b Residential Retrofit Multifamily	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A03c Residential Load Response	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
A04a Residential Lighting	3,805	1,781,436	468	132.01	$15,712	12,885	958	$111,745	$412,799	$108	4.30
A04b Residential Appliances	1,994	308,400	155	33.14	$48,573	4,684	405	$971,454	$228,457	$115	6.63
Total	9,992	5,543,807	555	1,019.86	$412,956	49,928	17,531	$8,303,642	$4,481,734	$449	4.12

2. By End Use

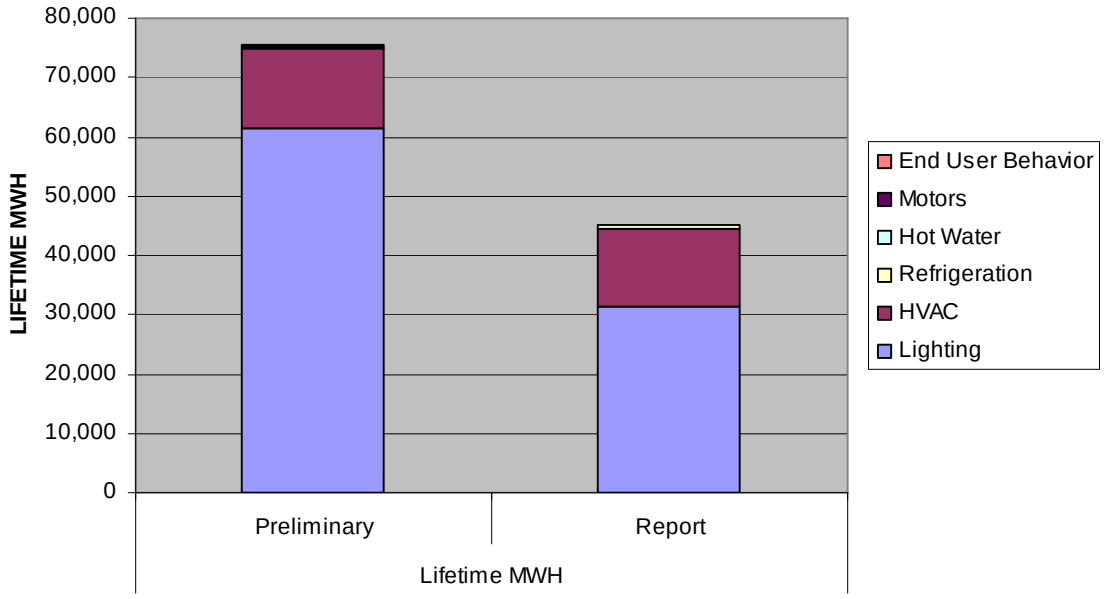
Table 6 presents a summary of the lifetime energy savings, capacity savings, and non-electric benefits, by the different end-uses addressed in the residential programs. Lighting and HVAC provide the majority of energy and capacity savings from the residential programs. Most of the residential non-electric benefits are from HVAC.

The residential impact factors were updated by evaluation studies. There are significant differences between preliminary and reported results for Lighting. The reported lifetime MWh and lifetime kW savings and non-electric benefits are substantially lower than the preliminary lifetime MWh and lifetime kW savings and non-electric benefits for Lighting measures due to adjustments to the in-service rate, energy savings and capacity savings.

TABLE 6 IMPACT BY RESIDENTIAL END-USES						
End Use	**Lifetime MWH**		**Lifetime kW**		**Lifetime $ NEB**	
	Preliminary	**Report**	**Preliminary**	**Report**	**Preliminary**	**Report**
Lighting	61,561	31,281	4,031	2,160	$461,715	$250,847
HVAC	13,228	13,228	14,820	14,820	$6,723,104	$6,723,104
Refrigeration	499	499	47	47	$0	$0
Hot Water	236	236	99	99	$358,237	$358,237
Motors	0	0	0	0	$0	$0
Process	4,684	4,684	405	405	$971,454	$971,454
End User Behavior	0	0	0	0	$0	$0
Total	**80,208**	**49,928**	**19,403**	**17,531**	**$8,514,511**	**$8,303,642**

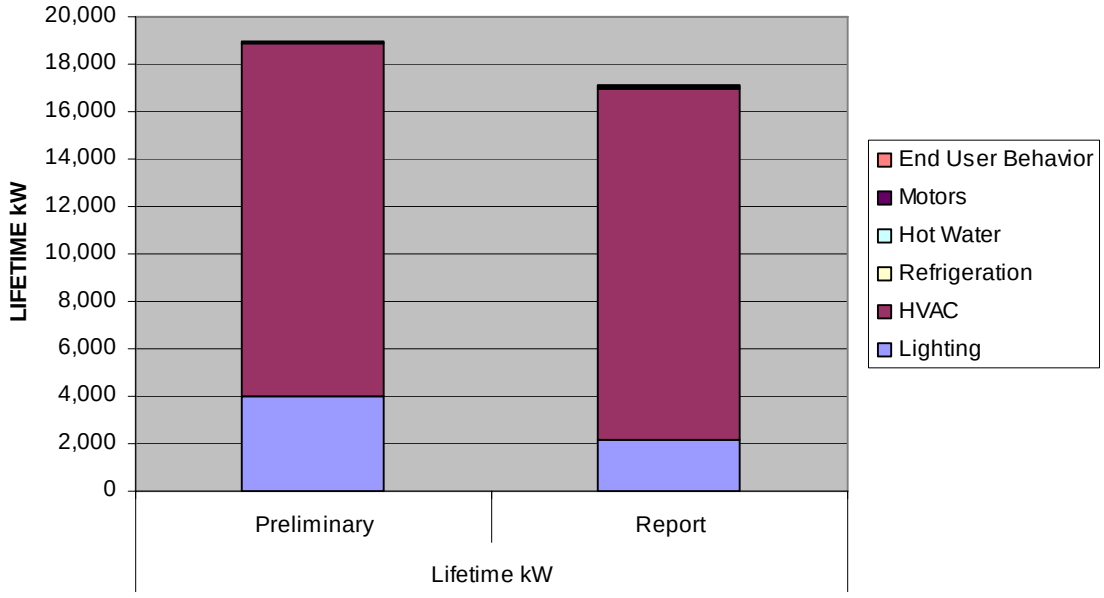
Figures 13 through 15 present the same information as Table 6.

FIGURE 13
RESIDENTIAL LIFETIME MWH - END-USE

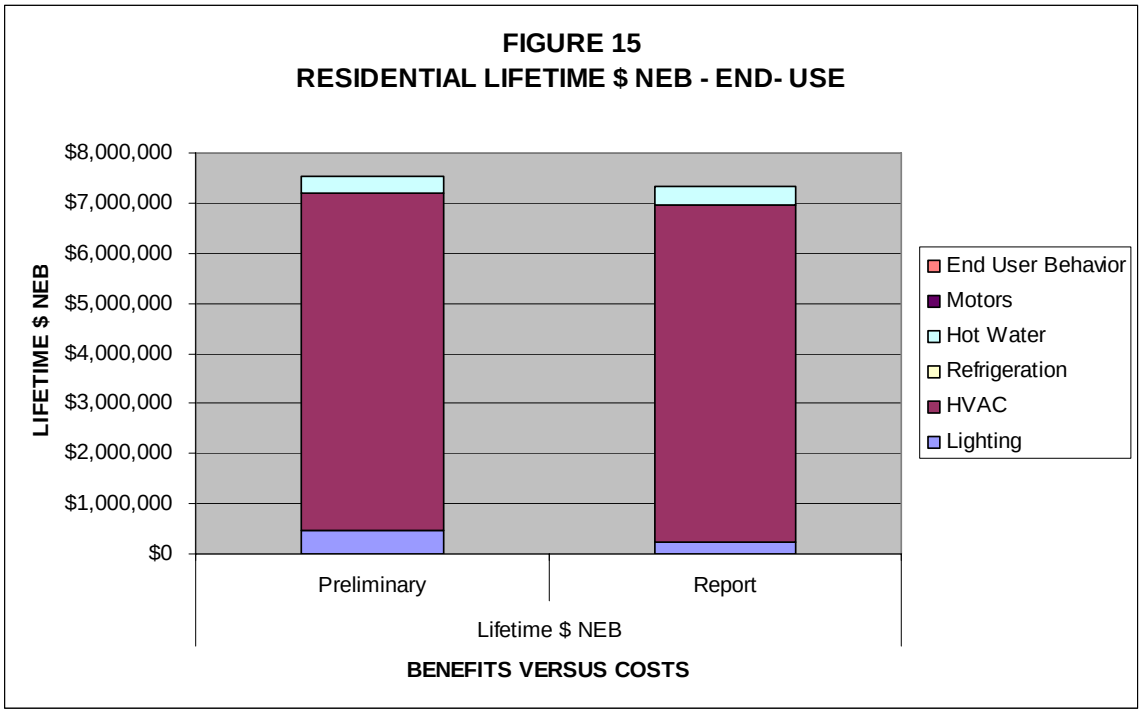


PRELIMINARY VERSUS EVALUATED

FIGURE 14
RESIDENTIAL LIFETIME kW - END-USE



PRELIMINARY VERSUS EVALUATED



3. Program Evaluation

Residential ENERGY STAR® New Construction Program

***Evaluation of the Massachusetts New Homes with ENERGY STAR® Program 2009 Findings and Analysis*, NMR Group Inc., May 26, 2010.**

In 2010, the Joint Management Committee (JMC) completed a program design, implementation, and measurement evaluation report. The evaluation included:

- An evaluation of California's mechanisms for claiming savings from code-related activities and proposed attribution framework for Massachusetts;
- Recommendations for streamlining the process by which builders participate in the Massachusetts New Homes with ENERGY STAR® Program;
- Identification of lessons learned from the Zero Energy Challenge Pilot;
- Other approaches to estimating whole house savings for homes undergoing major renovations or additions.

Codes and Standards: An extensive review of the California protocols for attribution of a portion of the savings from C&S activities to Program Administrator efforts was completed. Using these as a template, a proposed attribution mechanism was developed for Massachusetts which will cover savings from both upgrades to state codes and increased compliance with both state code and stretch codes for homes that do not participate in the Program. The principal recommendation is to use the California Delphi panel approach to assure an independent assessment of how much of the resulting savings to attribute to Program Administrator efforts.

Streamlining the Process: Interviews were conducted with 26 builders, 10 HERS raters, 3 rating companies listed on the web site, and 3 ICF account managers. Additionally, four builders who did not participate were interviewed. Principal conclusions include, flexibility among market players in program implementation is important, builders are very satisfied with the raters, ICF account managers are used mainly when an issue needs resolution and HERS raters screen out marginally interested builders. One issue that needs to be addressed is getting checks to the builders sooner.

Zero Energy Challenge: Two builders who built such homes achieved negative HERS ratings meaning that the homes are net producers of energy. Both builders have incorporated what they learned in building these homes into their standard building practice. Creating home buyer demand will be the key to getting more builders involved. Builders want to know how they can recover the significant additional costs involved in building these homes.

Major Renovations: Very few programs have provisions that cover additions to existing structures. The major renovations pilot program will assess the merits of blending parts of the residential retrofit program, such as are offered thru Mass Save®, with the unique features associated with the services offered with the pilot for large additions to existing houses.

Results from this study are informing future program design, implementation, and measurement. For example, the results from the investigation into streamlining the process are leading program administrators to design a fully market-based program. Results from this study did not drive changes to the reported savings and benefits for the Residential ENERGY STAR® New Construction Program.

***Energy Savings Analysis for the Massachusetts New Homes with ENERGY STAR®,* ICF International, June 4, 2010.**

Also in 2010, the Joint Management Committee (JMC) completed an evaluation report focused on investigating the relationship between HERS ratings and energy savings.

Historically the New Homes with ENERGY STAR® program has used a tiered approach to encourage participants to build to higher levels of energy efficiency. Greater incentives were paid for greater energy efficiency and higher tier levels. Higher tiers were assumed to equate to greater energy savings, and were based on the Home Energy Rating System (HERS). HERS ratings were, therefore, assumed to be a sufficiently accurate predictor of energy savings. Program results, however, lead the Joint Management Committee (JMC) to question that relationship. The JMC went on to determine that a low HERS rating does not necessarily guarantee greater energy savings.

The JMC then undertook an analysis that resulted in expanding the tier structure from three to four tiers, and identifying new criterion for achieving various tier levels. The new criterion is based on a percentage savings above a User Defined Reference Home (UDRH) baseline. The old tier levels were structured as follows: Code+, HERS 85 and HERS 65. The new tier levels are structured as follows: Code+, HERS 85, HERS 85 plus 30% improvement over the UDRH baseline, and HERS 85 plus 60% improvement over the UDRH baseline.

The results of this analysis are being used in the statewide working group to enhance implementation and energy savings derived from the program moving forward. For example, the savings calculations were restructured to better align with the way savings data inputs are structured. In particular, savings are now based on the User-Defined Reference Home, or a baseline home, instead of the model home within the REMRate tool. Results from this study did not drive changes to the reported savings and benefits for the Residential ENERGY STAR® New Construction Program.

***The Massachusetts New Homes with ENERGY STAR® Program, 2009 Progress Report,* Dorothy Conant, May 26, 2010.**

The Massachusetts New Homes with ENERGY STAR® Program 2009 Progress Report is a summary of 2009 Program activity. Program performance information includes historical as well as current information to show the growth of the Program over time. In preparing the report, the vendor looked at the following aspects of the New Homes with ENERGY STAR® Program:

- Permits, Completions, and ENERGY STAR® Penetration Rates
- HERS Ratings
- ENERGY STAR® Lighting, Windows, Heating and Central Air Conditioning
- Envelope and Duct Leakage
- HERS Raters
- New Homes Recruited

All findings included in this report are taken into consideration by the statewide working group in an effort to enhance the program implementation, participation, and derived savings. The key finding from this year's Progress Report was that the program administrators gained market share, despite the down economy. Results from this study did not drive changes to the reported savings and benefits for the Residential ENERGY STAR® New Construction Program.

Residential High Efficiency Central Air Conditioning Program

***Massachusetts New Homes with ENERGY STAR® 2009 COOL SMART Quality Installation Verification Evaluation Report,* ICF International, February 24, 2010.**

The intent of this study was to evaluate the quality of installations for central air conditioning (CAC) systems as well as adherence to the Massachusetts New Homes with ENERGY STAR® guidelines in a select number of homes.

A sample of fifty (50) new homes that participated in the program in 2008-09 was selected for this study. The findings indicate that most of the homes in the sample did not meet the standards for a quality installation. For example, very few would meet "ACCA Quality Installation Specifications", 50% of the AC systems were oversized, 70% had out-of-spec measured air flow, 40% had incorrect refrigerant charges, 30% lacked thermal expansion valves and, 26% had unverified indoor-outdoor cooling equipment

matches. Most homes had installed equipment that barely met the code requirement for efficiency (13 SEER).[27]

Program changes have been adopted as a result of these findings and identified short-comings. For example, the requirements and training for Quality Installation Specifications for central air systems were refined. Results from this study did not drive changes to the reported savings and benefits for the Residential High Efficiency Central Air Conditioning Program.

***Residential Central AC Regional Evaluation,* ADM Associates, Inc. October 2009.**

The purpose of this study is to assess energy savings and demand impacts resulting from the installation of efficient central air conditioning (CAC) systems. The study also collects baseline data on duct leakage and infiltration rates of houses.

Data for the study was collected through post-installation monitoring of the CAC systems installed in existing and new homes in Massachusetts, Connecticut and Rhode Island. Results are derived using Typical Meteorological Year (TMY) weather data, as well as actual 2008 weather data, and grouped into the following ISO Load Zones: Northeastern Massachusetts, Southeastern Massachusetts, Western/Central Massachusetts, Connecticut and Rhode Island.

Results of the study indicate that higher efficiency CAC systems provide a sizeable reduction in annual kWh usage. Using TMY data, for example, savings for Southeastern Massachusetts are estimated to be 95 kWh annually. Study results are intended to provide a basis for regulatory reporting as well as application to the Forward Capacity Market. Results from this study did not drive changes to the reported savings and benefits for the Residential High Efficiency Central Air Conditioning Program.

Residential ENERGY STAR® Lighting Program

***Results of the Multistate CFL Modeling Effort,* NMR Group, Inc., February 4, 2010.**

This report summarizes the analyses conducted in support of the multistate CFL modeling effort, highlighting the results as they pertain to the net-to-gross ratio (NTG) for the Massachusetts Residential ENERGY STAR® Lighting Program. Thirteen companies in 7 states sponsored 9,300 household phone surveys and 1,400 on-site visits in 15 states to estimate the net-to-gross (NTG) ratio of sales and penetration of compact fluorescent light bulbs (CFLs). The 15 surveyed states ranged from 4 states with established CFL programs to 7 states with no CFL program or emerging CFL programs. . The working penetration / market transformation model is that each CFL sold via a program would induce several non-program CFL sales in the early years. As the market matured, and as sales spilled over into other states, according to plan, the ratio of non-program sales to program sales would fall, eventually to zero.

[27] As a point of clarification, the study concentrated on central air conditioning systems within homes that met the performance path for ENERGY STAR Homes. This does not mean that these home received incentives for equipment or quality installation.

NMR Group built a variety of regression models that used demographics in the various study areas, plus measures of program strength and history, to explain (1) purchases of CFLs in the past 3 and 12 months and (2) cumulative penetration of CFLs in homes. The modeling suggested that CFL programs had a statistically significant net positive effect on CFL purchases in 2008, as well as on current CFL use and saturation. However, it did not find a net positive program effect on CFLs purchased in the past three months. In general, years using CFLs was a little more important predictor of purchases than was strength of program. A purchase model without CFL saturation as a predictor yielded a 19% NTG ratio, while a similar model with saturation yielded a 63% NTG ratio. Given the uncertainties involved, the report recommends an average of the two, a 41% NTG ratio.

Results from this study drove declines in the reported net savings and benefits for the Residential ENERGY STAR® Lighting Program. The Cape Light Compact calculated its preliminary net savings and benefits for CFL screw-in bulbs using a 117% in-service rate comprised of an 84% installation rate multiplied by a 139% net-to-gross ratio. The Cape Light Compact calculated its reported net savings and benefits for CFL screw-in bulbs using a 40% in-service rate comprised of a 97% installation rate multiplied by a 41% net-to-gross ratio. This study informed the net-to-gross ratio change. The installation rate change was informed by the 2008 Residential Lighting Markdown Impact Evaluation[28] that was completed in January 2009.[29] Reported gross annual kWh and kW savings assumptions also changed as follows as a result of the 2008 Residential Lighting Markdown Impact Evaluation. Gross annual kWh changed from a preliminary value of 57 to a reported value of 47. Gross annual kW changed from a preliminary value of 0.049 to a reported value of 0.046.

The decline in the net-to-gross ratio indicates that the market is transformed for CFL bulbs for some groups of consumers. As a result, the program design is changing the mix of products offered to different consumers and the market channels used to target different groups of consumers.

***The Market for CFL's in Massachusetts,* NMR Group, Inc., January 28, 2010.**

This report presents the findings of research conducted to understand the current market conditions and possible new program approaches for common and specialty CFLs in Massachusetts. The report presented findings within the following categories:

- Awareness and satisfaction
- CFL use
- Socket saturation
- CFL purchases

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[28] *Residential Lighting Markdown Impact Evaluation* by Nexus Market Research, RLW Analytics, Inc, and GDS Associates, January 20, 2009.

[29] As this study was not finalized until January 2009, the update does not appear in the 2009 EEP. Also, as the study is from the 2008 program year and was used to update the 2008 Annual Report, it is not listed with the studies from the 2009 program year.

- LEDs and other energy-saving technologies
- Upcoming federal lighting standards
- New technologies and policies

The recommendations that came out of this study will be taken into consideration in the statewide working group to enhance implementation, marketing, and program offerings moving forward. Results from this study did not drive changes to the reported savings and benefits for the Residential ENERGY STAR® Lighting Program.

Residential ENERGY STAR® Appliances Program

No new evaluation activities were conducted on the results of this program in 2009.

Non Program-Related Pilots

***Energy Pay and Save Pilot Program Survey & Analysis*, Black & Veatch, March 2010.**

The purpose of the study is to determine the extent to which on-bill financing motivates customers to install energy efficiency measures. The pilot ran from April 2009 through December 2009, and was offered to residential customers and small commercial and industrial customers. Statewide participation was low among residential customers, averaging 4% across the five participating Program Administrators (PAs), but was much higher among small business customers, averaging 22% across the five PAs.

For Cape Light Compact, a total of 32 customers participated in the program: 10 residential and 22 small business. Cape Light's residential participants installed heating systems, basement and attic insulation and air sealing measures. The average loan amount was $402 (below the cap of $500), the average term of the loan was 16 months, and the average monthly savings were $21. Average measure costs ranged from $95 to $1,800.

For Cape Light's small business participants, lighting equipment was the predominant measure installed. The average rebate for those lighting measures was $180, offsetting over 70% of the average measure cost of $257. For all small business participants, the average loan amount was $436 (well below the cap of $1,000), the average term of the loan was 10 months, and the average monthly savings were $81. The average project cost was $2,179.

The results of this evaluation suggest a very limited need for an on-bill financing option for residential customers. The results of this pilot study are being reviewed and used in conjunction with the statewide on-bill financing working group. Any findings will be used to inform financing options in future program years. Results from this study did not drive changes to the reported savings and benefits for the Residential Mass Save® Program.

***Cape Light Compact Residential Smart Energy Monitoring Pilot*, PA Consulting, March 31, 2010.**

Cape Light Compact designed and implemented a Residential Smart Home Energy Monitoring Pilot program in 2009 to evaluate potential energy savings from in−home

energy monitoring systems, gain insight to behavioral aspects of energy use, and inform future residential Smart Grid projects. The response to the pilot announcement was outstanding, with more than 300 residents requesting the available spots in the program.

To implement the pilot, the Cape Light identified 91 participants on Cape Cod and Martha's Vineyard and installed an in-home energy monitoring system in each participants home for a period of one year. The monitoring system is unique as compared to other behavioral programs in that it enables the participant to view their electricity consumption in real time, displaying energy usage down to the minute. Participants received information and training regarding the system and had access to an online dashboard. The online dashboard offered participants feedback on their energy consumption by providing:

- real time current energy use and demand;
- savings metrics in kWh, dollars, and CO_2 emissions; and,
- opportunities to learn about and sign up for energy saving activities (e.g., unplugging chargers when not in use).

Participants were also part of a community network and could view electricity use of other similar households in the pilot and communicate with other pilot members each other through a social networking system.

Results of the evaluation indicate:

- Strong customer interest in the pilot (with minimal marketing expense, the pilot attracted more than triple the number of desired participants);
- High levels of customer satisfaction with the pilot;
- Significant energy savings.

Seventy-five percent of program participants reduced energy consumption during the program. Program participants reduced their daily energy use by an average of 9.3 percent or 2.9 kWh per day, the second highest decrease when compared to results from similar smart monitoring programs tested throughout North America. One-third reduced average energy consumption by 4 or more kWh per day. Additional results are available in a report that is available at http://www.capelightcompact.org/reports.html. Click on the report titled, Residential Smart Home Energy Monitoring Pilot Final Evaluation Report, dated March 31, 2010.

As a result of the findings in the report, Cape Light Compact will expand the pilot by offering Phase 2 which will include residential and commercial participants. An RFP for Phase 2 will be available in August 2010. Evaluation of the pilot will continue through the end of calendar year 2010, at which point further information regarding the persistence of the identified energy savings will be further measured and evaluated. If savings and persistence remain, the Cape Light Compact would recommend making this pilot a program. This Annual Report does not include the savings estimates from this evaluation. The savings estimates will be applied if the pilot becomes a program.

B. Low-Income

1. By BCR Activity

Table 7 presents a summary of the number of customers served, the annual savings, the lifetime savings, and the costs incurred for the Low-Income programs. It also presents the benefit-cost ratio, based on the total resource cost test. The costs and benefits used to derive this ratio are the same as those presented in Table 3.

The Low-Income Retrofit 1-4 Program contributes greater annual and lifetime energy and capacity savings and non-electric benefits due to the fact that there are a greater number of participants in this program. All of the programs are cost-effective.

TABLE 7
IMPACT BY LOW-INCOME BCR ACTIVITIES

Benefit-Cost Ratio / Activity	Participant	Annual				Lifetime			Cost		Benefit-Cost
		kWh	kWh per Cust	kW	$-NEB	MWH	kW	$-NEB	Activity	per Cust	TRC
B02a Low-Income Lost Opportunity	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
B03a Low-Income Retrofit 1-4	624	396,453	635	102.58	$152,366	4,259	1,642	$2,556,586	$824,610	$1,321	4.19
B03b Low-Income Retrofit Multifamily	78	15,235	195	1.32	$46,346	193	11	$889,419	$169,814	$2,177	5.36
TOTAL	702	411,687	586	103.89	$198,712	4,451	1,654	$3,446,006	$994,424	$1,417	4.39

2. By End Use

Table 8 presents a summary of the lifetime energy savings, capacity savings, and non-electric benefits, by the different end-uses addressed in the Low-Income programs. Most of the energy savings for Low-Income are from the Lighting and End User Behavior end uses. Most of the capacity savings for Low-Income are from the Lighting and HVAC end uses. Most of the Low-Income non-electric benefits come from the HVAC measures. This is because the home energy audits result in benefits associated with (a) improved property values, (b) reduced fire, illness and moving costs, and (c) fossil-fuel savings. All of the Low-Income programs also have non-electric benefits as a result of reduced usage of the low-income discount rate. The Low-Income programs also have non-electric benefits that are experienced by non-low-income residential customers, such as lighting O&M savings and reduced water usage.

There is no difference between the reported and preliminary results for Low-Income programs since there were no updates from evaluation studies this year.

TABLE 8
IMPACT BY LOW-INCOME END-USES

End Use	Lifetime MWH		Lifetime kW		Lifetime $ NEB	
	Preliminary	Report	Preliminary	Report	Preliminary	Report
Lighting	2,978	2,978	276	276	$86,026	$86,026
HVAC	246	246	1,231	1,231	$3,170,936	$3,170,936
Refrigeration	739	739	96	96	$50,706	$50,706
Hot Water	8	8	5	5	$100,919	$100,919
Motors	0	0	0	0	$0	$0
End User Behavior	480	480	46	46	$37,418	$37,418
Total	**4,451**	**4,451**	**1,654**	**1,654**	**$3,446,006**	**$3,446,006**

Figures 16 through 18 present the same information as Table 8.

FIGURE 16
LOW-INCOME LIFETIME MWH - END-USE

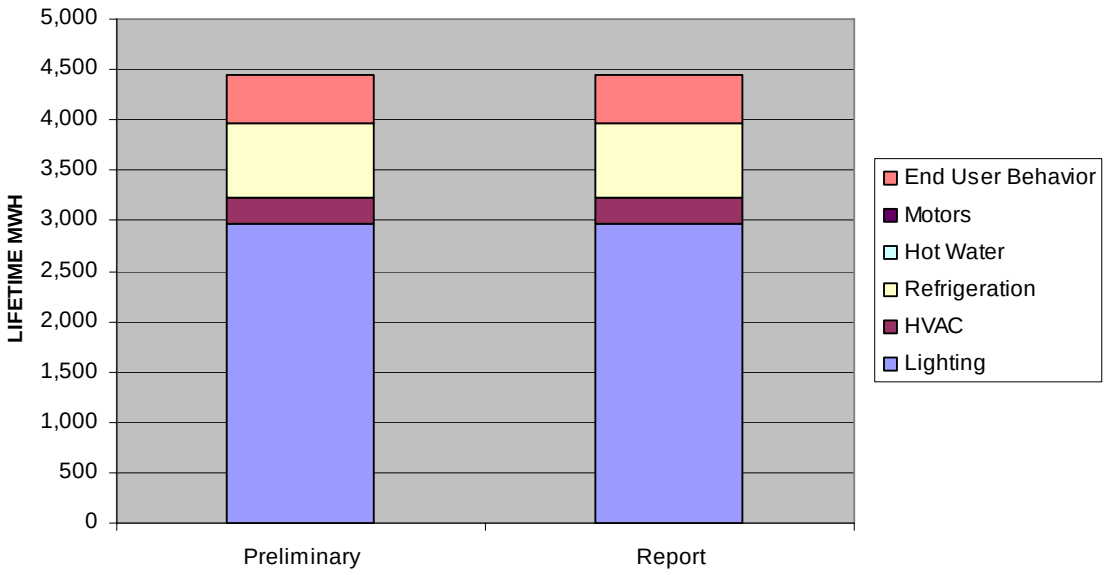


FIGURE 17
LOW-INCOME LIFETIME kW - END-USE

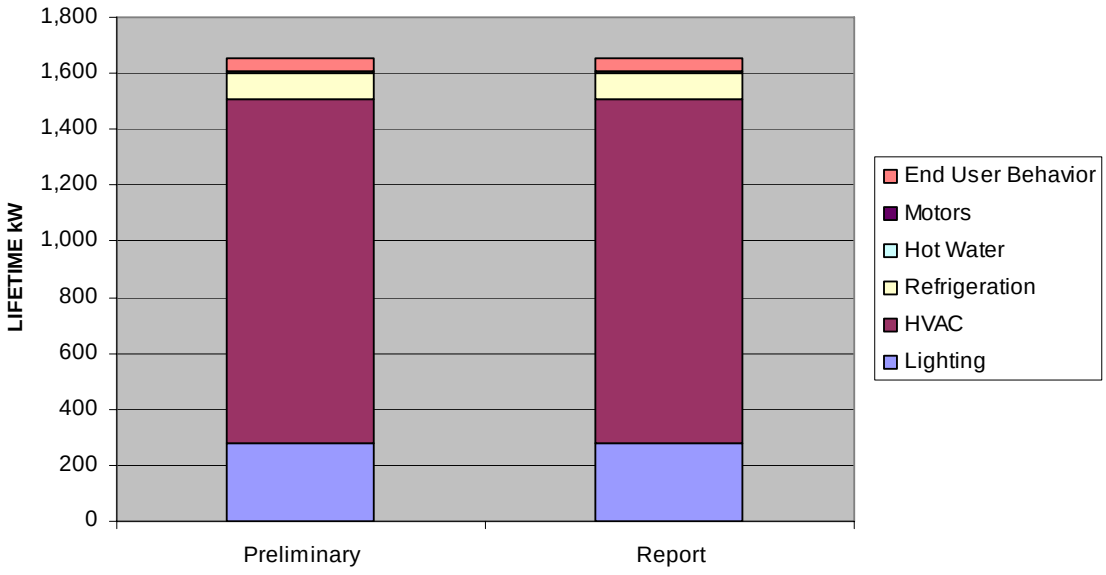
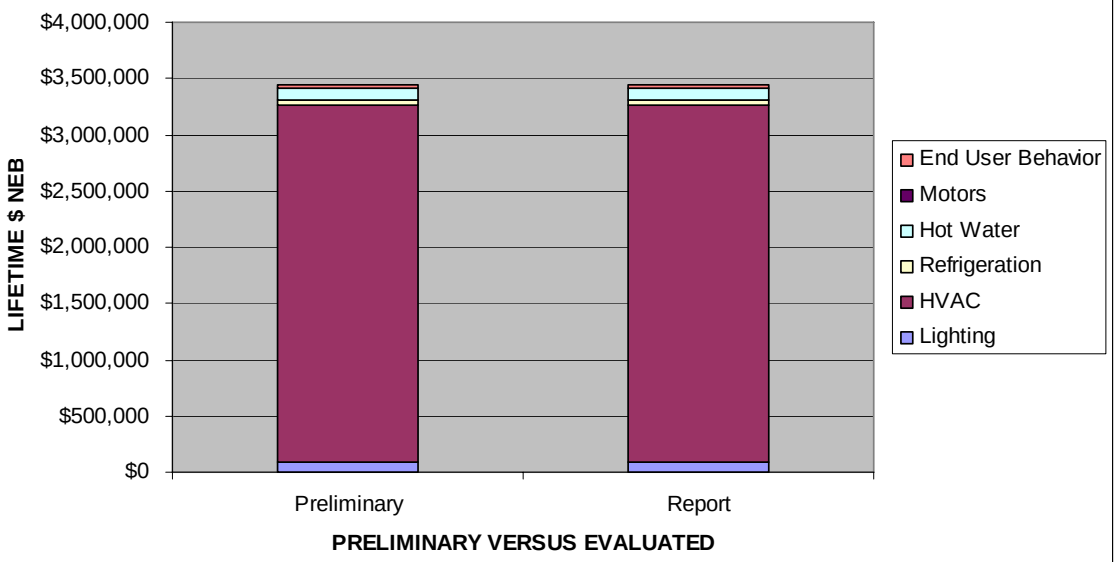


FIGURE 18
LOW-INCOME LIFETIME $ NEB - END-USE



3. Program Evaluation

Low-Income Single Family Program

No new evaluation activities were conducted on the results of this program in 2009.

Low-Income Multi-Family Program

***2009 Massachusetts Multi-Family Program Assessment*, Nexus Market Research, Inc., August 19, 2009.**[30]

On March 24, 2009 the Energy Efficiency Advisory Council (EEAC) issued a "Priorities Resolution" to support the development of statewide electric and natural gas efficiency investment plans.

In response to the Council's resolution, a Multi-Family Program Design Workshop was held in April 2009. The purpose of the workshop was to obtain key stakeholder feedback on the design elements of a successful Multi-Family program. The workshop was attended by customers, the EEAC members and their consultants, vendors providing service for MA Multi-Family programs, and PA staff. Customers that attended the workshop were primarily from the low-income/affordable housing sector.

[30] The Cape Light Compact is listing this study under the Low-Income Multi-Family Program, as it does not report Multi-Family program results under Residential and C&I. However, the results of this study include and therefore apply to all program participants, including Residential and C&I Multi-Family program participants.

As required by law, the program administrators filed drafts of the 2010-2012 statewide gas and electric energy efficiency plans on April 30, 2009. Due to time constraints, the program administrators did not have the opportunity to fully assess the results of the workshop, identify and fill additional data needs, or develop a comprehensive Multi-Family program design. As a result, the program administrators and EEAC agreed that additional time and effort was required, including gathering input from market rate actors given the composition of customers attending the workshop.

Accordingly, the purpose of this assessment was to obtain further data to inform the program design effort including:

- Confirm or disconfirm, as well as augment, the findings and recommendations from the workshop;
- Understand the progress made to date on overcoming technical barriers;
- Identify successful strategies for delivering a program that is fuel and rate class blind, takes a "whole building" approach to identifying energy efficiency opportunities, and encourages customers to achieve "deeper savings" within Multi-Family properties.

The following tasks were completed in support of this assessment:

- Four focus groups with multi-family building owners, managers and landlords;
- Eight interviews with program administrators in other states;
- A review of available literature and a review of the April 2009 workshop results.

Findings included the fact the same barriers identified in 1995 and 2001 hold true in 2009, suggesting continuing challenges in penetrating this market.

Key strengths of the existing program include, technical assistance offered, customer service, labeling and brand recognition, the whole building approach and quality assurance.

Key weaknesses include, the inability to operate blind to fuel type, poor uptake of tenant training services, insufficient market research, lack of funding for additional training services and not keeping up with client expectations. The principal barriers continue to be the split incentive issue, uncertainty of equipment performance, financial constraints and lack of program awareness.

The findings that came out of this study will be taken into consideration in the statewide working group to inform successful implementation of the program moving forward. Results from this study did not drive changes to the reported savings and benefits for the Low-Income Multi-Family Program.

C. Commercial & Industrial

1. By BCR Activity

Table 9 presents a summary of the number of customers served, the annual savings, the lifetime savings, and the costs incurred for the commercial & industrial programs. It also presents the benefit-cost ratio, based on the total resource cost test. The costs and benefits used to derive this ratio are the same as those presented in Table 4.

The Small C&I Retrofit Program contributes the most annual and lifetime energy and capacity savings and non-electric benefits. All of the programs are cost-effective.

TABLE 9
IMPACT BY C&I BCR ACTIVITIES

Benefit-Cost Ratio		Annual				Lifetime			Cost		Benefit-Cost
Activity	Participant	kWh	kWh per Customer	kW	$-NEB	MWH	kW	$-NEB	Activity	per Customer	TRC
C02a C&I Lost Opportunity	63	989,771	15,711	282.20	$1,139	14,425	3,992	$17,083	$469,945	$7,459	5.78
C03a Large C&I Retrofit	32	2,521,062	78,783	347.98	$857	35,170	4,844	$11,137	$1,248,429	$39,013	4.08
C03b Small C&I Retrofit	353	4,613,133	13,068	1,034.29	$9,019	59,663	13,565	$117,242	$3,394,506	$9,616	3.00
TOTAL	448	8,123,966	18,134	1,664.46	$11,014	109,258	22,402	$145,462	$5,112,881	$11,413	3.52

2. By End Use

Table 10 presents a summary of the lifetime energy savings, capacity savings, and non-electric benefits, by the different end-uses addressed in the commercial & industrial programs.

Most of the energy savings, capacity savings, and non-electric benefits are from lighting measures. The non-electric benefits in the C&I sector are primarily from reduced O&M costs as a result of efficient light bulbs with longer operating lives.

There is no difference between the reported and preliminary results for C&I programs since there were no updates from evaluation studies this year.

TABLE 10
IMPACT BY C&I END-USES

End Use	Lifetime MWH		Lifetime kW		Lifetime $ NEB	
	Preliminary	Report	Preliminary	Report	Preliminary	Report
Lighting	60,673	60,673	12,940	12,940	$145,462	$145,462
HVAC	22,182	22,182	4,427	4,427	$0	$0
Motors / Drives	19,797	19,797	4,378	4,378	$0	$0
Refrigeration	6,607	6,607	657	657	$0	$0
Hot Water	0	0	0	0	$0	$0
Compressed Air	NA	NA	NA	NA	NA	NA
Process	0	0	0	0	$0	$0
End User Behavior	0	0	0	0	$0	$0
Total	**109,258**	**109,258**	**22,402**	**22,402**	**$145,462**	**$145,462**

Figures 19 through 21 present the same information as Table 10.

FIGURE 19
C&I LIFETIME MWH - END-USE

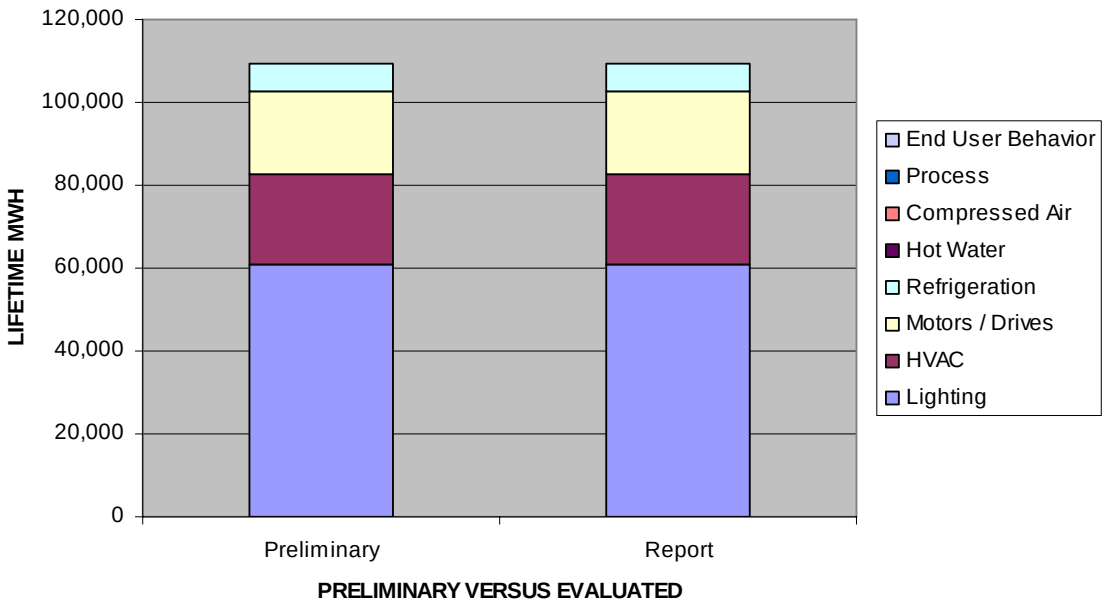
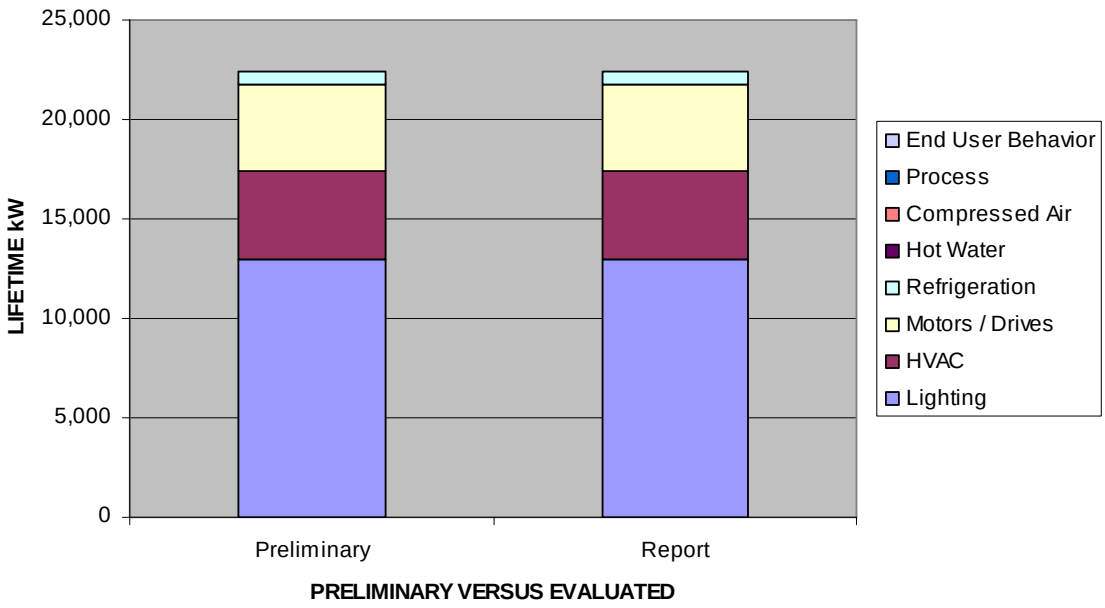
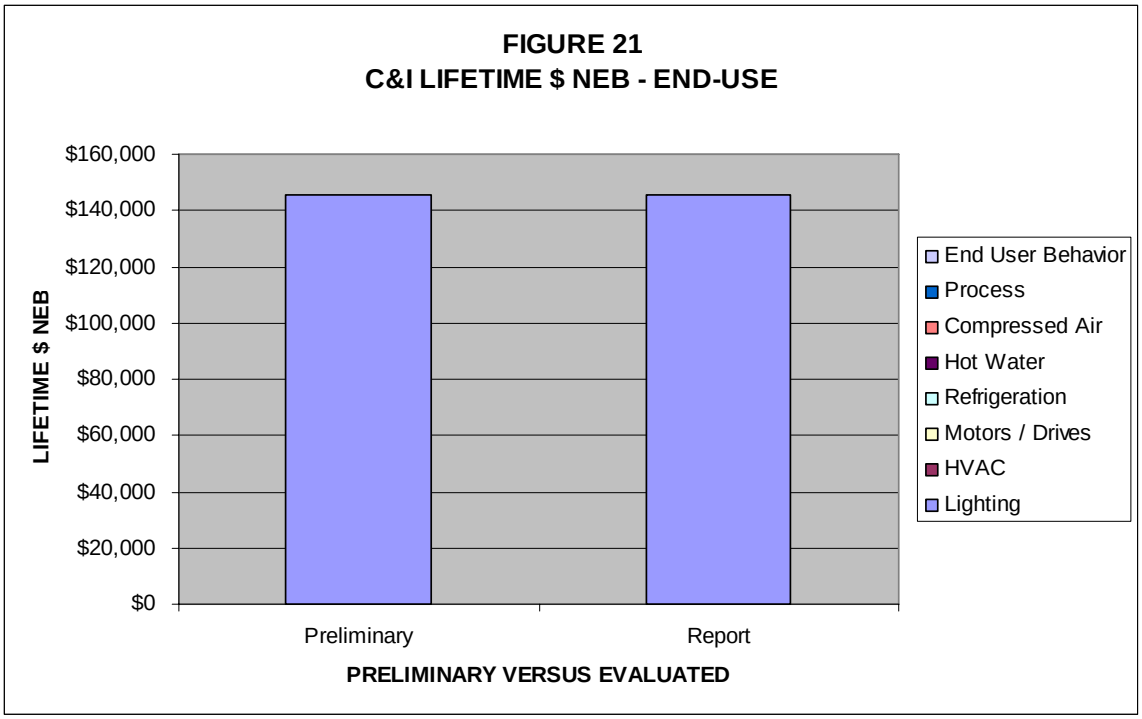


FIGURE 20
C&I LIFETIME kW - END USE





3. Program Evaluation

Commercial and Industrial New Construction Program

No new evaluation activities were conducted on the results of this program in 2009.

Medium and Large Commercial and Industrial Retrofit Program

No new evaluation activities were conducted on the results of this program in 2009.

Small Commercial and Industrial Retrofit Program

***Market Assessment and Best Practices for Delivering Plug-Load Energy Efficiency in Business – Final Report*, PA Consulting Group, June 14, 2010.**

The purpose of this study was to provide information on current plug-load programs, provide a preliminary estimate for potential energy savings, and recommend program strategies for the C&I sector, with an emphasis on small businesses.

The scope of this study was somewhat limited as there was no budget for primary data collection and analysis. While the results of the study include certain caveats, including recommendations for primary data collection, the results also point to a number of overarching recommendations, as well as numerous measure specific strategies for consideration. Overarching recommendations include the following:

- Integrate plug-load efficiency into existing programs;
- Consider programs that target upstream market actors;
- Explore the use of total work space control systems;
- Provide plug-load efficiency training and education.

Measure specific recommendations include the following:

- Distribute smart strips during energy audits and as part of a direct install program;
- Distribute educational materials on the benefits of computer and monitor power management;
- Encourage replacement of office task lights with energy efficient lights.

All recommendations from this study will be taken into consideration by the appropriate statewide PA working group. It is anticipated that some of the recommendations will be used to enhance C&I program offerings, and potentially residential program offerings as well.

Government Agencies Program

No new evaluation activities were conducted on the results of this program in 2009.

Commercial and Industrial Products and Services Program

No new evaluation activities were conducted on the results of this program in 2009.

IV. Appendices

Appendix 1. Glossary of Terms and Abbreviations
Appendix 2. Impact Factors
Appendix 3. Detailed Benefits and Costs by BCR Activity
Appendix 4. Comparison of Planned and Reported Outsourced and In-House Expenditures
Appendix 5. Calculation of Shareholder Incentive
Appendix 6. Energy Efficiency Evaluations & Studies
Appendix 7. Performance Metrics Related Documents and Reports
Appendix 8. Detailed Savings Calculations of the 2009 Programs
Appendix 9. Progress Report/Update on Compliance Items
Appendix 10. Variance Analysis
Appendix 11. Cape Light Compact's Year End 2009 Town Program Activity Reports (Cape Light Compact-Specific Appendix)

Appendix 1. Glossary of Terms and Abbreviations[1]

Annual kWh Reduction	Expected net annual energy savings after all impact factors have been taken into consideration.
AMP	Appliance Management Program
BBRS	Board of Building Regulations and Standards
CAP	Community Action Program
CEE	Consortium for Energy Efficiency
CFL	Compact Fluorescent Lamps
Coincident Peak Demand	Demand for electricity at the time of the Company's peak demand.
Delta Watts	The difference in the wattage between pre-existing or baseline lighting equipment and energy efficient lighting equipment.
Demand	The amount of electric energy used by a customer or a piece of equipment at a specific time, expressed in kilowatts.
Demand Adjustment Factor	This factor is a combination of one or more evaluation impact parameters applied to gross demand savings in the calculation of net demand savings.
Diversity	That characteristic of a variety of electric loads whereby individual maximum demands usually occur at different times.
Diversity Factor	Percent of savings available at the time of the Company's peak demand.
DOE	Department of Energy
DOER	Massachusetts Division of Energy Resources
D&R	D&R International, the contractor to DOE and EPA that monitors sales of ENERGY STAR® appliances.
DSM	Demand Side Management
DTE	Massachusetts Department of Telecommunications and Energy
EFLH	Equivalent Full Load Hours

[1] Much of this glossary was taken from Massachusetts Electric and Nantucket Electric, 2003 Energy Efficiency Annual Report, submitted to the Massachusetts Department of Telecommunications and Energy, September 2004. In addition to this glossary, a glossary completed in March 2009 for the Regional EM&V Forum with additional terms and acronyms is now available at: *http://www.neep.org/EMVinfo.html*

Energy Adjustment Factor	A factor made up of one or more evaluation impact parameters applied to gross kWh savings in the calculation of net kWh savings.
EPA	Environmental Protection Agency
EPACT	Energy Policy Act
ENERGY STAR®	Brand name for the voluntary energy efficiency labeling initiative sponsored by the U.S. Environmental Protection Agency and Department of Energy.
Free Riders	Customers who participate in an energy efficiency program but would have installed the same measure(s) on their own if the program had not been available.
Free-Ridership Rate	The percent of savings attributable to Free Riders.
Gross kW	Expected demand reduction based on a comparison of standard or replaced equipment, and equipment installed through an energy efficiency program.
Gross kWh	Expected kWh reduction based on a comparison of standard or replaced equipment, and equipment installed through an energy efficiency program.
GWh	Gigawatt-hour – a measure of electricity usage over time equal to 1,000 megawatt-hours or 1,000,000 kilowatt-hours.
Hours of Use	The estimated number of hours per year that a measure operates.
Hours of Use Realization Rate	Ratio of actual metered hours of use data to estimated hours of use data.
HP	Horsepower
HVAC	Heating Ventilation and Air Conditioning
Impact Factor	Generic term for persistence, realization rates, in-service rates, non-coincident connected demand factors, etc., developed during the evaluation of energy efficiency programs and used to calculate net savings.
JMC	The Joint Management Committee of utility and non-utility parties that manages the ENERGY STAR® Homes Program.
kWh	Kilowatt-hour – The basic unit of electric energy usage over time. One kWh is equal to one kW of power supplied to a circuit for a period of one hour.
kW	Kilowatt – A measure of electric demand – 1000 watts
kW – Years	See: Lifetime kW
Lifetime	The expected length of time, in years, that an installed measure will be in service and producing savings.
Lifetime kW	The expected demand savings over the lifetime of an

	installed measure, calculated by multiplying the annual peak kW reduction associated with a measure by the expected lifetime of that measure. It is expressed in units of kW-years.
Lifetime MWh	The expected energy savings over the lifetime of an installed measure, calculated by multiplying the annual MWh reduction associated with a measure by the expected lifetime of that measure.
LIHEAP	Low Income Heating Assistance Program
Maximum Annual kW Savings	Peak annual demand savings of a measure. At the program level, this equals the sum of the annual peak demand savings across all measures.
Measure	Specific technology or practice that produces energy and/or demand savings for which the company provides financial incentives.
MPER	Multi-Year Program Evaluation and Market Progress Reporting, or Market Progress and Evaluation Report, developed for various residential programs.
MW	Megawatt – a measure of electric demand equal to 1,000 kilowatts.
MWh	Megawatt-hour – a measure of energy use over time equal to 1,000 kilowatt-hours.
NATE	North American Technician Excellence Program
NEEP	Northeast Energy Efficiency Partnerships
O&M	Operation and Maintenance
Off-Peak energy kWh	The kWh reduction that occurs during the Company's off-peak hours for energy. (Monday-Friday 9 p.m. to 8 a.m. and all day of weekends and holidays)
On-Peak Energy kWh	The kWh reduction that occurs during the Company's on-peak hours for energy. (Monday-Friday 8 a.m. to 9 p.m., except holidays)
Persistence Rate	Percentage of first year energy or demand savings expected to persist over the life of the installed energy efficiency equipment; developed by conducting surveys of installed equipment several years after installation to determine presence and operational capability of the equipment.
RCS	Residential Conservation Services. Formerly Energy Conservation Services or ECS
Seasonal (Winter/Summer) kW	The net demand reduction during either the Winter or Summer seasons.
Spillover	Additional energy efficient equipment installed by customers

	that were influenced by the Company's sponsored program, but without direct financial or technical assistance from the program. Spillover is separated into Participant and Non-participant factors. Non-participating customers may be influenced by product availability, publicity, education, and other factors that are affected by the program.
Spillover Rate	Estimate of energy savings attributable to spillover effects expressed as a percent of savings installed by participants through an energy efficiency program.
VSD	Variable Speed Drive
WAP	Weatherization Assistance Program
Watt	The basic electrical unit of power.

Appendix 2. Impact Factors

The table below presents the impact factors that were used to calculate the evaluated savings for the Commercial & Industrial programs in 2009. Commercial & Industrial impact factors were not evaluated in 2009.

Table A2.1 Commercial & Industrial Program Evaluation Impact Factors

BCR Activity	Program	End Use	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
C02a C&I Lost Opportunity	C02a C&I New Construction	ALght	15	30.70%	6.20%	2.90%	100%
C02a C&I Lost Opportunity	C02a C&I New Construction	BHVAC	15	33.20%	8.80%	2.90%	100%
C02a C&I Lost Opportunity	C02a C&I New Construction	CMoDr	20	21.10%	17.70%	2.90%	100%
C02a C&I Lost Opportunity	C02a C&I New Construction	DRefr	15	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C02a C&I New Construction	EHoWa	15	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C02b C&I Govt New Construction	ALght	15	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C02b C&I Govt New Construction	BHVAC	15	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C02b C&I Govt New Construction	CMoDr	20	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C02b C&I Govt New Construction	DRefr	15	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C02b C&I Govt New Construction	EHoWa	15	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03a C&I Large Retrofit	ALght	13	5.70%	3.20%	2.90%	100%
C03a Large C&I Retrofit	C03a C&I Large Retrofit	BHVAC	12	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03a C&I Large Retrofit	CMoDr	15	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03a C&I Large Retrofit	DRefr	13	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03a C&I Large Retrofit	EHoWa	10	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03c C&I Govt Large	ALght	13	0.60%	3.40%	2.90%	89%
C03a Large C&I Retrofit	C03c C&I Govt Large	BHVAC	12	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03c C&I Govt Large	CMoDr	15	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03c C&I Govt Large	DRefr	13	0.00%	0.00%	2.90%	100%
C03a Large C&I Retrofit	C03c C&I Govt Large	BHVAC	15	0.00%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03b C&I Small Retrofit	ALght	13	5.70%	3.20%	2.90%	86%
C03b Small C&I Retrofit	C03b C&I Small Retrofit	BHVAC	10	43.30%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03b C&I Small Retrofit	CMoDr	15	0.00%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03b C&I Small Retrofit	DRefr	10	4.20%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03b C&I Small Retrofit	EHoWa	10	0.00%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03d C&I Govt Small	ALght	13	0.60%	3.40%	2.90%	89%
C03b Small C&I Retrofit	C03d C&I Govt Small	BHVAC	10	0.00%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03d C&I Govt Small	CMoDr	15	0.00%	0.00%	2.90%	100%
C03b Small C&I Retrofit	C03d C&I Govt Small	DRefr	10	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C04c C&I Products & Services	ALght	15	27.90%	13.40%	2.60%	100%
C02a C&I Lost Opportunity	C04c C&I Products & Services	BHVAC	13	0.00%	0.00%	2.90%	100%
C02a C&I Lost Opportunity	C04c C&I Products & Services	CMoDr	15	0.00%	0.00%	2.90%	100%

Note: Shaded cells indicate impact factors that are neither 100% for the In-Service Rate nor 0% for the Free Ridership, Participant Spillover, or Non-Participant Spillover Rates.

The table below presents the impact factors that were used to calculate the evaluated savings for residential programs offered by the Cape Light Compact in 2009. Impact factors shown below for most programs represent the common assumptions developed by Massachusetts program administrators, based on a review of best available information on measures in statewide programs. The Residential Lighting program impact factors in bold were updated in 2009.

Table A2.2 Residential Program Evaluation Impact Factors

BCR Activity	Measure	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
A02b Residential HVAC	CoolSmart AC SEER 14 (Equip) - EER 11.5-11.99	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP SEER 14 (Equip) -	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart AC SEER 14 => (Equip) - EER>=12	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP SEER 14=> (Equip)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart AC SEER 14.5 (Equip) - EER 12 (Jan 09 ES Spec)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP SEER 14.5 (Equip) - EER 12 (Jan 09 ES Spec)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart AC SEER 15.0 => (Equip) - EER>=12.5	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP SEER 15.0 => (Equip)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart AC QIV NES	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart AC QIV ES	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP QIV NES	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP QIV ES	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart AC Digital Check-up/Tune-up	5	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart HP Digital Check-up/Tune-up	5	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	CoolSmart Wm Air Furnace ECM (GN Reb)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Duct Sealing - 100 CFM redcution in leaks 20% of flow to 10%	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Down Size 1/2 ton	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Mini Splits (Ductless)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Mini Split HP SEER 14.5, EER 12 (Ductless)	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Equipt Tier I or II >= 12 EER w/ Sizing	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Early Replacement of equip age 13 years old, rmng life 7 years wit	7	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Early Retirement w/ Energy Star QI	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Early Retirement E*QI w/ Duct modifications	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Brushless Furnace Fan Motor	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	TXV rplcment of fixed orifice	7	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Rightsizing Tier 2 14.5/12	18	0.00%	0.00%	0.00%	100%
A02b Residential HVAC	Rightsizing Top Tier 15/12.5	18	0.00%	0.00%	0.00%	100%

BCR Activity	Measure	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
A04b Residential Appliances	AC (retirement value)	4	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	AC (energy star value)	12	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	AC (retirement value) turn-in	4	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	AC (energy star value) turn-in	12	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	ECM Heat (CLC-specific)	20	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	Clothes Washer - oil	11	10.00%	0.00%	0.00%	27%
A04b Residential Appliances	Clothes Washer - gas	11	10.00%	0.00%	0.00%	27%
A04b Residential Appliances	Clothes Washer - electric	11	10.00%	0.00%	0.00%	27%
A04b Residential Appliances	Dehumidifiers (retirement value) turn-in	4	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	Dehumidifiers (energy star value) turn-in	12	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	Refrigerator (savings over full life compare	13	35.00%	36.00%	0.00%	100%
A04b Residential Appliances	2nd Refrigerator Removal	5	35.00%	0.00%	0.00%	100%
A04b Residential Appliances	Consumer Electronics - TVs	6	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	Consumer Electronics - Set Top Boxes	4	0.00%	0.00%	0.00%	100%
A04b Residential Appliances	Consumer Electronics - Smart Strips	5	0.00%	0.00%	0.00%	75%
A04b Residential Appliances	Pool Pumps	10	0.00%	0.00%	0.00%	100%

BCR Activity	Measure	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
A02a Residential Lost Opportunity	RNC ES Homes All Tiers (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes All Tiers (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes All Tiers (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 1 (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 1 (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 1 (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 2 (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 2 (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 2 (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 3 (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 3 (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	RNC ES Homes 3 (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	CP ES Homes (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	CP ES Homes (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	CP ES Homes (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Refrigerator (savings over full life compared to new baseline equipment)	13	35.00%	36.00%	0.00%	100%
A02a Residential Lost Opportunity	Dishwashers	12	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Fixtures	11	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	ES Homes Screw-in Bulbs	7	0.00%	0.00%	0.00%	99%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 1 Cooling	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 1 Heating	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 1 Water Heating	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 1 Lighting	8	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 1 Appliances	14	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 2 Cooling	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 2 Heating	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 2 Water Heating	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 2 Lighting	8	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 2 Appliances	14	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 3 Cooling	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 3 Heating	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 3 Water Heating	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 3 Lighting	8	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 3 Appliances	14	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 4 Cooling	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 4 Heating	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 4 Water Heating	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 4 Lighting	8	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	GAF - Efficiency Tier 4 Appliances	14	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes All Tiers (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes All Tiers (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes All Tiers (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 1 (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 1 (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 1 (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 2 (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 2 (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 2 (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 3 (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 3 (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI RNC ES Homes 3 (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI CP ES Homes (Heating)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI CP ES Homes (Cooling)	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI CP ES Homes (Water Heating)	15	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI Refrigerator (savings over full life compared to new baseline equipment)	13	35.00%	36.00%	0.00%	100%
A02a Residential Lost Opportunity	LI Dishwashers	12	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	LI Interior Fixtures	20	0.00%	0.00%	0.00%	96%
A02a Residential Lost Opportunity	LI ES Homes Screw-in Bulbs	7	0.00%	0.00%	0.00%	99%
A02a Residential Lost Opportunity	Major Renovation Pilot - Free CFL	7	2.00%	0.00%	0.00%	90%
A02a Residential Lost Opportunity	Major Renovation Pilot - Insulation, Oil	25	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Insulation, Gas	25	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Insulation, Electric	25	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Insulation, Other Fuels	25	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Air Sealing, Oil	15	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Air Sealing, Gas	15	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Air Sealing, Electric	15	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Air Sealing, Other Fuels	15	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Seal, Oil	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Seal, Gas	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Seal, Electric	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Seal, Other FF	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Insulation, Oil	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Insulation, Gas	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Insulation, Electric	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Duct Insulation, Other FF	20	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Thermostats, Oil	10	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Thermostats, Electric	10	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Heating System Replacement, Oil	18	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Heating System Replacement, Gas	18	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Heating System Replacement, Other Fuels	18	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Indirect Water Heater, Oil	20	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Solar Hot Water, Electric (2-person)	20	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Solar Hot Water, Electric (3-person)	20	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Solar Hot Water, Electric (4-person)	20	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - DHW ISMs, Oil	7	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - DHW ISMs, Gas	7	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - DHW ISMs, Electric	7	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - DHW ISMs, Other Fuels	7	2.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - ES Window, Oil	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - ES Window, Gas	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - ES Window, Electric	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - ES Window, Other Fuels	25	0.00%	0.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Refrigerator (savings over remaining life of existing	1	35.00%	36.00%	0.00%	100%
A02a Residential Lost Opportunity	Major Renovation Pilot - Refrigerator (savings over full life compared to new	13	35.00%	36.00%	0.00%	100%

BCR Activity	Measure	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
A03a Residential Retrofit 1-4	Free CFL	7	2.00%	0.00%	0.00%	90%
A03a Residential Retrofit 1-4	Free CFL (piggyback on other utility audits)	7	2.00%	0.00%	0.00%	90%
A03a Residential Retrofit 1-4	Torchiere	8	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Insulation, Oil	25	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Insulation, Gas	25	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Insulation, Electric	25	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Insulation, Other Fuels	25	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Air Sealing, Oil	15	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Air Sealing, Gas	15	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Air Sealing, Electric	15	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Air Sealing, Other Fuels	15	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Seal, Oil	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Seal, Gas	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Seal, Electric	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Seal, Other FF	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Insulation, Oil	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Insulation, Gas	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Insulation, Electric	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Duct Insulation, Other FF	20	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Thermostats, Oil	10	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Thermostats, Electric	10	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Hot Water Boiler	20	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Heating System Replacement, Oil	18	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Heating System Replacement, Gas	18	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Heating System Replacement, Other Fuels	18	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Indirect Water Heater, Oil	20	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Appliance/Pool Timers	5	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Solar Hot Water, Electric (2-person)	20	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Solar Hot Water, Electric (3-person)	20	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Solar Hot Water, Electric (4-person)	20	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	DHW ISMs, Oil	7	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	DHW ISMs, Gas	7	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	DHW ISMs, Electric	7	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	DHW ISMs, Other Fuels	7	2.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	ES Window, Oil	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	ES Window, Gas	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	ES Window, Electric	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	ES Window, Other Fuels	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Refrigerator (savings over remaining life of exi	1	35.00%	36.00%	0.00%	100%
A03a Residential Retrofit 1-4	Refrigerator (savings over full life compared to	13	35.00%	36.00%	0.00%	100%
A03a Residential Retrofit 1-4	Deep Retrofit Pilot - Electric	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Deep Retrofit Pilot - Gas	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Deep Retrofit Pilot - Oil	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Deep Retrofit Pilot - Propane/Other	25	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	CHP	15	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Waterbed Replacement	20	0.00%	0.00%	0.00%	100%
A03a Residential Retrofit 1-4	Weather Responsive Controls (Boiler Reset)	15	0.00%	0.00%	0.00%	100%

BCR Activity	Measure	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
A04a Residential Lighting	Screw-in Bulbs (incl. NCP and rebates)	7	0.00%	0.00%	0.00%	**40%**
A04a Residential Lighting	Indoor Fixture	20	8.00%	4.00%	0.00%	95%
A04a Residential Lighting	Outdoor Fixture	6	12.00%	7.00%	0.00%	87%
A04a Residential Lighting	Torchiere	8	6.00%	3.00%	0.00%	83%
A04a Residential Lighting	LED Fixtures	20	0.00%	0.00%	0.00%	73%

Note: Shaded cells indicate impact factors that are neither 100% for the In-Service Rate nor 0% for the Free Ridership, Participant Spillover, or Non-Participant Spillover Rates.

The table below presents the impact factors that were used to calculate the evaluated savings for low income programs offered by the Cape Light Compact in 2009. Impact factors shown below for most programs represent the common assumptions developed by Massachusetts program administrators, based on a review of best available information

on measures in statewide programs. Low Income impact factors were not evaluated in 2009.

Table A2.3 Low Income Program Evaluation Impact Factors

BCR Activity	Measure	Measure Life	Free Ridership Rate	Spillover [Participant] Rate	Spillover [Non-Participant] Rate	In-Service Rate
B03a Low-Income Retrofit 1-4	Baseload	5	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Other Wx	20	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Gas Wx	20	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Electric Wx	20	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Oil Wx	20	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Heating System Retrofit - Oil	18	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	CFL's	16	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Fixtures	20	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Torchiere	8	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Refrigerator (savings over remainin	5	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Refrigerator (savings over full life c	19	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Replacement Freezer	19	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	ES Window, Oil	25	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	ES Window, Gas	25	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	ES Window, Electric	25	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	ES Window, Other Fuels	25	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	DHWater Measure (elec)	7	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	DHWater Measure (OIL)	7	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	DHWater Measure (gas&other)	7	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	AC or POOL Timer	5	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Dehumidifiers retirement value (CL	4	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Dehumidifiers energy star value (CI	12	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Fuel switching (CLC-specific)	20	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Window AC Replacements	12	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Tstats - Electric	10	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Tstats - Oil	10	0.00%	0.00%	0.00%	100%
B03a Low-Income Retrofit 1-4	Tstats - Other	10	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	CFL	16	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	ES Window, Oil	25	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	ES Window, Gas	25	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	ES Window, Electric	25	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	ES Window, Other Fuels	25	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Refrigerator (savings over remainin	1	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Refrigerator (savings over full life c	13	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	DHWs	7	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Dehumidifiers retirement value (CL	4	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Dehumidifiers energy star value (CI	12	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Insulation & Air Sealing - electric	20	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Insulation & Air Sealing - oil	20	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Insulation & Air Sealing - gas	20	0.00%	0.00%	0.00%	100%
B03b Low-Income Retrofit Multifamily	Insulation & Air Sealing - propane	20	0.00%	0.00%	0.00%	100%

Note: Shaded cells indicate impact factors that are neither 100% for the In-Service Rate nor 0% for the Free Ridership, Participant Spillover, or Non-Participant Spillover Rates.

Appendix 3. Detailed Benefits and Costs by BCR Activity

Appendix 3 is comprised of three tables: Table 1, Table 2, and Table 3. All tables are organized by BCR Activity. All tables provide planned and reported values, as well as the difference between the reported and planned values.

- Table 1 provides a summary of the total resource cost (TRC) benefit cost ratios as well as the TRC benefits and TRC costs that comprise the ratios.
- Table 2 provides the total costs as well as various subtotals of the cost components.
- Table 3 provides the total benefits as well as totals for the components of the total benefits.

Appendix 3: Table 1
Summary of Benefit/Cost Ratios by Program
Lifetime Impacts of Measures Installed in 2009

Planned

BCR-Activity by Sector	Benefit / Cost Ratio	Sum of Net Benefits	Sum of TRC Benefits	Sum of TRC Costs	Sum of PA Costs
Residential					
A02a Residential Lost Opportunity Total	3.10	$2,474,675	$3,650,409	$1,175,734	$1,028,413
A02b Residential HVAC Total	2.41	$559,301	$956,954	$397,653	$347,753
A03a Residential Retrofit 1-4 Total	4.51	$13,753,587	$17,668,466	$3,914,879	$2,360,062
A04a Residential Lighting Total	12.50	$9,391,758	$10,208,585	$816,827	$633,615
A04b Residential Appliances Total	1.39	$218,816	$774,119	$555,302	$255,804
A07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: Residential	4.85	$26,398,137	$33,258,532	$6,860,395	$4,625,647
Low Income					
B03a Low-Income Retrofit 1-4	3.16	$2,427,441	$3,550,402	$1,122,962	$1,122,962
B03b Low-Income Retrofit Multifamily	5.74	$1,940,781	$2,349,996	$409,214	$409,214
B07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: Low Income	3.85	$4,368,222	$5,900,398	$1,532,176	$1,532,176
Commercial & Industrial					
C02a C&I Lost Opportunity Total	2.92	$773,129	$1,175,997	$402,867	$359,183
C03a Large C&I Retrofit Total	2.80	$1,634,784	$2,540,552	$905,768	$740,775
C03b Small C&I Retrofit Total	3.31	$7,464,552	$10,695,408	$3,230,856	$2,809,853
C07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: C&I	3.17	$9,872,466	$14,411,957	$4,539,491	$3,909,811
Grand Total	**4.14**	**$40,638,825**	**$53,570,887**	**$12,932,063**	**$10,067,635**

Appendix 3: Table 1
Summary of Benefit/Cost Ratios by Program
Lifetime Impacts of Measures Installed in 2009

Reported

BCR-Activity by Sector	Benefit / Cost Ratio	Sum of Net Benefits	Sum of TRC Benefits	Sum of TRC Costs	Sum of PA Costs
Residential					
A02a Residential Lost Opportunity Total	2.62	$719,813	$1,163,373	$443,560	$442,635
A02b Residential HVAC Total	4.22	$201,663	$264,201	$62,539	$62,539
A03a Residential Retrofit 1-4 Total	4.12	$10,411,383	$13,745,762	$3,334,379	$2,826,273
A04a Residential Lighting Total	4.30	$1,362,705	$1,775,504	$412,799	$404,361
A04b Residential Appliances Total	6.63	$1,285,098	$1,513,556	$228,457	$226,509
A07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: Residential	4.12	$13,980,662	$18,462,396	$4,481,734	$3,962,316
Low Income					
B03a Low-Income Retrofit 1-4	4.19	$2,629,573	$3,454,183	$824,610	$824,610
B03b Low-Income Retrofit Multifamily	5.36	$739,728	$909,542	$169,814	$169,814
B07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: Low Income	4.39	$3,369,301	$4,363,725	$994,424	$994,424
Commercial & Industrial					
C02a C&I Lost Opportunity Total	5.78	$2,246,500	$2,716,446	$469,945	$466,762
C03a Large C&I Retrofit Total	4.08	$3,849,625	$5,098,054	$1,248,429	$448,602
C03b Small C&I Retrofit Total	3.00	$6,783,742	$10,178,248	$3,394,506	$3,029,003
C07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: C&I	3.52	$12,879,867	$17,992,748	$5,112,881	$3,944,366
Grand Total	**3.85**	**$30,229,831**	**$40,818,869**	**$10,589,038**	**$8,901,106**

Appendix 3: Table 1
Summary of Benefit/Cost Ratios by Program
Lifetime Impacts of Measures Installed in 2009

Variance

BCR-Activity by Sector	Benefit / Cost Ratio	Sum of Net Benefits	Sum of TRC Benefits	Sum of TRC Costs	Sum of PA Costs
Residential					
A02a Residential Lost Opportunity Total	-0.48	-$1,754,862	-$2,487,036	-$732,174	-$585,778
A02b Residential HVAC Total	1.82	-$357,638	-$692,753	-$335,115	-$285,215
A03a Residential Retrofit 1-4 Total	-0.39	-$3,342,204	-$3,922,704	-$580,500	$466,212
A04a Residential Lighting Total	-8.20	-$8,029,053	-$8,433,081	-$404,028	-$229,254
A04b Residential Appliances Total	5.23	$1,066,282	$739,437	-$326,845	-$29,295
A07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: Residential	-0.73	-$12,417,475	-$14,796,136	-$2,378,662	-$663,331
Low Income					
B03a Low-Income Retrofit 1-4	1.03	$202,132	-$96,220	-$298,352	-$298,352
B03b Low-Income Retrofit Multifamily	-0.39	-$1,201,053	-$1,440,453	-$239,400	-$239,400
B07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: Low Income	0.54	-$998,921	-$1,536,673	-$537,752	-$537,752
	0.00	$0	$0	$0	$0
Commercial & Industrial	0.00	$0	$0	$0	$0
C02a C&I Lost Opportunity Total	2.86	$1,473,371	$1,540,449	$67,078	$107,578
C03a Large C&I Retrofit Total	1.28	$2,214,841	$2,557,502	$342,661	-$292,173
C03b Small C&I Retrofit Total	-0.31	-$680,810	-$517,160	$163,650	$219,150
C07x Performance Incentive Tax Liability Total	NA	NA	NA	NA	NA
Subtotal: C&I	0.34	$3,007,402	$3,580,791	$573,390	$34,555
Grand Total	**-0.29**	**-$10,408,994**	**-$12,752,018**	**-$2,343,024**	**-$1,166,529**

Appendix 3: Table 2
Detail Summary of Costs by Program

Planned

		Cost Categories					
BCR-Activity	**Program**	**Total TRC Costs**	**Total PA Costs**	**Program Implementation**	**Customer**	**Evaluation**	**Shareholder Incentive**
A02a Residential Lost Opportunity	A02a Energy Star Homes	$1,175,734	$1,028,413	$995,172	$530,177	$33,241	NA
A02a Residential Lost Opportunity Total		**$1,175,734**	**$1,028,413**	**$995,172**	**$530,177**	**$33,241**	**$0**
A02b Residential HVAC	A02b Energy Star HVAC	$397,653	$347,753	$338,257	$195,875	$9,496	NA
A02b Residential HVAC Total		**$397,653**	**$347,753**	**$338,257**	**$195,875**	**$9,496**	**$0**
A03a Residential Retrofit 1-4	A03a Residential Conservation Service	$3,914,879	$2,360,062	$2,286,397	$1,391,090	$73,665	NA
A03a Residential Retrofit 1-4 Total		**$3,914,879**	**$2,360,062**	**$2,286,397**	**$1,391,090**	**$73,665**	**$0**
A04a Residential Lighting	A04a Energy Star Lighting (Includes Catalog)	$816,827	$633,615	$613,771	$361,810	$19,844	NA
A04a Residential Lighting Total		**$816,827**	**$633,615**	**$613,771**	**$361,810**	**$19,844**	**$0**
A04b Residential Appliances	A04b Energy Star Appliance	$555,302	$255,804	$221,651	$80,150	$34,153	NA
A04b Residential Appliances Total		**$555,302**	**$255,804**	**$221,651**	**$80,150**	**$34,153**	**$0**
A07x Performance Incentive Tax Liability	A07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
A07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Residential Total		**$6,860,395**	**$4,625,647**	**$4,455,247**	**$2,559,102**	**$170,400**	**$0**
B03a Low Income Retrofit 1-4	B03a Low-Income Single-Family Program	$1,122,962	$1,122,962	$1,078,322	$722,022	$44,640	NA
B03a Low Income Retrofit 1-4 Total		**$1,122,962**	**$1,122,962**	**$1,078,322**	**$722,022**	**$44,640**	**$0**
B03b Low-Income Retrofit Multifamily	B03b Low-Income Multi-Family Program	$409,214	$409,214	$404,254	$316,169	$4,960	NA
B03b Low-Income Retrofit Multifamily		**$409,214**	**$409,214**	**$404,254**	**$316,169**	**$4,960**	**$0**
B07x Performance Incentive Tax Liability	B07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
B07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Low-Income Total		**$1,532,176**	**$1,532,176**	**$1,482,576**	**$1,038,191**	**$49,600**	**$0**
C02a C&I Lost Opportunity	C02a C&I New Construction	$172,956	$164,050	$157,385	$127,694	$6,665	NA
	C02b C&I Govt New Construction	$66,777	$65,384	$61,784	$48,011	$3,600	NA
	C04c C&I Products & Services	$163,135	$129,749	$125,799	$47,117	$3,950	NA
C02a C&I Lost Opportunity Total		**$402,867**	**$359,183**	**$344,968**	**$222,823**	**$14,215**	**$0**
C03a Large C&I Retrofit	C03a C&I Large Retrofit	$365,756	$219,990	$210,264	$122,159	$9,725	NA
	C03c C&I Govt Large	$540,012	$520,786	$491,986	$364,141	$28,800	NA
C03a Large C&I Retrofit Total		**$905,768**	**$740,775**	**$702,250**	**$486,300**	**$38,525**	**$0**
C03b Small C&I Retrofit	C03b C&I Small Retrofit	$2,314,781	$1,925,554	$1,847,164	$1,476,057	$78,390	NA
	C03d C&I Govt Small	$916,075	$884,299	$835,429	$665,329	$48,870	NA
C03b Small C&I Retrofit Total		**$3,230,856**	**$2,809,853**	**$2,682,593**	**$2,141,386**	**$127,260**	**$0**
C07x Performance Incentive Tax Liability	C07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
C07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Commercial & Industrial Total		**$4,539,491**	**$3,909,811**	**$3,729,811**	**$2,850,509**	**$180,000**	**$0**
Grand Total		**$12,932,063**	**$10,067,635**	**$9,667,635**	**$6,447,802**	**$400,000**	**$0**

Appendix 3: Table 2
Detail Summary of Costs by Program

Reported

		Cost Categories					
BCR-Activity	**Program**	**Total TRC Costs**	**Total PA Costs**	**Program Implementation**	**Customer**	**Evaluation**	**Shareholder Incentive**
A02a Residential Lost Opportunity	A02a Energy Star Homes	$443,560	$442,635	$433,934	$925	$8,701	NA
A02a Residential Lost Opportunity Total		**$443,560**	**$442,635**	**$433,934**	**$925**	**$8,701**	**$0**
A02b Residential HVAC	A02b Energy Star HVAC	$62,539	$62,539	$61,309	$0	$1,229	NA
A02b Residential HVAC Total		**$62,539**	**$62,539**	**$61,309**	**$0**	**$1,229**	**$0**
A03a Residential Retrofit 1-4	A03a Residential Conservation Service	$3,334,379	$2,826,273	$2,770,716	$508,105	$55,558	NA
A03a Residential Retrofit 1-4 Total		**$3,334,379**	**$2,826,273**	**$2,770,716**	**$508,105**	**$55,558**	**$0**
A04a Residential Lighting	A04a Energy Star Lighting (Includes Catalog)	$412,799	$404,361	$396,412	$8,438	$7,949	NA
A04a Residential Lighting Total		**$412,799**	**$404,361**	**$396,412**	**$8,438**	**$7,949**	**$0**
A04b Residential Appliances	A04b Energy Star Appliance	$228,457	$226,509	$222,056	$1,948	$4,453	NA
A04b Residential Appliances Total		**$228,457**	**$226,509**	**$222,056**	**$1,948**	**$4,453**	**$0**
A07x Performance Incentive Tax Liability	A07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
A07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Residential Total		**$4,481,734**	**$3,962,316**	**$3,884,427**	**$519,417**	**$77,890**	**$0**
B03a Low Income Retrofit 1-4	B03a Low-Income Single-Family Program	$824,610	$824,610	$808,538	$0	$16,072	NA
B03a Low Income Retrofit 1-4 Total		**$824,610**	**$824,610**	**$808,538**	**$0**	**$16,072**	**$0**
B03b Low-Income Retrofit Multifamily	B03b Low-Income Multi-Family Program	$169,814	$169,814	$166,614	$0	$3,200	NA
B03b Low-Income Retrofit Multifamily		**$169,814**	**$169,814**	**$166,614**	**$0**	**$3,200**	**$0**
B07x Performance Incentive Tax Liability	B07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
B07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Low-Income Total		**$994,424**	**$994,424**	**$975,152**	**$0**	**$19,272**	**$0**
C02a C&I Lost Opportunity	C02a C&I New Construction	$103,660	$103,660	$101,623	$0	$2,038	NA
	C02b C&I Govt New Construction	$318,194	$318,194	$311,939	$0	$6,255	NA
	C04c C&I Products & Services	$48,091	$44,908	$44,025	$3,184	$883	NA
C02a C&I Lost Opportunity Total		**$469,945**	**$466,762**	**$457,586**	**$3,184**	**$9,175**	**$0**
C03a Large C&I Retrofit	C03a C&I Large Retrofit	$346,759	$316,932	$310,702	$29,827	$6,230	NA
	C03c C&I Govt Large	$901,670	$131,670	$129,082	$770,000	$2,588	NA
C03a Large C&I Retrofit Total		**$1,248,429**	**$448,602**	**$439,783**	**$799,827**	**$8,818**	**$0**
C03b Small C&I Retrofit	C03b C&I Small Retrofit	$2,305,859	$1,940,355	$1,902,212	$365,504	$38,143	NA
	C03d C&I Govt Small	$1,088,647	$1,088,647	$1,067,247	$0	$21,400	NA
C03b Small C&I Retrofit Total		**$3,394,506**	**$3,029,003**	**$2,969,460**	**$365,504**	**$59,543**	**$0**
C07x Performance Incentive Tax Liability	C07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
C07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Commercial & Industrial Total		**$5,112,881**	**$3,944,366**	**$3,866,829**	**$1,168,515**	**$77,537**	**$0**
Grand Total		**$10,589,038**	**$8,901,106**	**$8,726,408**	**$1,687,932**	**$174,698**	**$0**

Appendix 3: Table 2
Detail Summary of Costs by Program

Variance

		Cost Categories					
BCR-Activity	**Program**	**Total TRC Costs**	**Total PA Costs**	**Program Implementation**	**Customer**	**Evaluation**	**Shareholder Incentive**
A02a Residential Lost Opportunity	A02a Energy Star Homes	-$732,174	-$585,778	-$561,238	-$529,252	-$24,540	NA
A02a Residential Lost Opportunity Total		**-$732,174**	**-$585,778**	**-$561,238**	**-$529,252**	**-$24,540**	**$0**
A02b Residential HVAC	A02b Energy Star HVAC	-$335,115	-$285,215	-$276,948	-$195,875	-$8,267	NA
A02b Residential HVAC Total		**-$335,115**	**-$285,215**	**-$276,948**	**-$195,875**	**-$8,267**	**$0**
A03a Residential Retrofit 1-4	A03a Residential Conservation Service	-$580,500	$466,212	$484,319	-$882,985	-$18,107	NA
A03a Residential Retrofit 1-4 Total		**-$580,500**	**$466,212**	**$484,319**	**-$882,985**	**-$18,107**	**$0**
A04a Residential Lighting	A04a Energy Star Lighting (Includes Catalog)	-$404,028	-$229,254	-$217,359	-$353,372	-$11,895	NA
A04a Residential Lighting Total		**-$404,028**	**-$229,254**	**-$217,359**	**-$353,372**	**-$11,895**	**$0**
A04b Residential Appliances	A04b Energy Star Appliance	-$326,845	-$29,295	$406	-$78,202	-$29,701	NA
A04b Residential Appliances Total		**-$326,845**	**-$29,295**	**$406**	**-$78,202**	**-$29,701**	**$0**
A07x Performance Incentive Tax Liability	A07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
A07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Residential Total		**-$2,378,662**	**-$663,331**	**-$570,820**	**-$2,039,685**	**-$92,510**	**$0**
B03a Low Income Retrofit 1-4	B03a Low-Income Single-Family Program	-$298,352	-$298,352	-$269,784	-$722,022	-$28,568	NA
B03a Low Income Retrofit 1-4 Total		**-$298,352**	**-$298,352**	**-$269,784**	**-$722,022**	**-$28,568**	**$0**
B03b Low-Income Retrofit Multifamily	B03b Low-Income Multi-Family Program	-$239,400	-$239,400	-$237,640	-$316,169	-$1,760	NA
B03b Low-Income Retrofit Multifamily		**-$239,400**	**-$239,400**	**-$237,640**	**-$316,169**	**-$1,760**	**$0**
B07x Performance Incentive Tax Liability	B07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
B07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Low-Income Total		**-$537,752**	**-$537,752**	**-$507,424**	**-$1,038,191**	**-$30,328**	**$0**
C02a C&I Lost Opportunity	C02a C&I New Construction	-$69,295	-$60,390	-$55,762	-$127,694	-$4,627	NA
	C02b C&I Govt New Construction	$251,417	$252,810	$250,155	-$48,011	$2,655	NA
	C04c C&I Products & Services	-$115,044	-$84,842	-$81,775	-$43,933	-$3,067	NA
C02a C&I Lost Opportunity Total		**$67,078**	**$107,578**	**$112,618**	**-$219,639**	**-$5,039**	**$0**
C03a Large C&I Retrofit	C03a C&I Large Retrofit	-$18,996	$96,942	$100,437	-$92,331	-$3,495	NA
	C03c C&I Govt Large	$361,658	-$389,116	-$362,904	$405,859	-$26,212	NA
C03a Large C&I Retrofit Total		**$342,661**	**-$292,174**	**-$262,467**	**$313,527**	**-$29,707**	**$0**
C03b Small C&I Retrofit	C03b C&I Small Retrofit	-$8,922	$14,801	$55,048	-$1,110,554	-$40,247	NA
	C03d C&I Govt Small	$172,572	$204,348	$231,818	-$665,329	-$27,470	NA
C03b Small C&I Retrofit Total		**$163,650**	**$219,150**	**$286,867**	**-$1,775,882**	**-$67,717**	**$0**
C07x Performance Incentive Tax Liability	C07x Tax Liability - Performance Incentive	NA	NA	NA	NA	NA	NA
C07x Performance Incentive Tax Liability Total		NA	NA	NA	NA	NA	NA
Commercial & Industrial Total		**$573,390**	**$34,555**	**$137,018**	**-$1,681,994**	**-$102,463**	**$0**
Grand Total		**-$2,343,024**	**-$1,166,529**	**-$941,227**	**-$4,759,870**	**-$225,302**	**$0**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Planned

	Total Benefits	Capacity				Total Benefits
		Generation				
BCR Activity	Total Benefits	Summer	Winter	Trans	MDC	DRIPE
A - Residential	**$33,258,532**	**$3,948,939**	**$0**	**$786,957**	**$4,820,201**	**$658,584**
A02a Residential Lost Opportunity	$3,650,409	$160,669	$0	$31,378	$192,195	$22,948
A02b Residential HVAC	$956,954	$291,741	$0	$59,421	$363,961	$54,879
A03a Residential Retrofit 1-4	$17,668,466	$2,865,056	$0	$549,643	$3,366,623	$344,780
A04a Residential Lighting	$10,208,585	$555,612	$0	$129,696	$794,403	$216,597
A04b Residential Appliances	$774,118	$75,861	$0	$16,819	$103,019	$19,380
B - Low Income	**$5,900,398**	**$56,910**	**$0**	**$13,234**	**$81,055**	**$18,145**
B03a Low-Income Retrofit 1-4	$3,550,402	$48,264	$0	$11,223	$68,739	$16,460
B03b Low-Income Retrofit Multifamily	$2,349,996	$8,646	$0	$2,011	$12,316	$1,685
C - Commercial & Industrial	**$14,411,957**	**$2,359,360**	**$0**	**$480,732**	**$2,944,531**	**$467,161**
C02a C&I Lost Opportunity	$1,175,997	$224,934	$0	$45,063	$276,018	$39,573
C03a Large C&I Retrofit	$2,540,552	$418,265	$0	$85,173	$521,691	$82,488
C03b Small C&I Retrofit	$10,695,408	$1,716,162	$0	$350,496	$2,146,822	$345,100
TOTAL	**$53,570,887**	**$6,365,209**	**$0**	**$1,280,923**	**$7,845,787**	**$1,143,890**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Reported

	Total Benefits	Capacity				Total Benefits
		Generation				
	Total Benefits	Summer	Winter	Trans	MDC	DRIPE
A - Residential	**$18,462,396**	**$2,040,230**	**$0**	**$401,993**	**$2,462,250**	**$314,050**
A02a Residential Lost Opportunity	$1,163,373	$109,125	$0	$20,942	$128,272	$13,251
A02b Residential HVAC	$264,201	$84,609	$0	$16,522	$101,202	$12,118
A03a Residential Retrofit 1-4	$13,745,762	$1,690,646	$0	$329,627	$2,019,002	$237,601
A04a Residential Lighting	$1,775,504	$107,065	$0	$24,866	$152,306	$40,922
A04b Residential Appliances	$1,513,556	$48,786	$0	$10,035	$61,468	$10,158
B - Low Income	**$4,363,725**	**$195,254**	**$0**	**$38,774**	**$237,494**	**$31,033**
B03a Low-Income Retrofit 1-4	$3,454,183	$193,975	$0	$38,501	$235,823	$30,805
B03b Low-Income Retrofit Multifamily	$909,542	$1,279	$0	$273	$1,671	$228
C - Commercial & Industrial	**$17,992,748**	**$2,708,921**	**$0**	**$548,802**	**$3,361,471**	**$515,986**
C02a C&I Lost Opportunity	$2,716,446	$483,291	$0	$97,203	$595,377	$87,482
C03a Large C&I Retrofit	$5,098,054	$586,242	$0	$118,181	$723,868	$107,873
C03b Small C&I Retrofit	$10,178,248	$1,639,388	$0	$333,419	$2,042,226	$320,631
TOTAL	**$40,818,869**	**$4,944,405**	**$0**	**$989,569**	**$6,061,216**	**$861,069**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Variance

	Total Benefits	Capacity				Total Benefits
		Generation				
	Total Benefits	Summer	Winter	Trans	MDC	DRIPE
A - Residential	**$ (14,796,136)**	**$ (1,908,709)**	**$ -**	**$ (384,964)**	**$ (2,357,951)**	**$ (344,534)**
A02a Residential Lost Opportunity	$ (2,487,036)	$ (51,544)	$ -	$ (10,436)	$ (63,923)	$ (9,697)
A02b Residential HVAC	$ (692,753)	$ (207,132)	$ -	$ (42,899)	$ (262,759)	$ (42,761)
A03a Residential Retrofit 1-4	$ (3,922,704)	$ (1,174,410)	$ -	$ (220,016)	$ (1,347,621)	$ (107,179)
A04a Residential Lighting	$ (8,433,081)	$ (448,547)	$ -	$ (104,830)	$ (642,097)	$ (175,675)
A04b Residential Appliances	$ 739,438	$ (27,075)	$ -	$ (6,784)	$ (41,551)	$ (9,222)
B - Low Income	**$ (1,536,673)**	**$ 138,344**	**$ -**	**$ 25,540**	**$ 156,439**	**$ 12,888**
B03a Low-Income Retrofit 1-4	$ (96,219)	$ 145,711	$ -	$ 27,278	$ 167,084	$ 14,345
B03b Low-Income Retrofit Multifamily	$ (1,440,454)	$ (7,367)	$ -	$ (1,738)	$ (10,645)	$ (1,457)
C - Commercial & Industrial	**$ 3,580,791**	**$ 349,560**	**$ -**	**$ 68,071**	**$ 416,940**	**$ 48,825**
C02a C&I Lost Opportunity	$ 1,540,449	$ 258,357	$ -	$ 52,139	$ 319,359	$ 47,909
C03a Large C&I Retrofit	$ 2,557,502	$ 167,977	$ -	$ 33,008	$ 202,177	$ 25,385
C03b Small C&I Retrofit	$ (517,160)	$ (76,774)	$ -	$ (17,077)	$ (104,597)	$ (24,469)
TOTAL	**$ (12,752,018)**	**$ (1,420,804)**	**$ -**	**$ (291,353)**	**$ (1,784,572)**	**$ (282,821)**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Planned

	Energy				Total Benefits Energy			
	Winter		Summer		Winter DRIPE		Summer DRIPE	
BCR Activity	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
A - Residential	**$3,040,502**	**$3,121,197**	**$2,161,996**	**$1,691,288**	**$518,264**	**$592,302**	**$527,157**	**$281,480**
A02a Residential Lost Opportunity	$149,550	$132,966	$117,854	$77,479	$15,904	$15,868	$18,618	$8,102
A02b Residential HVAC	$88,405	$20,873	$44,833	$12,475	$7,878	$2,059	$8,924	$1,505
A03a Residential Retrofit 1-4	$644,937	$676,324	$919,153	$492,299	$56,676	$65,828	$119,415	$41,643
A04a Residential Lighting	$2,087,729	$2,217,133	$1,044,539	$1,072,988	$426,877	$495,853	$370,709	$224,483
A04b Residential Appliances	$69,881	$73,901	$35,617	$36,047	$10,929	$12,694	$9,491	$5,747
B - Low Income	**$197,934**	**$209,254**	**$101,222**	**$101,998**	**$30,323**	**$35,222**	**$26,331**	**$15,945**
B03a Low-Income Retrofit 1-4	$166,583	$176,171	$85,095	$85,807	$26,892	$31,237	$23,353	$14,142
B03b Low-Income Retrofit Multifamily	$31,351	$33,083	$16,127	$16,191	$3,431	$3,985	$2,978	$1,803
C - Commercial & Industrial	**$2,442,445**	**$1,579,733**	**$1,705,713**	**$972,332**	**$288,678**	**$205,662**	**$349,618**	**$118,666**
C02a C&I Lost Opportunity	$190,704	$105,127	$140,948	$64,332	$20,194	$12,103	$24,834	$6,742
C03a Large C&I Retrofit	$428,107	$279,644	$293,309	$164,707	$50,428	$36,248	$58,854	$19,710
C03b Small C&I Retrofit	$1,823,633	$1,194,962	$1,271,455	$743,293	$218,056	$157,311	$265,931	$92,215
TOTAL	**$5,680,881**	**$4,910,184**	**$3,968,931**	**$2,765,618**	**$837,265**	**$833,186**	**$903,106**	**$416,091**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Reported

	Energy				Total Benefits Energy			
	Winter		Summer		Winter DRIPE		Summer DRIPE	
	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
A - Residential	**$1,175,016**	**$1,236,766**	**$1,025,166**	**$719,446**	**$203,573**	**$235,755**	**$228,955**	**$115,553**
A02a Residential Lost Opportunity	$51,475	$54,143	$27,078	$26,659	$6,248	$7,258	$5,484	$3,296
A02b Residential HVAC	$8,932	$2,109	$26,046	$7,197	$787	$206	$3,828	$646
A03a Residential Retrofit 1-4	$642,349	$680,301	$733,564	$442,486	$113,240	$131,534	$147,306	$67,808
A04a Residential Lighting	$353,034	$374,787	$176,810	$181,482	$71,006	$82,479	$61,663	$37,340
A04b Residential Appliances	$119,227	$125,427	$61,669	$61,622	$12,292	$14,279	$10,675	$6,464
B - Low Income	**$115,756**	**$122,214**	**$59,605**	**$59,771**	**$16,252**	**$18,878**	**$14,138**	**$8,550**
B03a Low-Income Retrofit 1-4	$110,879	$117,087	$57,075	$57,252	$15,797	$18,349	$13,743	$8,311
B03b Low-Income Retrofit Multifamily	$4,877	$5,128	$2,530	$2,519	$455	$528	$395	$239
C - Commercial & Industrial	**$3,614,968**	**$1,731,030**	**$2,809,253**	**$1,238,316**	**$410,500**	**$222,584**	**$539,258**	**$146,195**
C02a C&I Lost Opportunity	$368,585	$169,799	$544,072	$177,485	$39,944	$20,003	$97,066	$19,056
C03a Large C&I Retrofit	$1,500,680	$412,761	$941,572	$273,548	$163,642	$52,725	$174,019	$31,805
C03b Small C&I Retrofit	$1,745,703	$1,148,471	$1,323,608	$787,284	$206,915	$149,856	$268,173	$95,334
TOTAL	**$4,905,740**	**$3,090,011**	**$3,894,024**	**$2,017,533**	**$630,325**	**$477,217**	**$782,351**	**$270,299**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Variance

	Energy				Total Benefits Energy			
	Winter		Summer		Winter DRIPE		Summer DRIPE	
	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak	Peak	Off Peak
A - Residential	**$ (1,865,486)**	**$ (1,884,431)**	**$ (1,136,830)**	**$ (971,842)**	**$ (314,691)**	**$ (356,547)**	**$ (298,202)**	**$ (165,927)**
A02a Residential Lost Opportunity	$ (98,075)	$ (78,823)	$ (90,776)	$ (50,820)	$ (9,656)	$ (8,610)	$ (13,134)	$ (4,806)
A02b Residential HVAC	$ (79,473)	$ (18,764)	$ (18,787)	$ (5,278)	$ (7,091)	$ (1,853)	$ (5,096)	$ (859)
A03a Residential Retrofit 1-4	$ (2,588)	$ 3,977	$ (185,589)	$ (49,813)	$ 56,564	$ 65,706	$ 27,891	$ 26,165
A04a Residential Lighting	$ (1,734,695)	$ (1,842,346)	$ (867,729)	$ (891,506)	$ (355,871)	$ (413,374)	$ (309,046)	$ (187,143)
A04b Residential Appliances	$ 49,346	$ 51,526	$ 26,052	$ 25,575	$ 1,363	$ 1,585	$ 1,184	$ 717
B - Low Income	**$ (82,178)**	**$ (87,040)**	**$ (41,617)**	**$ (42,227)**	**$ (14,071)**	**$ (16,344)**	**$ (12,193)**	**$ (7,395)**
B03a Low-Income Retrofit 1-4	$ (55,704)	$ (59,084)	$ (28,020)	$ (28,555)	$ (11,095)	$ (12,888)	$ (9,610)	$ (5,831)
B03b Low-Income Retrofit Multifamily	$ (26,474)	$ (27,955)	$ (13,597)	$ (13,672)	$ (2,976)	$ (3,457)	$ (2,583)	$ (1,564)
C - Commercial & Industrial	**$ 1,172,523**	**$ 151,297**	**$ 1,103,540**	**$ 265,984**	**$ 121,822**	**$ 16,922**	**$ 189,640**	**$ 27,529**
C02a C&I Lost Opportunity	$ 177,881	$ 64,671	$ 403,124	$ 113,152	$ 19,750	$ 7,900	$ 72,232	$ 12,315
C03a Large C&I Retrofit	$ 1,072,573	$ 133,116	$ 648,263	$ 108,841	$ 113,214	$ 16,478	$ 115,165	$ 12,095
C03b Small C&I Retrofit	$ (77,930)	$ (46,491)	$ 52,154	$ 43,991	$ (11,142)	$ (7,455)	$ 2,242	$ 3,119
TOTAL	**$ (775,140)**	**$ (1,820,174)**	**$ (74,907)**	**$ (748,085)**	**$ (206,940)**	**$ (355,969)**	**$ (120,755)**	**$ (145,792)**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Planned

	Non Electric		Load Reduction			MWh Saved	
	Resource	Non-Resource	Summer	Winter	Lifetime	Annual	Lifetime
BCR Activity							
A - Residential	**$10,583,588**	**$526,077**	**2,159**	**3,434**	**34,040**	**13,579**	**120,825**
A02a Residential Lost Opportunity	$2,648,119	$58,759	74	502	1,376	404	5,975
A02b Residential HVAC	$0	$0	186	57	2,485	119	1,895
A03a Residential Retrofit 1-4	$7,508,475	$17,614	1,123	229	24,530	2,072	34,282
A04a Residential Lighting	$0	$571,966	699	2,629	4,984	10,710	76,019
A04b Residential Appliances	$426,994	-$122,262	77	16	666	274	2,654
B - Low Income	**$2,170,801**	**$2,842,024**	**74**	**182**	**525**	**821**	**7,554**
B03a Low-Income Retrofit 1-4	$971,703	$1,824,733	60	160	443	675	6,339
B03b Low-Income Retrofit Multifamily	$1,199,098	$1,017,291	15	22	81	146	1,215
C - Commercial & Industrial	**$0**	**$497,325**	**1,507**	**843**	**19,531**	**6,178**	**79,716**
C02a C&I Lost Opportunity	$0	$25,424	128	70	1,860	399	5,936
C03a Large C&I Retrofit	$0	$101,929	266	132	3,458	1,064	13,883
C03b Small C&I Retrofit	$0	$369,972	1,113	640	14,213	4,715	59,896
TOTAL	**$12,754,389**	**$3,865,426**	**3,740**	**4,459**	**54,096**	**20,577**	**208,095**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Reported

	Non Electric		Load Reduction			MWh Saved	
	Resource	Non-Resource	Summer	Winter	Lifetime	Annual	Lifetime
A - Residential	**$8,438,630**	**-$134,988**	**1,020**	**1,273**	**17,531**	**5,544**	**49,928**
A02a Residential Lost Opportunity	$704,686	$5,457	43	61	942	157	2,023
A02b Residential HVAC	$0	$0	39	1	704	28	498
A03a Residential Retrofit 1-4	$6,367,564	$142,736	773	659	14,522	3,269	29,838
A04a Residential Lighting	$0	$111,745	132	497	958	1,781	12,885
A04b Residential Appliances	$1,366,380	-$394,926	33	56	405	308	4,684
B - Low Income	**$1,472,854**	**$1,973,152**	**104**	**2,142**	**1,654**	**412**	**4,451**
B03a Low-Income Retrofit 1-4	$981,317	$1,575,270	103	2,139	1,642	396	4,259
B03b Low-Income Retrofit Multifamily	$491,537	$397,882	1	3	11	15	193
C - Commercial & Industrial	**$0**	**$145,462**	**1,664**	**1,166**	**22,402**	**8,124**	**109,258**
C02a C&I Lost Opportunity	$0	$17,083	282	162	3,992	990	14,425
C03a Large C&I Retrofit	$0	$11,137	348	333	4,844	2,521	35,170
C03b Small C&I Retrofit	$0	$117,242	1,034	671	13,565	4,613	59,663
TOTAL	**$9,911,484**	**$1,983,626**	**2,788**	**4,581**	**41,587**	**14,079**	**163,637**

Appendix 3: Table 3
Detail Summary of Benefits by Program

Variance

	Non Electric		Load Reduction			MWh Saved	
	Resource	Non-Resource	Summer	Winter	Lifetime	Annual	Lifetime
A - Residential	**$ (2,144,958)**	**$ (661,065)**	**(1139)**	**(2161)**	**(16509)**	**(8035)**	**(70897)**
A02a Residential Lost Opportunity	$ (1,943,433)	$ (53,302)	(32)	(441)	(434)	(247)	(3952)
A02b Residential HVAC	$ -	$ -	(147)	(56)	(1781)	(91)	(1397)
A03a Residential Retrofit 1-4	$ (1,140,911)	$ 125,122	(350)	429	(10008)	1197	(4444)
A04a Residential Lighting	$ -	$ (460,221)	(567)	(2133)	(4026)	(8928)	(63134)
A04b Residential Appliances	$ 939,386	$ (272,664)	(44)	39	(260)	34	2030
B - Low Income	**$ (697,947)**	**$ (868,872)**	**30**	**1960**	**1129**	**(409)**	**(3103)**
B03a Low-Income Retrofit 1-4	$ 9,614	$ (249,463)	43	1979	1199	(278)	(2080)
B03b Low-Income Retrofit Multifamily	$ (707,561)	$ (619,409)	(13)	(19)	(70)	(131)	(1022)
C - Commercial & Industrial	**$ -**	**$ (351,863)**	**157**	**323**	**2871**	**1946**	**29542**
C02a C&I Lost Opportunity	$ -	$ (8,341)	155	92	2133	591	8489
C03a Large C&I Retrofit	$ -	$ (90,792)	82	200	1386	1457	21286
C03b Small C&I Retrofit	$ -	$ (252,730)	(79)	31	(648)	(102)	(233)
TOTAL	**$ (2,842,905)**	**$ (1,881,800)**	**(952)**	**122**	**(12,509)**	**(6,498)**	**(44,457)**

Appendix 4. Comparison of Planned and Reported Outsourced and In-House Expenditures

The following table provides the reported outsourced and in-house expenditures. Planning was not conducted at this level of detail. Therefore, a comparison between 2009 planned and reported expenditures at this level of detail is not available.

Program	Program Planning and Administration						
	In-House Activities		Outsourced Activities				TOTAL ($)
			Competitively Procured		Non-Competitively Procured		
	$	%	$	%	$	%	
Residential							
2009	54,918	16.4%	103,904	31.1%	175,460	52.5%	334,283
Low Income							
2009	13,588	16.4%	25,708	31.1%	43,413	52.5%	82,709
Commercial & Industrial							
2009	54,670	16.4%	103,434	31.1%	174,665	52.5%	332,768
TOTAL							
2009	123,176	16.4%	233,046	31.1%	393,538	52.5%	749,760

Notes

1. This table does not include customer incentives. In 2009, the Compact spent $5,603,289.54 on customer incentives.

Program	Marketing and Advertising						
	In-House Activities		Outsourced Activities				TOTAL ($)
			Competitively Procured		Non-Competitively Procured		
	$	%	$	%	$	%	
Residential							
2009	65,331	56.5%	23,001	19.9%	27,294	23.6%	115,625
Low Income							
2009	16,164	47.7%	5,691	16.8%	12,025	35.5%	33,880
Commercial & Industrial							
2009	65,035	56.5%	22,897	19.9%	27,170	23.6%	115,102
TOTAL							
2009	146,530	55.4%	51,588	19.5%	66,489	25.1%	264,607

Notes

1. This table does not include customer incentives. In 2009, the Compact spent $5,603,289.54 on customer incentives.

Program	Sales, Technical Assistance & Training						
	In-House Activities		Outsourced Activities				TOTAL ($)
			Competitively Procured		Non-Competitively Procured		
	$	%	$	%	$	%	
Residential							
2009	189,910	14.6%	1,112,743	85.4%	260	0.0%	1,302,913
Low Income							
2009	46,988	21.1%	166,743	74.9%	8,786	3.9%	222,517
Commercial & Industrial							
2009	189,050	32.4%	394,272	67.6%	0	0.0%	583,322
TOTAL							
2009	425,948	20.2%	1,673,758	79.4%	9,046	0.4%	2,108,752

Notes

1. This table does not include customer incentives. In 2009, the Compact spent $5,603,289.54 on customer incentives.

Program	Evaluation and Market Research						
	In-House Activities		Outsourced Activities				TOTAL($)
			Competitively Procured		Non-Competitively Procured		
	$	%	$	%	$	%	
Residential							
2009	0	0.0%	77,890	100.0%	0	0.0%	77,890
Low Income							
2009	0	0.0%	19,272	100.0%	0	0.0%	19,272
Commercial & Industrial							
2009	0	0.0%	77,537	100.0%	0	0.0%	77,537
TOTAL							
2009	0	0.0%	174,698	100.0%	0	0.0%	174,698

Notes

1. This table does not include customer incentives. In 2009, the Compact spent $5,603,289.54 on customer incentives.

Program	TOTAL Outsourced and Competitively Procured Services						
	In-House Activities		Outsourced Activities				TOTAL ($)
			Competitively Procured		Non-Competitively Procured		
	$	%	$	%	$	%	
Residential							
2009	310,159	16.9%	1,317,538	72.0%	203,014	11.1%	1,830,711
Low Income							
2009	76,740	21.4%	217,414	60.7%	64,223	17.9%	358,377
Commercial & Industrial							
2009	308,754	27.8%	598,139	53.9%	201,835	18.2%	1,108,728
TOTAL							
2009	695,654	21.1%	2,133,090	64.7%	469,072	14.2%	3,297,817

Notes

1. This table does not include customer incentives. In 2009, the Compact spent $5,603,289.54 on customer incentives.

Appendix 5. Calculation of Shareholder Incentive

The Cape Light Compact does not receive a shareholder incentive. Therefore, this section does not apply to the Cape Light Compact.

Appendix 6. Energy Efficiency Evaluations & Studies

The following studies were used in preparing the reported results presented in this Annual Report. The executive summaries and full reports for these studies are listed below and provided in this Appendix.

1. Evaluation of the Massachusetts New Homes with ENERGY STAR® Program 2009 Findings and Analysis, NMR Group Inc., May 26, 2010. Executive Summary.

   Evaluation of the Massachusetts New Homes with ENERGY STAR® Program 2009 Findings and Analysis, NMR Group Inc., May 26, 2010. Full Report.

2. Massachusetts New Homes with ENERGY STAR® 2009 COOL SMART Quality Installation Verification Evaluation Report, ICF International, February 24, 2010. Executive Summary.

   Massachusetts New Homes with ENERGY STAR® 2009 COOL SMART Quality Installation Verification Evaluation Report, ICF International, February 24, 2010. Full Report.

3. Energy Savings Analysis for the Massachusetts New Homes with Energy Star, ICF International, June 4, 2010. Executive Summary.

   Energy Savings Analysis for the Massachusetts New Homes with Energy Star, ICF International, June 4, 2010. Full Report.

4. The Massachusetts New Homes with ENERGY STAR® Program, 2009 Progress Report, Dorothy Conant, May 26, 2010. Executive Summary.

   The Massachusetts New Homes with ENERGY STAR® Program, 2009 Progress Report, Dorothy Conant, May 26, 2010. Full Report.

5. Residential Central AC Regional Evaluation, ADM Associates, Inc., October 2009.

6. Energy Pay and Save Pilot Program Survey & Analysis, Black & Veatch, March 2010.

7. 2009 Massachusetts Multi-Family Program Assessment, Nexus Market Research, Inc., October 16, 2009.

8. The Market for CFLs in Massachusetts, NMR Group, Inc., January 28, 2010.

9. Results of the Multistate CFL Modeling Effort, NMR Group, Inc., February 4, 2010.

10. Market Assessment and Best Practices for Delivering Plug-Load Energy Efficiency in Business-Final Report, PA Consulting Group, June 14, 2010.

11. Cape Light Compact Residential Smart Energy Monitoring Pilot, PA Consulting, March 31, 2010.

Appendix 7. Performance Metrics Related Documents and Reports

The Cape Light Compact does not receive a shareholder incentive. Therefore, this section does not apply to the Cape Light Compact.

Appendix 8. Detailed Savings Calculations of the 2009 Programs

The following tables provide the detail behind the savings calculations.

Year	2009
Program	Energy Star Homes
Residential Income Type	Standard

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	RNC ES Homes All Tiers (Heating)	30	14.321	34,708	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	14.32	0.00	14.32	34.71	25	358.02	867.70	728.04	39.18	402.72	0.00	$420,235	$0
2	RNC ES Homes All Tiers (Cooling)	19	8.157	5,810	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	8.16	8.16	0.00	5.81	25	203.94	145.26	0.00	0.00	0.00	0.00	$0	$0
3	RNC ES Homes All Tiers (Water Heating)	30	0.000	12	0.00%	0.00%	75.00%	100.00%	100.00%	100.00%	0.00	0.00	0.00	0.01	15	0.00	0.19	0.00	0.00	0.00	0.00	$0	$0
4	Fixtures	2	0.098	88	0.00%	0.00%	7.60%	28.60%	100.00%	100.00%	0.10	0.01	0.03	0.09	11	1.08	0.97	0.00	0.00	0.00	0.00	$0	$7
5	ES Homes Screw-in Bulbs	1,347	65.599	76,779	0.00%	0.00%	7.60%	28.60%	99.00%	99.00%	64.94	4.94	18.57	76.01	7	454.60	532.08	0.00	0.00	0.00	0.00	$0	$4,041
6	LI RNC ES Homes All Tiers (Heating)	93	21.284	-1,096	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	21.28	0.00	21.28	-1.10	25	532.11	-27.39	973.93	0.00	67.76	0.00	$262,116	$0
7	LI RNC ES Homes All Tiers (Cooling)	40	26.561	7,733	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	26.56	26.56	0.00	7.73	25	664.03	193.33	0.00	0.00	0.00	0.00	$0	$0
8	LI RNC ES Homes All Tiers (Water Heating)	93	0.000	0	0.00%	0.00%	75.00%	100.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	15	0.00	0.00	0.00	0.00	0.00	0.00	$0	$0
9	LI Refrigerator (savings over full life compared to new baseline equipment)	55	0.715	5,500	35.00%	36.00%	100.00%	82.00%	100.00%	100.00%	0.72	0.72	0.59	5.56	13	9.39	72.22	0.00	0.00	0.00	0.00	$0	$0
10	LI Dishwashers	55	0.000	2,368	0.00%	0.00%	74.60%	100.00%	100.00%	100.00%	0.00	0.00	0.00	2.37	12	0.00	28.41	110.00	0.00	0.08	23,650.00	$15,424	$0
11	LI Interior Fixtures	43	2.107	1,892	0.00%	0.00%	7.60%	28.60%	96.00%	96.00%	2.02	0.15	0.58	1.82	20	40.45	36.33	0.00	0.00	0.00	0.00	$0	$146
12	LI ES Homes Screw-in Bulbs	421	20.503	23,997	0.00%	0.00%	7.60%	28.60%	99.00%	99.00%	20.30	1.54	5.81	23.76	7	142.08	166.30	0.00	0.00	0.00	0.00	$0	$1,263
13	Major Renovation Pilot - Insulation, Gas	1	0.678	317	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	0.66	0.66	0.00	0.31	25	16.61	7.77	27.44	0.00	0.00	0.00	$6,911	$0
		2,229	160.023	158,109							159.07	42.74	61.18	157.07		2,422.31	2,023.15	1,839.41	39.18	470.55	23,650.00	$704,686	$5,457

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	Energy Star HVAC
Residential Income Type	Standard

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	CoolSmart AC SEER 14 => (Equip) - EER>=12	9	2.455	445	0.00%	0.00%	85.00%	0.00%	100.00%	100.00%	2.45	2.09	0.00	0.45	18	44.18	8.01	0.00	0.00	0.00	0.00	$0	$0
2	CoolSmart AC SEER 15.0 => (Equip) - EER>=12.5	43	16.887	3,969	0.00%	0.00%	85.00%	0.00%	100.00%	100.00%	16.89	14.35	0.00	3.97	18	303.97	71.45	0.00	0.00	0.00	0.00	$0	$0
3	CoolSmart HP SEER 15.0 => (Equip)	2	1.003	1,388	0.00%	0.00%	66.56%	50.00%	100.00%	100.00%	1.00	0.67	0.50	1.39	18	18.06	24.99	0.00	0.00	0.00	0.00	$0	$0
4	CoolSmart Wm Air Furnace ECM (GN Reb)	12	1.396	7,200	0.00%	0.00%	66.56%	50.00%	100.00%	100.00%	1.40	0.93	0.70	7.20	18	25.13	129.60	0.00	0.00	0.00	0.00	$0	$0
5	Mini Splits (Ductless	56	24.768	14,641	0.00%	0.00%	85.00%	0.00%	100.00%	100.00%	24.77	21.05	0.00	14.64	18	445.83	263.54	0.00	0.00	0.00	0.00	$0	$0
		122	46.509	27,644							46.51	39.09	1.20	27.64		837.17	497.59	0.00	0.00	0.00	0.00	$0	$0

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	Residential Conservation
Residential Income Type	Standard

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	Free CFL	38,419	1,882.531	2,189,883	2.00%	0.00%	7.60%	28.60%	90.00%	90.00%	1,660.39	126.19	474.87	1,931.48	7	11,622.75	13,520.34	0.00	0.00	0.00	0.00	$0	$102,688
2	Free CFL (piggyback on other utility audits)	11,582	567.518	660,174	2.00%	0.00%	7.60%	28.60%	90.00%	90.00%	500.55	38.04	143.16	582.27	7	3,503.86	4,075.91	0.00	0.00	0.00	0.00	$0	$30,957
3	Torchiere	57	6.601	7,923	0.00%	0.00%	7.60%	28.60%	100.00%	100.00%	6.60	0.50	1.89	7.92	8	52.80	63.38	0.00	0.00	0.00	0.00	$0	$0
4	Insulation, Oil	313	212.214	99,221	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	207.97	207.97	0.00	97.24	25	5,199.24	2,430.91	0.00	7,975.24	0.00	0.00	$2,502,404	$0
5	Insulation, Gas	241	163.398	76,397	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	160.13	160.13	0.00	74.87	25	4,003.25	1,871.73	6,613.04	0.00	0.00	0.00	$1,665,437	$0
6	Insulation, Electric	74	69.782	179,894	2.00%	0.00%	72.00%	28.00%	100.00%	100.00%	68.39	49.24	19.15	176.30	25	1,709.66	4,407.40	0.00	0.00	0.00	0.00	$0	$0
7	Insulation, Other Fuels	21	14.238	6,657	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	13.95	13.95	0.00	6.52	25	348.83	163.10	0.00	0.00	308.70	0.00	$185,887	$0
8	Air Sealing, Oil	291	79.152	36,957	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	77.57	77.57	0.00	36.22	15	1,163.53	543.27	0.00	1,711.08	0.00	0.00	$343,177	$0
9	Air Sealing, Gas	229	62.288	29,083	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	61.04	61.04	0.00	28.50	15	915.63	427.52	1,346.52	0.00	0.00	0.00	$217,561	$0
10	Air Sealing, Electric	67	25.259	65,057	2.00%	0.00%	72.00%	28.00%	100.00%	100.00%	24.75	17.82	6.93	63.76	15	371.31	956.34	0.00	0.00	0.00	0.00	$0	$0
11	Air Sealing, Other Fuels	19	5.168	2,413	2.00%	0.00%	100.00%	0.00%	100.00%	100.00%	5.06	5.06	0.00	2.36	15	75.97	35.47	0.00	0.00	93.10	0.00	$36,634	$0
12	Thermostats, Oil	299	0.000	0	2.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	10	0.00	0.00	0.00	1,289.29	0.00	0.00	$180,226	$0
13	Thermostats, Electric	129	3.999	18,447	2.00%	0.00%	3.00%	100.00%	100.00%	100.00%	3.92	0.12	3.92	18.08	10	39.19	180.78	0.00	0.00	0.00	0.00	$0	$0
14	Hot Water Boiler	273	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	20	0.00	0.00	0.00	2,260.44	0.00	0.00	$584,966	$0
15	Heating System Replacement, Oil	29	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	18	0.00	0.00	0.00	240.12	0.00	0.00	$56,642	$0
16	Indirect Water Heater, Oil	137	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	20	0.00	0.00	0.00	1,096.00	0.00	0.00	$283,627	$0
17	Appliance/Pool Timers	15	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	5	0.00	0.00	0.00	0.00	0.00	0.00	$0	$0
18	Solar Hot Water, Electric (2-person)	1	1.033	1,550	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	1.03	1.03	0.00	1.55	20	20.67	31.00	0.00	0.00	0.00	0.00	$0	$3,030
19	Solar Hot Water, Electric (3-person)	1	1.550	2,325	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	1.55	1.55	0.00	2.33	20	31.00	46.50	0.00	0.00	0.00	0.00	$0	$3,030
20	Solar Hot Water, Electric (4-person)	1	2.067	3,100	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	2.07	2.07	0.00	3.10	20	41.33	62.00	0.00	0.00	0.00	0.00	$0	$3,030
21	DHW ISMs, Electric	101	0.909	7,373	2.00%	0.00%	75.00%	100.00%	100.00%	100.00%	0.89	0.67	0.89	7.23	7	6.24	50.58	0.00	0.00	0.00	869,539.30	$50,094	$0
22	ES Window, Oil	1,309	0.000	17,017	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	17.02	25	0.00	425.43	0.00	431.97	0.00	0.00	$135,540	$0
23	ES Window, Gas	127	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00	0.00	0.00	0.00	$0	$0
24	ES Window, Electric	37	1.480	4,070	0.00%	0.00%	70.00%	30.00%	100.00%	100.00%	1.48	1.04	0.44	4.07	25	37.00	101.75	0.00	0.00	0.00	0.00	$0	$0
25	ES Window, Other Fuels	1	0.000	13	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.01	25	0.00	0.33	0.00	0.00	0.33	0.00	$199	$0
26	Refrigerator (savings over remaining life of existing equipment)	212	6.360	187,408	35.00%	36.00%	100.00%	82.00%	100.00%	100.00%	6.42	6.42	5.27	189.28	1	6.42	189.28	0.00	0.00	0.00	0.00	$0	$0
27	Refrigerator (savings over full life compared to new baseline equipment)	181	2.353	18,100	35.00%	36.00%	100.00%	82.00%	100.00%	100.00%	2.38	2.38	1.95	18.28	13	30.89	237.65	0.00	0.00	0.00	0.00	$0	$0
28	Waterbed Replacement	1	0.109	872	0.00%	0.00%	75.00%	100.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	20	0.00	0.00	0.00	0.00	0.00	0.00	$0	$0
29	Weather Responsive Controls (Boiler Reset)	79	0.000	0	0.00%	0.00%	0.00%	100.00%	100.00%	100.00%	1,653.43	125.66	472.88	1,689.37	15	24,801.45	11,825.62	0.00	624.10	0.00	0.00	$125,170	$0
		54,246	3,108.009	3,613,934							4,459.58	898.46	1,131.35	4,957.75		########	41,646.29	7,959.56	15,628.24	402.13	869,539.30	$6,367,564	$142,736

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	Energy Star Lighting
Residential Income Type	Standard

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	Screw-in Bulbs (incl. NCP and rebates)	90,380	4,157.480	4,247,860	0.00%	0.00%	7.60%	28.60%	39.77%	39.77%	1,653.43	125.66	472.88	1,689.37	7	11,574.01	11,825.62	0.00	0.00	0.00	0.00	$0	$108,926
2	Indoor Fixture	671	32.879	29,524	8.00%	4.00%	7.60%	28.60%	95.00%	95.00%	29.99	2.28	8.58	26.93	20	599.71	538.52	0.00	0.00	0.00	0.00	$0	$2,164
3	Outdoor Fixture	29	2.755	4,524	12.00%	7.00%	7.60%	28.60%	87.00%	87.00%	2.28	0.17	0.65	3.74	6	13.66	22.43	0.00	0.00	0.00	0.00	$0	$85
4	Torchiere	543	62.988	75,477	6.00%	3.00%	7.60%	28.60%	83.00%	83.00%	50.71	3.85	14.50	60.77	8	405.69	486.13	0.00	0.00	0.00	0.00	$0	$0
5	LED Fixtures	18	0.697	864	0.00%	0.00%	7.60%	28.60%	73.00%	73.00%	0.51	0.04	0.15	0.63	20	10.17	12.61	0.00	0.00	0.00	0.00	$0	$571
		91,641	4,256.799	4,358,249							1,736.91	132.01	496.76	1,781.44		########	12,885.32	0.00	0.00	0.00	0.00	$0	$111,745

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	Energy Star Products
Residential Income Type	Standard

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	AC (energy star value)	281	29.505	13,769	0.00%	0.00%	30.00%	0.00%	100.00%	100.00%	29.51	8.85	0.00	13.77	12	354.06	165.23	0.00	0.00	0.00	0.00	$0	$0
2	ECM Heat (CLC-specific)	320	76.800	115,200	0.00%	0.00%	0.00%	50.00%	100.00%	100.00%	76.80	0.00	38.40	115.20	20	1,536.00	2,304.00	0.00	5,280.00	0.00	0.00	$1,366,380	($394,926)
3	Dehumidifiers (retirement value) turn-in	23	0.478	690	0.00%	0.00%	80.00%	0.00%	100.00%	100.00%	0.48	0.38	0.00	0.69	4	1.91	2.76	0.00	0.00	0.00	0.00	$0	$0
4	Dehumidifiers (energy star value) turn-in	23	1.353	1,955	0.00%	0.00%	80.00%	0.00%	100.00%	100.00%	1.35	1.08	0.00	1.96	12	16.24	23.46	0.00	0.00	0.00	0.00	$0	$0
5	Refrigerator (savings over full life compared to new baseline equipment)	1,601	20.813	160,100	35.00%	36.00%	100.00%	82.00%	100.00%	100.00%	21.02	21.02	17.24	161.70	13	273.27	2,102.11	0.00	0.00	0.00	0.00	$0	$0
6	Consumer Electronics - Smart Strips	98	5.880	17,170	0.00%	0.00%	30.00%	0.00%	75.00%	75.00%	4.41	1.32	0.00	12.88	5	22.05	64.39	0.00	0.00	0.00	0.00	$0	$0
7	Pool Pumps	4	1.600	2,208	0.00%	0.00%	30.00%	0.00%	100.00%	100.00%	1.60	0.48	0.00	2.21	10	16.00	22.08	0.00	0.00	0.00	0.00	$0	$0
		2,350	136.428	311,092							135.17	33.14	55.64	308.40		2,219.53	4,684.03	0.00	5,280.00	0.00	0.00	$1,366,380	($394,926)

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	Low Income Single Family
Residential Income Type	Low Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	Baseload	353	26.122	96,016	0.00%	0.00%	35.00%	100.00%	100.00%	100.00%	26.12	9.14	26.12	96.02	5	130.61	480.08	0.00	0.00	0.00	0.00	$0	$37,418
2	Other Wx	2	1.366	110	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	1.37	0.04	1.37	0.11	20	27.32	2.20	0.00	0.00	38.86	0.00	$19,504	$7,710
3	Gas Wx	16	2,049.083	880	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	2,049.08	61.47	2,049.08	0.88	20	40,981.66	17.60	480.48	0.00	0.00	0.00	$99,873	$75,486
4	Electric Wx	6	0.222	1,782	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	0.22	0.01	0.22	1.78	20	4.44	35.64	0.00	0.00	0.00	0.00	$0	$22,056
5	Oil Wx	36	0.252	1,980	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	0.25	0.01	0.25	1.98	20	5.04	39.60	0.00	907.20	0.00	0.00	$234,769	$365,166
6	Heating System Retrofit - Oil	63	0.441	3,465	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	0.44	0.01	0.44	3.47	18	7.94	62.37	0.00	2,557.80	0.00	0.00	$603,361	$874,660
7	CFL's	5,297	47.673	180,098	0.00%	0.00%	35.00%	100.00%	100.00%	100.00%	47.67	16.69	47.67	180.10	16	762.77	2,881.57	0.00	0.00	0.00	0.00	$0	$83,229
8	Refrigerator (savings over remaining life of existing equipment)	158	13.114	98,592	0.00%	0.00%	100.00%	92.00%	100.00%	100.00%	13.11	13.11	12.06	98.59	5	65.57	492.96	0.00	0.00	0.00	0.00	$0	$12,791
9	Refrigerator (savings over full life compared to new baseline equipment)	156	1.560	12,480	0.00%	0.00%	100.00%	92.00%	100.00%	100.00%	1.56	1.56	1.44	12.48	19	29.64	237.12	0.00	0.00	0.00	0.00	$0	$36,889
10	ES Window, Oil	10	0.000	130	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.13	25	0.00	3.25	0.00	3.30	0.00	0.00	$1,035	$70
11	ES Window, Gas	7	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00	0.00	0.00	0.00	$0	$0
12	DHWater Measure (elec)	45	0.711	920	0.00%	0.00%	75.00%	100.00%	100.00%	100.00%	0.71	0.53	0.71	0.92	7	4.98	6.44	0.00	0.00	0.00	395,325.00	$22,775	$59,796
		6,149	2,140.544	396,453							2,140.54	102.58	2,139.37	396.45		########	4,258.83	480.48	3,468.30	38.86	395,325.00	$981,317	$1,575,270

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	Low Income Multi-Family
Residential Income Type	Low Income

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Summer Coincident	Winter Coincident	Demand Adjustment Factor (In-Service Rate)	Energy Adjustment Factor (In-Service Rate)	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh	MMBTUs Gas savings	MMBTUs Oil Savings	MMBTUs Propane Savings	Gallons Water Savings	Resource Non-Energy Benefit	Non-Resource Non Energy Benefit
1	CFL	178	1.602	6,052	0.00%	0.00%	35.00%	100.00%	100.00%	100.00%	1.60	0.56	1.60	6.05	16	25.63	96.83	0.00	0.00	0.00	0.00	$0	$2,797
2	ES Window, Gas	23	0.000	0	0.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00	0.00	0.00	0.00	$0	$0
3	Refrigerator (savings over remaining life of existing equipment)	7	0.581	4,368	0.00%	0.00%	100.00%	92.00%	100.00%	100.00%	0.58	0.58	0.53	4.37	1	0.58	4.37	0.00	0.00	0.00	0.00	$0	$118
4	Refrigerator (savings over full life compared to new baseline equipment)	4	0.040	320	0.00%	0.00%	100.00%	92.00%	100.00%	100.00%	0.04	0.04	0.04	0.32	13	0.52	4.16	0.00	0.00	0.00	0.00	$0	$908
5	DHWs	10	0.158	204	0.00%	0.00%	75.00%	100.00%	100.00%	100.00%	0.16	0.12	0.16	0.20	7	1.11	1.43	0.00	0.00	0.00	87,850.00	$5,061	$13,288
6	Insulation & Air Sealing - oil	10	0.070	550	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	0.07	0.00	0.07	0.55	20	1.40	11.00	0.00	252.00	0.00	0.00	$65,214	$101,435
7	Insulation & Air Sealing - gas	68	0.476	3,740	0.00%	0.00%	3.00%	100.00%	100.00%	100.00%	0.48	0.01	0.48	3.74	20	9.52	74.80	2,026.65	0.00	0.00	0.00	$421,263	$279,336
		300	2.927	15,234							2.93	1.32	2.88	15.23		38.76	192.59	2,026.65	252.00	0.00	87,850.00	$491,537	$397,882

Notes:

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(2) Quantity = the number of measures installed or the number of homes in which the measure was installed.
(3) Total Gross Max kW Savings = Gross demand savings for all measures of this type.
(4) Total Gross Annual kWh Savings = Gross annual energy savings for all measures of this type.
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) Summer and Winter Coincident factors are based on seasonal impact of individual measures.
(9), (10) Demand and Energy Adjustment Factors.
(11) Net Peak kW = Net Max kW
(12), (13) Net Summer and Winter kW = Diversified seasonal demand savings. Quantity * Total Gross kW * (1 - Free-Ridership + Spillover) * Seasonal Coincident * Demand Adjustment Factor
(14) Annual Net MWh Savings = Annual energy savings reflecting all adjustment factors. Total Gross kWh * (1 - Free Ridership + Spillover) * Energy Adjustment Factor
(15) Measure Life - The life of an energy consuming measure, including its equipment life and measure persistence (not savings persistence)
(16) kW Years = Measure Life * Net Peak kW
(17) Lifetime MWh = Measure Life * Net kWh Reduction
(18) Gas saved annually due to heating and water heating.
(19) Oil saved annually due to heating and water heating.
(20) Propane saved annually due to heating and water heating.
(21) Gallons of water saved.
(22) The Total Resource Benefits represents the value of benefits associated with natural gas, oil, propane and water savings.
(23) The Total Non-Resource Benefits represents accounts for the longer replacement cycles of the CFLs, as well as other types of benefits.

Year	2009
Program	C02a C&I New Construction

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Lighting	5	21.100	66,116	30.70%	6.20%	16.542	12.142	6.154	52	15	248.136	778
		5	21.100	66,116			16.542	12.142	6.154	52		248.136	778

Notes:
(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Year	2009
Program	C02b C&I Govt New Construction

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Lighting	4	76.580	270,654	0.00%	0.00%	78.801	57.840	29.314	279	15	1,182.012	4,178
2	Heating, ventilation and AC	1	36.000	283,740	0.00%	0.00%	37.044	31.487	0.000	292	15	555.660	4,380
		5	112.580	554,394			115.845	89.327	29.314	570		1,737.672	8,557

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Year	2009
Program	C04c C&I Products & Services

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Lighting	320	15.680	18,240	27.90%	13.40%	13.814	12.239	9.953	16	15	207.211	241
2	Cool Choice	18	137.538	205,029	0.00%	0.00%	141.527	120.298	83.501	211	13	1,839.846	2,743
3	Motor Up	19	55.100	136,463	0.00%	0.00%	56.698	48.193	33.452	140	15	850.469	2,106
		357	208.318	359,732			212.039	180.730	126.906	367		2,897.526	5,090

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Year	2009
Program	C03a C&I Large Retrofit

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Lighting	7	216.222	1,193,969	5.70%	3.20%	217.086	159.341	80.756	1,199	13	2,822.123	15,584
2	Motors	8	30.900	249,415	0.00%	0.00%	31.796	25.437	28.585	257	15	476.942	3,850
3	Refrigeration	3	2.722	27,522	0.00%	0.00%	2.801	2.241	2.518	28	13	36.415	368
		18	249.844	1,470,906			251.684	187.019	111.859	1,484		3,335.479	19,802

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Year	2009
Program	C03c C&I Govt Large

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Heating, ventilation and AC	1	20.000	62,215	0.00%	0.00%	20.580	17.493	0.000	64	12	246.960	768
2	Motors	1	22.400	55,900	0.00%	0.00%	23.050	18.440	20.722	58	15	345.744	863
3	CHP	1	243.000	889,999	0.00%	0.00%	250.047	125.024	200.038	916	15	3,750.705	13,737
		3	285.400	1,008,114			293.677	160.956	220.759	1,037		4,343.409	15,368

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Year	2009
Program	C03b C&I Small Retrofit

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Lighting	240	952.380	3,047,261	5.70%	3.20%	822.323	603.585	305.904	2,631	13	########	34,205
2	Heating, ventilation and AC	4	16.000	34,116	43.30%	0.00%	9.536	8.106	0.000	20	10	95.360	203
3	Motors	11	16.051	118,481	0.00%	0.00%	16.516	13.213	14.848	122	15	247.747	1,829
4	Refrigeration	65	77.474	607,954	4.20%	0.00%	76.467	61.174	68.744	600	10	764.672	6,001
5	Hot Water	1	0.000	0	0.00%	0.00%	0.000	0.000	0.000	0	10	0.000	0
		321	1,061.906	3,807,812			924.843	686.078	389.497	3,373		########	42,237

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Year	2009
Program	C03d C&I Govt Small

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Measure Description	Quantity	Total Gross Max kW Savings	Total Gross Annual kWh Savings	Free Ridership Rate	Participant Spillover Rate	Net Peak kW	Net Summer kW	Net Winter kW	Annual Net MWh Savings	Measure Life	kW Years	Lifetime MWh
1	Lighting	31	199.256	465,131	0.60%	3.40%	187.446	137.586	69.730	438	13	2,436.800	5,688
2	Heating, ventilation and AC	10	25.683	34,091	0.00%	0.00%	26.428	22.464	0.000	35	10	264.278	351
3	Motors	9	226.632	722,331	0.00%	0.00%	233.204	186.563	209.650	743	15	3,498.059	11,149
4	Refrigeration	8	1.942	23,114	0.00%	0.00%	1.998	1.599	1.796	24	10	19.983	238
		58	453.513	1,244,667			449.076	348.211	281.177	1,240		6,219.120	17,426

Notes:

(1) Measure Description = From the Cape Light Compact's program BCR screening tool.
(2) Quantity = the number of sites in which the measure was installed.
(3) Total Gross Max kW Savings = gross demand savings for all measures in each end use category
(4) Total Gross Annual kWh Savings = gross energy savings for all measures in each end use category
(5), (6) Free-Ridership and Spillover estimates.
(7), (8) = Net summer demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(9) = Net winter demand reduction consistent with ISO FCM on-peak resources; incorporates coincidence, free ridership and spillover factors from most recent program impact evaluation
(10) = Total Gross kWh * (1 - Free Ridership Rate + Spillover)
(11) = Aggregate whole number rounded measure life for end use category, incorporating persistence as determined by most recent measure life study
(12) = Net Peak kW * Measure Life
(13) = Net kWh Reduction * Lifetime

Appendix 9. Progress Report Updates on Compliance Items Consistent with the Department's Order in D.P.U. 09-119

This Appendix provides Progress Report Updates on compliance items consistent with the Department's Order in D.P.U. 09-119. The following is a list of the materials provided in this Appendix:

1. Progress Report
2. Attachment A - May 10, 2010 OBR Working Group Report to EEAC
3. Attachment B - National Grid Government Grants
4. Attachment C - NSTAR EE Grant Presentation

Progress Report and Updates on Compliance Items
Consistent with the Department's Orders in

D.P.U. 09-116, D.P.U. 09-117, D.P.U. 09-118, D.P.U. 09-119, D.P.U. 09-120, D.P.U. 09-121, D.P.U. 09-122, D.P.U. 09-123, D.P.U. 09-124, D.P.U. 09-125, D.P.U. 09-126, D.P.U. 09-127, D.P.U. 09-128

On January 28, 2010, the Department of Public Utilities ("Department") issued Orders in D.P.U. 09-116 through D.P.U. 09-128, approving Energy Efficiency Plans for 2010 through 2012 filed by the Massachusetts Program Administrators. In these Orders, and in a June 22, 2010 Hearing Officer Memorandum, the Department included directives regarding information that the Program Administrators are required to include in their 2009 Energy Efficiency Annual Reports, as follows:

1. a status update on the evaluation, measurement and verification study regarding free ridership and spillover. Gas Three Year Plan Order at 124-125.

2. a progress report on the development of consistent statewide program planning and administrative cost categories, including the identification of unresolved issues. Electric Three-Year Plan Order at 45; Gas Three-Year Plan Order at 42.

3. a progress report on the development of avoided cost factors that improve the reliability of transmission and distribution benefits as well as an explanation of any differences in the models and underlying assumptions by Program Administrators (to be included in the benefit/cost ratio for the next three-year plans). Electric Three-Year Plan Order at 54.

4. documentation regarding efforts to secure outside funding for 2011 and 2012. Electric Three-Year Plan Order at 69; Gas Three-Year Plan Order at 62.

5. the results of the non-electric benefits study that is to be conducted in 2010. Electric Three-Year Plan Order at 130-131; Gas Three-Year Plan Order at 121.

6. a progress report on the development of updated and fully documented assumptions regarding savings from heating oil measures and other non-electric benefits. Electric Three-Year Plan Order at 131.

7. either a copy of the Technical Reference Manual, or if the Technical Reference Manual is not available as of the filing date, a report that details its current status and anticipated completion date.

The Massachusetts Energy Efficiency Program Administrators are pleased to provide the Department and all interested stakeholders with the following up-to-date information on these issues.

1. Evaluation, Measurement & Verification Study on Free Ridership and Spillover

An entity named PA Consulting was selected to conduct this study. A kick-off meeting was held on June 15, 2010. The 2010 initiative is to review the existing methodology developed in 2003 for determining Free Ridership and Spillover in the C&I Sector. This new initiative will entail a broader study of how to measure what results would have occurred absent the program. Although the new initiative may ultimately conclude that Free Ridership and Spillover are still the most valid methodologies, other methods, such as looking at comparison areas, will be investigated. This portion of the study is to be completed in December 2010.

For residential programs, the Program Administrators plan to assess free-ridership, spillover and/or net savings in the individual residential process and impact evaluation studies which will be conducted jointly. For some programs, such as residential lighting, an overall net to gross ratio will be developed, while for other programs individual free-ridership and spillover values will be determined.

2. Consistent Statewide Program Planning & Administrative Cost Categories

A Program Administrator working group, dedicated to ensuring consistent statewide Program Planning & Administrative ("PP&A") cost categories, has identified some discrepancies among the Program Administrators regarding how costs are assigned to certain categories.

The most significant difference is in the category in which internal labor and related expenses are assigned. Some Program Administrators are assigning all internal labor and related expenses to the PP&A cost category. Other Program Administrators are assigning some internal labor and related expenses (specifically for staff members dedicated to marketing, sales technical assistance and training, or evaluation measurement and verification ("EM&V")) to the Marketing, Sales Technical Assistance & Training or EM&V cost categories.

The only other discrepancy identified by the working group was that some Program Administrators are assigning database tracking improvements to the PP&A cost category, while others are assigning this cost to the Sales, Training and Technical Assistance cost category.

A follow-up meeting of the working group will be held in August 2010 (prior to 2011 mid-term modification plan filings) to determine a consistent approach to tracking these types of expenses and to set a timeframe to implement a consistent statewide approach.

3. Avoided Cost Factors to Improve Reliability of Transmission and Distribution Benefits

I. Introduction

In 2005, the Program Administrators contracted ICF International, Inc. ("ICF") to develop a tool to calculate the benefits on the transmission and distribution ("T&D") systems as a result of the

energy efficiency programs that are offered. As part of the 2009 Avoided Energy Supply Cost ("AESC") Avoided Cost Analysis, Synapse Energy Economics, Inc. reviewed ICF's tool and identified inconsistencies in how each Program Administrator utilizes the tool.

Below is a progress report related to Synapse's comments. They are categorized according to spreadsheet errors and input inconsistencies. Some of the points lead to simple fixes or updates, while others will need collaboration and consensus among the Program Administrators.

Synapse's report focused on models used by National Grid and NSTAR Electric. As these two Program Administrators work through these issues, they will share their findings and recommendations with the other Program Administrators to increase consistency in the valuation of T&D benefits.

II. Spreadsheet Errors

1. "Insurance expense. The ICF model incorrectly cites page 323, line 156 of the FERC form 1 as the source of Total Plant Annual Insurance Costs. The correct citation is page 323, line 185 of the FERC form 1"

    - As noted by Synapse, National Grid and NSTAR Electric have corrected the citation in their spreadsheets.

2. Carrying charge calculation. "The ICF model spreadsheet contains cell-reference errors that excludes depreciation expense and the cost of capital from the distribution carrying charge, but adds in the state income tax rate."

    - As noted by Synapse, National Grid corrected all three errors on its spreadsheet.

    - NSTAR Electric has corrected its model so that Line 7 of Carrying Charge Schedule 3 (DS) sums the percentages found on lines 1 through 6 and that it matches the formula used on Line 7 of Carrying Charge Schedule 3 (TR).

3. Financing Errors. Synapse pointed out two financing errors having to do with the calculation of income taxes and interest deductions. First, Synapse noted that WACC is already adjusted for taxes but in the formula below, it appears that the WACC is again multiplied (and further reduced) by the effective state and federal income tax rate. Synapse also questioned the use of real versus nominal interest rates and return on equity

.

$$(Tf \div (1 - Tf)) * (WACC + de - 1/life) * (1 - Rr * Fd / WACC)$$

Symbol	Description	Line
Tf	Effective State & Federal Income Tax Rate	Line 1f
WACC	After Tax Cost of Financing	Line 1
de	Depreciation Expense	Line 4

Life	Depreciation Life	Line 4a
Rr	Real interest rate on debt	Line 1b
Fd	Share of project financed through debt	Line 1a

- National Grid and NSTAR Electric are awaiting clarification from Synapse due to contradicting suggestions in the report. In one instance, Synapse suggests that the income tax expense formula use the real interest rate, and in another point suggests that income tax be assessed using the nominal value.

- The tax expense formula is not the same for both transmission and distribution. The transmission tax expense formula uses the nominal interest rate, whereas the distribution tax expense formula uses the real interest rate. These formulae need to be reconciled.

- National Grid and NSTAR Electric are awaiting further clarification from Synapse before taking action to correct either of these formulae.

III. Input Inconsistencies

1. T&D Inputs and Capital Investments. Synapse noted that both National Grid and NSTAR Electric used equal lives for transmission and distribution plants. NSTAR Electric used a life of 30 years, while National Grid used 45 years. Synapse argued that a transmission plant generally has a longer average life than a distribution plant, and that the use of equal lives is non-standard.

    - National Grid and NSTAR Electric have recalculated the average life by first dividing the depreciation expense for the current calendar year by the average plant value of the two most recent calendar years to determine the depreciation rate. The ratio of 1 divided by the depreciation rate is equal to the average life.

    - As a result, National Grid's new average life for a distribution plant is 26 years, and the average life for a transmission plant is 45 years. National Grid is waiting to hear back from the plant accounting department on how often these inputs should be updated.

    - NSTAR Electric's new average life is 31 years for a distribution plant and 45 years for a transmission plant when using average gross plant value to determine the depreciation rate.

    - These calculations will be company-specific, but all Program Administrators should use a consistent formula for calculating average life.

2. Percentage of capital investments avoidable due to increasing load. According to Synapse, NSTAR Electric's treatment of 100% of investments avoidable is implausible, while National Grid's usage of 25% seems too low.

    - National Grid will review its percentage for 2011. National Grid typically looked at its capital budget and determined that transmission and distribution expenses labeled as new business or load relief were the types of expenses deemed "avoidable." The calculation needs to be updated for 2011, but National Grid does not expect the percentage to vary greatly from the 25%.

    - Synapse misinterpreted NSTAR Electric's input of 100% for avoidable investment. NSTAR Electric already excluded the non-avoidable costs in its capital investment figures on a year by year basis. That calculation was conducted outside of the model and then inputted for each year. This method differs slightly from National Grid where a single average percentage was applied to the sum of the incremental investments across all years. The average percentage used by NSTAR Electric is approximately 23% for distribution and 34% for transmission.

3. Weighting of historical and forecast investment costs. Synapse has suggested that summing historical and forecast investment and dividing by the sum of historical and forecast load growth (as National Grid does) may yield a more accurate result than the inputting of specific weighting factors as allowed for by ICF. NSTAR Electric uses the weighting method as recommended by ICF.

    - Reconciliation of this issue has not yet been discussed.

4. Load Growth Assumptions. Synapse noted that the basis for the load forecast and the DSM savings estimates should be consistent. Since DSM savings are generally estimated for normal peak weather, the divisor in the $/kW computation should be normal peak growth.

    - National Grid is currently using normal peak load data in its analysis. NSTAR is currently using actual peak load data in its analysis; Reconciliation of this issue has not yet been discussed.

5. Avoidable Operations & Maintenance ("O&M") Costs. Avoidable O&M expenses will vary from company to company. However, ICF does not offer any explanations for the percentages they loaded in the tool. Synapse suggested that avoidable O&M expenses should be more in line with the percentage of avoidable capital investments due to increasing load. The line with the greatest variance between National Grid and NSTAR falls under transmission O&M: (565) – Transmission of Electricity by Others. NSTAR had 0% of this cost as avoidable, while National Grid had 100% of this cost as avoidable.

- In the past, National Grid supported the treatment of these costs as 100% avoidable, per ICF's original recommendation because energy efficiency has a direct relationship with lowering the amount of transmission of electricity by others—the more energy efficiency there is, the less transmission by others is necessary. In practice, there are considerations which suggest the percentage should be lowered:

  ⇒ Geographic. For example, if most of the Energy Efficiency actions/measures are implemented in the eastern part of Massachusetts, but the majority of transmission of electricity by others occurs in the western part of Massachusetts, then not all of those transmission costs are avoidable.

  ⇒ Corporate Accounting. Utilities also collect revenue for transmitting electricity on behalf of other utilities. This revenue will offset some of the costs and this could be reflected by modifying the percentage avoidable downward.

- Taking the above into consideration, National Grid proposes lowering its percentage of avoidable costs for Transmission of Electricity by Others from 100% to 20%.

- NSTAR Electric supports the use of 0% for avoidable O&M costs in the category of Transmission of Electricity by Others. NSTAR Electric believes that this is a generation-related cost and therefore not avoidable as transmission. Effective energy efficiency measures, as they relate to this category, decrease the need for additional generation investment the benefit of which is incorporated in avoided generation costs.

- Further reconciliation of these assumptions has not been discussed

4. Efforts to secure outside funding for 2011 and 2012

As the Program Administrators were developing their Three-Year Plans, and prior to the Department's final orders on the Three-Year Plans, the Program Administrators were engaged in initial discussions with the Department of Energy Resources, members of the Energy Efficiency Advisory Council, other interested parties, and the banking industry regarding outside financing (i.e., loans that are to be repaid) and funding (i.e., grants/funds that directly off-set program costs and that do not need to be repaid) with specific attention to the following:

- discovering lessons learned from other utilities across the nation;

- having on-going discussions with customers and lending institutions to develop prescriptive and customized financing solutions for energy efficiency investments; and

- engaging consultants supporting financing for this industry.

Based on these initial efforts, in the Three-Year Plans for electric and gas Program Administrators, statewide targets for outside financing and funding were established for 2011 and 2012 at the following levels: $100 million for the 2011 electric budgets and $20 million for the 2011 gas budgets; and $200 million for the 2012 electric budgets and $40 million for the 2012 gas budgets, with the operating assumption in each instance that 60% of such total amounts would be in the form of funding and 40% of such amounts would be in the form of financing. In its January 28, 2010 Orders on the electric and gas Three-Year Plans, the Department instructed the Program Administrators to provide documentation of their efforts to secure outside funding in this annual report. The following narrative provides such documentation of ongoing efforts to secure both outside funding and, closely related thereto, outside financing. These efforts continue and will help inform any midterm modifications that will be proposed at the Department by the Program Administrators after review with the Energy Efficiency Advisory Council ("EEAC"). The Program Administrators and the EEAC's consultants have adopted a proposed target date of October 29, 2010 for the filing of any proposed midterm modifications with the Department. (As of this date, the Program Administrators do not have midterm modifications for effect in 2011 that they are currently proposing, but will continue to work with the EEAC and, where applicable, the D.P.U. 08-50 Annual Report Working Group, on potential modifications.)

As discussed in more detail below, with respect to financing, the Program Administrators have segmented the market to better understand customer needs and have identified specific financial tools that are readily available and can be adapted and adopted for Massachusetts. The Program Administrators have engaged in extensive efforts in the Department of Energy Resources ("DOER") On-Bill Repayment ("OBR") Working Group, which efforts yielded a detailed report dated May 10, 2010, which is attached as Attachment A, and which provides extensive information on OBR options. The Program Administrators have also engaged in requests for information ("RFI") and requests for proposal ("RFP") activities related to outside financing. Further, the Program Administrators have met extensively with banks, lenders, state agencies, and industry experts to pursue effective financing opportunities and these efforts, including efforts with the Massachusetts Bankers Association, actively continue.

As discussed in more detail below and in Attachments B and C, following the Department's Orders, over the last several months, the Program Administrators have also coordinated with each other and with several EEAC members and organizations to identify and pursue grants for funding. Obtaining grants to help off-set energy efficiency charges for customers has presented a challenge for the Program Administrators, as nearly all current federal grants for energy efficiency have been exhausted. However, the Program Administrators continue to work with councilors and multiple other interested parties in identifying alternative approaches to accessing grant funding. Among other efforts, the Program Administrators have researched, identified, and contacted multiple possible funding sources at the federal, state, and private level. Detailed documentation of outside funding sources reviewed that have been prepared by National Grid (Attachment B) and by NSTAR (Attachment C) illustrate the depth of this effort, with over 70 possible government grants and multiple possible private foundation grants identified.

Relatedly, the Program Administrators have reviewed Internal Revenue Code matters related to funding and optimal approaches to securing outside grants, including looking to match customers with customized grant opportunities. The Program Administrators are engaged with the Northeast Energy Efficiency Partnership ("NEEP") to ensure that they have not missed any potential funding opportunities, and will continue to pursue outside funding aggressively. Nonetheless, to date, material new government sources of outside funding (such as "cap and trade" initiatives under discussion as the Three-Year Plans were in development) have not materialized and securing material outside funding remains a challenge for the Program Administrators and other interested parties.

The following chronology highlights the Program Administrators' activities regarding efforts to secure outside funding and financing. The bulleted items represent key initiatives, and reflect significant work undertaken by the Program Administrators in pursuit of these activities:

December 2009/January 2010:

Starting in December 2009, the Program Administrators actively participated in the DOER's OBR Working Group and have collaboratively worked with other stakeholders to develop "business rules" for on-bill repayments for residential and small C&I customer segments. Program Administrators have also extensively participated in the Rental OBR task force convened by the DOER. There have been over twelve such OBR meetings since December, and they have continued through July.

In addition, during December 2009, NSTAR initiated discussions with other utilities nationally regarding OBR programs and success/failures.

With regard to outside funding, NSTAR and National Grid, in collaboration with the DOER, applied for Federal Energy Efficiency Conservation Block Grants.

February 2010:

National Grid initiates a Request for Information process regarding the availability of federal funds. National Grid identifies and sends the RFI to 45 banks, investment firms and specialty finance firms.

NSTAR determines that OBR has not been tested on a large scale anywhere in the country. Only California has OBR for small business on a limited basis. Other jurisdictions are only pilot phases. Manitoba Hydro (Canada) has an OBR program, backed by customer dollars and has a safety clause for banks at risk to customers. NSTAR investigates Metrus Energy for Large C&I financing.

The Program Administrators continue to be engaged in the OBR Working Group providing DOER with a consensus memorandum on key issues on February 9, 2010, and, where applicable, collaboratively exchanging funding and financing information based on their efforts. This collaboration is a hallmark of the Program Administrators' efforts and has continued through the present and benefits all Program Administrators.

March 2010:

National Grid chooses to continue conversations with the top five respondents to their RFI. They are each invited to present their financing solutions.

NSTAR reaches out to the National Renewable Energy Laboratory for federal financing for customers. NSTAR also reaches out to the Mass Bankers Association to gauge local interest in energy efficiency financing. NSTAR explores financing for municipalities, universities, schools and hospitals. The Cape Light Compact engaged in the Property Assessed Clean Energy ("PACE") program. New England Gas Company reaches out to a major local lender with experience in lending in the economically challenged and unique New England Gas Company service area.

The Program Administrators review and discuss financing presentation of DOER made at the March EEAC meeting.

The Program Administrators continue to be engaged in the OBR Working Group and continue collaboration efforts.

April 2010:

NSTAR makes its first presentation to the Mass Bankers Association. NSTAR/Metrus identify possible pilot project financing.

NSTAR and National Grid support MIT's request to secure a $129 million multi-year grant for its Center for Advancement of Building Systems.

National Grid meets with all five respondents to its RFI, which include four leading banks and a firm that specializes in the securitization of "non-regular" loans.

The Program Administrators continue to be engaged in the OBR Working Group and continue collaborative efforts, including an ad hoc Program Administrator group focusing on financing solutions.

May 2010:

NSTAR, National Grid and DOER actively participate in the American Council for an Energy Efficient Economy's financing conference in Chicago to learn about different approaches currently employed nationally relating to energy efficiency financing.

NSTAR and National Grid submit a bid to the City of Boston's Renew Boston program and secure a $900,000 grant for small C&I customers.

The Program Administrators continue to be engaged in the OBR Working Group and continue collaborative efforts, including drafting work led by NSTAR on an RFP for a financial consultant for all Program Administrators.

June 2010:

The Program Administrators host a second meeting with the Mass Bankers Association. The meeting is a success, with local banks expressing interest in the energy efficiency market. NSTAR reaches out to Mass Credit Union League for similar meeting. National Grid reaches out to the Small Business Administration. NSTAR issues an RFP for a financial consultant on behalf of all Program Administrators. NSTAR and National Grid host a technology and finance seminar for C&I customers on energy efficiency finance options and benefits. The Berkshire Gas Company engages with a leading local credit union, with expertise in serving customers in Western Massachusetts, and internally reviews possible issuance of a targeted request for proposals.

National Grid invites the DOER to meet with the Wall Street Securitization Firm identified through the Company's RFI.

The Program Administrators continue to be engaged in the OBR Working Group and continue collaborative efforts. After detailed comments from the Program Administrators, a report of the OBR Working Group is submitted to the EEAC on May 10, 2010, and is provided herein as Attachment A.

July 2010:

The Mass Bankers Association invites the Program Administrators to an internal meeting and both decide to initiate a task force to develop energy efficiency-specific financing. NSTAR initiates conversation with Bank of America and Citizens Bank. The first task force meeting is held in July. NSTAR engages in possible pilot financing for municipal/state sector. Six-month statewide HEAT loan targets on track. Capital constraints have not been sensed thus far.

In addition, with regard to funding, the Program Administrators held discussions with NEEP and DOER to share ideas on possible funding sources from federal, state and private sources. Information shared by National Grid and NSTAR with NEEP regarding potential sources is provided herewith as Attachments B and C. NEEP confirms that Program Administrators have been targeting most likely sources and confirms the challenges in securing further outside funding. Discussions with NEEP will continue, with follow-up planned for about one month.

MIT and NSTAR have received a preliminary award for a DOE grant to work with Lawrence Berkley Labs, which was also supported by National Grid. Under this grant, Program Administrators will have access to expertise from the DOE laboratories as well as a number of firms under contract for the program. NSTAR/MIT have the opportunity to receive up to $500,000 for these services.

The DOER and National Grid jointly meet with the Wall Street Securitization Firm in New York City.

The Program Administrators continue to be engaged in the OBR Working Group and continue collaborative efforts.

Customer-Specific Efforts

In addition to the efforts described above which seek financing solutions on a large-scale basis, the Program Administrators have been successful in identifying financing solutions appropriate for specific customers. For example, the Cape Light Compact has engaged consultants to design unique financing solutions for specific customers. In addition, tax-exempt leases, bonding and savings-backed financing agreement opportunities have been identified as possible financing options for certain customers.

5. Non-Energy Benefits Study

An entity named PA Consulting was selected to conduct a study on non-energy benefits ("NEBs"). A kick-off meeting was held on June 16, 2010. Tasks for this evaluation include: developing a list of measures/equipment for which NEBs could be quantified, conducting a literature review of NEBs for measures with less quantifiable NEBs, interviews with Program Administrator staff, program implementers, conducting participant surveys, and reporting. This study is to be completed in December 2010.

6. Heating Oil Measures & Other Non-Electric Benefits Assumptions

These assumptions will be developed during the impact evaluation phase of the Mass Save program scheduled for 2011. Until these new assumptions are developed, the existing assumptions will be documented in the 2011 TRM – Plan Version, discussed below.

7. Technical Reference Manual.

The Program Administrators, the DOER, the Attorney General, the EEAC and other stakeholders have been working collaboratively to complete Version 1.0 of the Technical Reference Manual ("TRM") to be filed in the fall of 2010. This version will be called the "2011 MA TRM – Plan Version", and will contain the savings assumptions and algorithms for both electric and gas prescriptive measures across all programs and sectors.

The Program Administrators will file the 2011 MA TRM – Plan Version with the Department along with major modifications to the 2011 program plans. The MA TRM – Plan Version provides regulators and stakeholders with the assumptions and algorithms that the Program Administrators will use to count savings for the 2011 program year. An update to this Plan Version, which will incorporate results of evaluations completed in the next year, will be filed

with the 2011 Energy Efficiency Annual Report. It will be called the 2011 MA TRM – Report Version.

In the final months leading to the filing of the 2011 MA TRM – Plan Version (along with the 2011 Program Plans), all of the savings documentation for residential, low-income and C&I measures that have been completed by the working groups will be compiled and undergo a final review by Optimal Energy Inc. The reviewed final draft will then be distributed to the Program Administrators and representatives of the Department, DOER and Attorney General's offices for comments and edits during August 2010. During the fall of 2010, the Program Administrators will be revising their tracking systems as necessary to conform to the specifications in the 2011 MA TRM – Plan Version.

ATTACHMENT A

ON-BILL REPAYMENT WORKING GROUP
REPORT TO THE ENERGY EFFICIENCY ADVISORY COUNCIL

ON-BILL REPAYMENT WORKING GROUP

REPORT TO THE ENERGY EFFICIENCY ADVISORY COUNCIL

MAY 10, 2010

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EXECUTIVE SUMMARY

The On-Bill Repayment ("OBR") Working Group submits this report to the Energy Efficiency Advisory Council ("EEAC" or "Council"). Today's report sets forth the results of a collaborative, broad-based working group that has been meeting since September 2009, with approximately 12 full meetings since then.

The mission of the OBR working group was to examine and determine repayment mechanisms that would facilitate the use of outside funding, as envisioned in the Program Administrator 2010-2012 Statewide Energy Efficiency Investment Plans, beginning in 2011. The Working Group's initial charge was to examine both financing and repayment mechanisms. However, the intensive nature of financing and repayment, and the need for somewhat different knowledge and skill sets, led the Working Group to concentrate on repayment issues and become known as the OBR Working Group.

As with other EEAC Working Groups, the OBR Working Group was chaired by DOER in its staffing capacity to the Council. Membership in the group consisted of voting EEAC members, Program Administrators, other non-voting EEAC members, EEAC consultants, and other interested parties, such as members of the Green Justice Coalition, and a weatherization contractor. The meetings were formally noticed as public meetings and were open to anyone wishing to attend in person or participate by telephone.

The report sets forth the core principles that have achieved full consensus of the working group and shows in matrix format how the principles will be applied to residential and small commercial customers. These principles include:

- Full disclosure in clear language regarding financing terms, default provisions, and remedies to any efficiency program participant who considers and elects to use outside funding offered through the Program Administrators.
- The adoption of appropriately inclusive standards in determining customer eligibility for participation. The OBR Working Group recommends that inclusive standards be applied in determining eligibility for participation and that individual credit checks not be employed. The exact underwriting standards that will be applied will be determined in negotiation with lenders and servicing entities in accordance with the principles expressed here.
- Electric or gas service will not be terminated upon a customer's failure to pay the energy efficiency portion of a service bill, or failure to pay a companion bill. Partial payments will first be allocated to the energy/ distribution portion of the bill.
- Program Administrators will be the conduits for outside financing and repayment including their normal collections process, but do not anticipate serving as the lender.
- Customers who qualify for low-income programs will not be solicited for any financing programs.

Although discussions within the Working Group have coalesced around certain overarching principles, the group recognizes that these principles and expectations are subject to modification and will continue to evolve, depending in part on the particular terms and requirements of outside lenders. Outside financing opportunities that materialize will need to be considered from a repayment (OBR) perspective, and the OBR principles outlined in this report are not intended to be categorically fixed. As experience is gained, strategies and efforts will evolve.

The report also sets forth detailed matrices detailing OBR approaches and issues in different customer categories, reflecting the group's consensus that a segmented approach to OBR is appropriate. Key findings by sector are:

- Major customer segments such as Residential, Small Commercial &Industrial (Small C/I), Renters and Owners, are distinct and require distinct provisions to meet their needs. Within those groups, particularly within the rental market, further segmentation should be conducted, with an analysis of barriers facing the particular segments and an exploration of the type of financing program that will address those barriers most effectively.

- Customer segmentation may require additional tailoring of repayment to meet household income, business type, or other distinctive repayment requirements, which will be discovered through implementation.

- A robust residential OBR model has been established. Renters, in residential and commercial properties require substantial additional work but the Working Group believes that the OBR work should move forward in all sectors and subsectors to ensure that every class of customer is able to participate appropriately in deeper energy savings opportunities provided by the additional leverage of outside funding.

- Work clearly need s to be done to address the needs of renters and households whose income exceeds 60% of median income but for whom the burden of either customer cash contributions or additional obligations brought on through financing is considerable and may need amelioration. Addressing these needs should be accomplished through other venues, which may include the EEAC and its Equity Committee, landlord associations, the legislature, and the Department of Public Utilities ("DPU").

Finally, the report sets forth the following proposed next steps:

- Communicate the findings of the EEAC OBR Working Group to the DPU to determine, what processes and actions, if any, are required in that venue to move the OBR and financing issues forward for 2011.

- Match the OBR concerns to the work being done by PA's, DOER, other EEAC members and other parties on financing to develop a complete and integrated financing/repayment implementable plan.

- Continue to develop the renter matrices further in a small working group devoted to that issue. Set a timeline for resolution but no later than September 1, 2010 for a further report to the EEAC.

- Continue to explore the question of households with incomes above 60% but still experiencing disproportional energy burdens, carefully describe this demographic, characterize relevant living conditions, employment and other relevant factors, and develop cost-effective solutions for addressing the needs of this group.

- A phased implementation approach should be used that will help mitigate investment and other risk, and that will allow for continuous validation of concepts and implementation strategies and details.

- Review the Pay and Save pilot program data and evaluation report for insights that may be useful for design and implementation of full scale financing proposed for 2011 and beyond.

- Address additional concerns raised by the EEAC, the DPU or Working Group members. (also see Section 4 for additional comments)

1. INTRODUCTION

The OBR Working Group was established by the Division of Energy Resources ("DOER"), acting in its role as Chair of the Council, to explore all options for on-bill repayment in order to expand existing on-bill financing options and make energy efficiency programs more accessible to customers. The OBR Working Group has focused on ways to work towards implementation of the financing goals and principles described in the Massachusetts Joint Statewide Three-Year Gas and Electric Energy Efficiency Plans ("Three-Year Plans") both prior to and following their approval by the Department of Public Utilities (the "Department") in its Orders, each dated January 28, 2010, regarding the electric Program Administrators' Three-Year Energy Efficiency Plans and the gas Program Administrators' Three-Year Energy Efficiency Plans in dockets D.P.U. 09-116 to D.P.U. 09-120 (regarding electric Program Administrators) and dockets D.P.U. 121 to D.P.U. 09-128 (regarding the gas Program Administrators). The Three-Year Plans promote financing mechanisms to help address barriers associated with the potentially substantial up-front costs of installing energy efficiency measures (see § II.B. of each Three-Year Plan); the OBR Working Group seeks to set forth and have the Program Administrators adopt consensus-based standards, representing the views of multiple stakeholders, for the provision of on-bill repayment for residential and Small C/I customers over the next three years.

The OBR Working Group was endorsed by Council resolution on July 28, 2009, in the overall resolution approving the Statewide Electric and Gas Energy Efficiency Programs. As with other EEAC Working Groups, the OBR Working Group was chaired by DOER in its staffing capacity to the Council. Membership in the group consisted of voting EEAC members, Program Administrators, other non-voting EEAC members, EEAC consultants, and other interested parties, such as members of the Green Justice Coalition, and a weatherization contractor. The meetings were formally noticed as public meetings and were open to anyone wishing to attend in person or participate by telephone.

1.1. PRINCIPLES

Items Addressed by OBR Working Group

The OBR Working Group has addressed multiple aspects of on-bill repayment and has agreed on the following eleven core principles:

1. **No Promotion of Loans to Low-Income Customers**

The OBR Working Group has agreed that the Program Administrators and others involved with implementation of the Three-Year Plans will not promote loans to customers eligible for low-income programs. Customers who are eligible for low-income programs should be directed in the carefully tailored low-income programs, which provide

100% of the funding for energy efficiency measures for eligible participants. All parties seek to avoid over-leverage for any customer, including the most vulnerable customers in the low-income sector.

2. Repayment Tied to Customer for Residential and Small C/I Owned Properties

The OBR Working Group has also determined that, for residential owner customer segments and Small C/I(owner) customers, repayment should be tied to the borrower and not to the meter. As detailed in the residential matrix set forth in Section below, meter-based repayment is not appropriate at this time for this sector given that questions still remain on how it would work and how payment obligations would be handled. Repayment should instead be tied to the customer who has initiated the energy efficiency measures and accepted responsibility for payment.

3. No Termination for Non-Payment

The OBR Working Group has agreed that there will be no termination of energy services based on non-payment of the energy efficiency loan portion of bill. Termination rights could create customer backlash, would be excessive, and would risk violation of customer protection standards and policies established to ensure the provision of energy services to customers. Similarly, in rental situations, rent increase and evictions protections are needed to ensure tenants are not inappropriately charged for the cost of the improvements or evicted for other than standard non payment of rent provisions. These problems argue for the development of robust "Green Leases" that provide adequate statements of responsibilities of landlords and tenants and provide appropriate remedies for abuses in apportioning the costs of financed energy efficiency improvements through the PA programs.

4. Allocation of Partial Payment

The OBR Working Group has also reached consensus on the allocation of partial payments, and has determined that the energy/distribution portion of the bill will be paid down in full prior to the payment of the energy efficiency loan portion. The OBR Working Group has also addressed additional items on the bill, including services and rental charges, and determined that these will also be paid down prior to the energy efficiency loan.

5. Fixed Payments

The OBR Work Group has determined that any OBR re-payments will be fixed over the term of the loan. The use of fixed, monthly finance charges reduces customer concerns regarding loan repayment and lends itself to succinct, clear disclosure. Variable interest rates will not be employed. [Please note, however, prepayment will be allowed.]

6. **No Requirement of Positive Cash Flow/No Savings Guarantee**

The OBR Working Group has agreed that there will be no absolute requirement of positive cash flow, and no savings guarantee, with respect to any project for which financing is provided. Although all participants of the OBR Working Group aspire towards achieving net savings through on-bill repayment, it is understood that such savings are dependent on many factors (including, for example, commodity costs, weather, measure-mix and building occupancy) and accordingly cannot be guaranteed.

7. Certain Customers at 60%-120% of Statewide Median Income

The Working Group's discussions included a question about the ability of customers whose income ranges from 60%-120% of median income to participate in any financing, and suggestions that such customers should be treated comparably to customers eligible for the low-income programs. Some anecdotal evidence suggests that this income group is currently underserved and harder to reach and as such efforts will be made to design inititiatives and explore ways to reach these valued customers. However, while agreeing that there certainly are customers for whom the costs of copayment and perhaps financing are substantial barriers to participation, the Working Group was not able to readily find and examine well documented evidence about the burden of energy and customer copayments on this class of customers, or even determine where the upper end of the vulnerability range lies. We note there is no specific mandate under the Green Communities Act to reach these customers separately from other residential or low-income customers but agree that financial and other barriers that impede participation by any segments of eligible customers are of concern and need to be addressed. The Working Group believes that issues pertaining to targeted income groups need primarily to be addressed by other EEAC Committees (*i.e.* ,Residential and/or Equity).

8. Customer Eligibility

With respect to customer eligibility, the OBR Working Group has determined that on-bill repayment should be available for all qualifying customers including residential customers (other than low-income, as described above) who are either owners or renters, as well as for Small C/I customers. However, due to the split incentive problem (most often tenants pay utility costs but property owners bear the cost of capital investment) and the complexity of meter-based obligations in residential rental markets, the workgroup has been unable to reach a consensus opinion. Discussions will continue with respect to on-bill repayment issues specific to renters. A more detailed discussion of issues related to OBR in the rental market is set forth in Sections 2.4.3. (Residential) and 2.4.2(Small C/I). Large C&I customers will be eligible for uniquely tailored solutions and are not addressed in this report.

9. Credit Checks and Payment History

The OBR Working Group has also determined that credit checks will not be used for qualification purposes in the residential owner segment; in order to decrease the risk of customer defaults, however, payment history will be relevant to qualification decisions and on-bill repayment will only be available to customers who have been current on their energy bill for a certain minimum period of time. Credit checks may be used in rental or Small C/I segments and/or where larger loan sizes require enhanced underwriting. , a subject that will need further exploration once the lender community is engaged. See Section 2.4 for more detail.

10. Collection and Banking Laws

The OBR Working Group agrees that the Program Administrators will not serve as collection agents for outside loans (aside from standard utility bill collection procedures). The Program Administrators will provide a means of repayment by enabling OBR on either a standard or sundry bill, but will not actually be involved with the provision of financing dollars or in any other way acting as a bank, lender or guarantor. The OBR Working Group agrees that the Program Administrators should not become regulated banking institutions that are required to comply with banking laws as a result of OBR efforts, and is continuing to review compliance issues with respect to banking and lending laws.

11. Full and Fair Disclosure

Finally, the OBR Working Group emphasizes that there must be full and fair disclosure to all customers regarding any financing of measures that utilizes OBR, including estimated loan costs, default provisions, remedies, and use

of payment history or other qualifying standards, and that the disclosure must be clear and plainly written. Although the OBR Working Group will not assume primary responsibility for drafting disclosure language, the group may review such language to ensure that it complies all applicable state and federal statutes and regulations.

1.2 ITEMS BEYOND OBR WORKING GROUP SCOPE

As detailed below, numerous core principles have been discussed and agreed upon, achieving full consensus of the OBR Working Group. We note that by consensus, Working Group does not require 100% agreement on each and every issue. However, the Working Group has taken pains to ensure there is substantial agreement on the principles and the expression of the principles detailed in the matrices. Where there is significant disagreement or the members recognized an issue as unfinished, the Working Group and the report has noted such. Resolution on certain issues, however, has not been captured by this report, either because (1) the issues are beyond the Working Group's scope of inquiry and have not been part of OBR Working Group discussions, or (2) the issues have not been resolved by consensus of the Working Group (these unresolved issues are addressed in Section 2.3 and in comments in Section 4.1).

While outside financing is interwoven with, and related to, the purposes of the OBR Working Group, it is a separate and distinct issue, and will be coordinated with on-bill repayment at an appropriate time. Outside financing opportunities that are presented to the parties will carry terms that will necessarily need to be considered from an OBR standpoint .It is anticipated that certain terms set forth herein will continue to evolve and may reflect lender requirements or other conditions in the financing marketplace and the legal and regulatory oversight of that marketplace. The Working Group, however, seeks to establish core guidelines and expectations regarding OBR matters, which will serve as a guide as outside financing opportunities are presented and evaluated.

Also excluded from the OBR Working Group Report are specific Program Administrator billing system issues related to on-bill repayment, and specific Department of Public Utilities issues, if any. The Working Group recognizes there are significant Program Administrator issues regarding specific repayment mechanisms, including issues relating to cost recovery and technical implementation. Many of these items are specific to the individual PAs and therefore are not addressed in this report. All parties understand that sundry billing options are a viable option for on-bill repayment (as opposed to totally integrated bills, which might require substantial billing system expenditures). There may be differing repayment solutions for different classes and groups of customers and those solutions may differ as well among the Program Administrators, depending upon their individual circunstances.

2. ANALYSIS OF ISSUES, OPTIONS AND RECOMMENDATIONS BY SEGMENT (MATRICES)[1]

2.1 SUMMARY OF ISSUES

The Working Group quickly found four distinct customer groups with different requirements and needs with respect to OBR. Attached are tables (matrices) summarizing financing and on-bill repayment issues that should be addressed in order to implement one or more effective financing offerings in the energy efficiency programs. The four customer groups are: residential owners, residential renters, small C&I renters, and small C&I owners. For the purposes of the Working Group, however, we created three matrices:

- Residential owner-occupied properties
- Residential rental properties
- Small businesses rented

The Small business owner-occupied category represents a very small percentage of that customer class, and while small c/I owned properties resemble residential owner-occupied properties in some ways, the business characteristics of small C/I customers are a stronger association than the differences between owned and rented properties. Thus three matrices were created by the working group.

Residential owner-occupied properties. Much of the early OBR working group discussion focused on the issues related to residential owner-occupied property, and overall, significant progress was achieved in terms of

[1] The issues and matrices in this report section are derived from EEAC Consultant Draft Based on OBR Working Group Discussions April 29, 2010, and comments provided to DOER by Working Group members.

resolving issues for residential owner-occupied properties. Owned residential real estate financing represents the most straightforward financing segment and formed the basis for other segment proposals.

Small C&I . With respect to small C&I customers, financed through owner obligations, the Working Group built upon the residential owned obligation structure to address business-specific issues and collateral types. Some Program Administrators have been running successful financing programs with thousands of C&I customers for a number of years. These programs have enjoyed very low default rates, very high repayment levels and customer satisfaction and strong associated energy savings. The existing C&I financing mechanisms have also involved substantial customer incentives and bonuses for early repayment. These programs have not, however, generally financed measures that require substantial capital investment on the part of property owners, again leaving the issues around leased and rented property for further resolution.

Residential rental properties. Residential rental properties garnered considerable discussion, but achieved only modest consensus due to the complexity of the problem. The "split incentive", in which tenants pay utility costs but property owners pay the capital costs of energy efficiency improvement and therefore have very little incentive to make investments for which they realize no off-setting energy savings. The Working Group reviewed a meter approach involving landlord obligation, but did not achieve a clear consensus. The matrix included in this report reflects only preliminary discussions and is presented neither as a consensus view nor as an encapsulation of the full Working Group's current thinking. In particular, the Program Administrators' comments on rental repayment approaches are set forth separately in Section 4.

Additionally, the discussions concerning rental properties and renters attempted to grapple with issues of customer income and program level equity. For example, a point was raised that renters comprise 35% of the residential population statewide but even the sparse evidence available indicates that renters are under-served as a percentage of non-low income program participants. The Working Group will continue to assess the particular challenges of the rental community to ensure full access to energy efficiency opportunities. A further set of discussions related to customers whose income is above 60% of statewide median, the maximum level for qualification for low income energy efficiency programs. While the Working Group agreed that the questions of equitably serving renters and equitably serving households whose income is above 60% of median income (there is likely considerable overlap between those two groups) need to be addressed, no solutions were presented within the context of the Working Group's charge to explore and develop on-bill repayment mechanisms. Some Working Group members recommended that households falling above60% of the state median household income[2] should in effect be treated like households below 60% of median and not asked to take on energy efficiency financing debt. Rather, those members suggested that low-income subsidies be extended to customers in the low-mid income range.

Given the concerns about where and how to attach the obligation in residential rented properties, the Working Group was not able to reach a substantial consensus on a residential renter matrix. A preliminary residential rental property proposal is attached in Section 2.4.3, but this should be viewed as a first attempt at solutions in an ongoing discussion.

[2] --The GJC has referred to the group of customers whose household incomes are at 60-120% of the median, but the 60-120% grouping was set indicatively rather than definitively. Further study about this issue is needed in other venues.

2.2 STATUS OF THE ISSUES

The Working Group operated on a consensus basis but strove to avoid a lowest common denominator approach. Where working group members expressed real differences, the Working Group has pointed up those issues and will address them in further work. In commercial and residential properties most of the individual issues are in fact resolved but key issues, such as the structure of the obligation in residential rentals remain unsettled at this moment. On others, we have been able to craft acceptable solutions to parties. Thus for small C/I rented properties, some Working Group members felt it was essential to have customer service termination as an option, primarily to reduce perceived risk in the eyes of any potential lender. Program Administrators believed this requirement could substantially impede the operations of the existing Small C/I lending operations. A resolution was found in which a U.C.C., lien, sometimes known as a "mechanic's lien" could be placed, providing the level of assurance or perhaps more assurance than would be provided by termination.

Note that there is a difference between major issues that remain unresolved, and issues for which there is agreement at a high level but the details still need to be worked out. In the matrices we have labeled these details as "TBD".

Finally, we expect to find that although the Working Group has recognized that a "one size fits all" approach does not work across broad classes of customers--such as renters v. owners and residential v. commercial customers--we also expect to find that in order to maximize the use of outside capital, further distinctions may need to be made among subgroups of customers about questions such as loan terms, repayment schedules, loan requirements by size (loans above a certain size may require enhanced underwriting), and other distinctions that will be discovered and experimented with as we move further into this area and gain experience about what works and what doesn't.

2.3 ISSUES NOT CONSIDERED IN OBR WORKING GROUP DISCUSSIONS

The following issues were not discussed in the OBR working group, at least not significantly in any efforts to develop specific approaches or recommendations to resolve the issues:

- **Source of financing capital and specific nature of financing offers.** – These issues are being addressed in the other "bucket" of financing issues (including attracting and attaining outside capital for financing, cost of such capital, specific design of the finance program, etc.). That "bucket" is being worked on by various parties and a separate progress report will be made to the EEAC. Ultimately, to develop a complete and comprehensive set of financing packages, the OBR issues will be coordinated when addressing financing terms for specific financing offers. Further, specific interest rates offered to customers will be determined by several factors, including the result of future program design decisions setting overall levels of rebates, interest buy-downs and other customer incentives.

- **PA implementation. –** Once the overall OBR mechanism and financing approach is determined, what will PAs need to do in their billing systems to quickly and efficiently implement OBR repayments, or to implement repayment through a separate bill? The requirements may be different depending on whether repayment is strictly On-Bill as opposed to on a separate or "sundry" bill. The PAs have scoped and commented on the common issues herein; understanding the solutions may be PA-specific in some cases.

- **DPU requirements or issues for the DPU to address.** The role of the DPU is yet to be determined. DOER will address the findings of the OBR Working Group to the DPU in an appropriate manner. Additionally, it may be appropriate to incorporate the complementary issue of financing to the DPU simultaneously. Discussions on this topic are ongoing.

2.4.1 RESIDENTIAL OWNER OCCUPIER MATRIX (FROM 4/29/2010 VERSION WITH COMMENTS FROM WORKING MEMBERS)

Note: This version of the matrix is modeled for residential owner-occupied properties. The guiding purposes for this version of the matrix are to deal with the large number of residential customers in owner-occupied properties for which a single model will work, and to make some progress with a new or improved financing offering in the field soon. There are many market segments and variations that need to be addressed. Many of the more complex situations occur in rental properties (see the residential renter matrix), but condominium developments also present challenges, as do buildings with changes of use, changes in residents' income, etc. The goal and proposed approach is to build the OBR model that will work for many customers and to tackle the progressively more difficult questions in parallel processes.

Issue	Current Proposal	Comments
Principle: program financing should not be offered to low-income customers	Protections to ensure that customers eligible for low income programs participate in those programs (in which the programs provide 100% of the funding for measures, as grants) and do not receive loans or offers for loans.	Some discussions involved changing the subsidy threshold to 80% of SMI from 60% currently, but this topic was deemed to be outside the scope of the workgroup's mandate despite its implications for OBR terms and implementation
Repayment obligation: should repayment be tied to the customer or to the meter?	Tied to the customer for residential owner properties. (See rental matrix for rental property.)	Preference among most of WG (including PAs) is to tie the obligation to the owner, with disclosure requiring that obligation be satisfied on sale of property. Tie to owner simplifies issues in many respects
Termination for non-payment	No termination for nonpayment of EE loan	WG reviewed and considered consumer protections and current statutes on energy services, and recommends no termination for nonpayment of EE loans.

Issue	Current Proposal	Comments
Allocation of partial payments	Allocation of partial payments in similar manner as in Terms and Conditions for Distribution Service (TCDS), with loan charges treated as part of energy service charges, and secondary to the generation and distribution service charges.	Allocation of partial payments in similar manner as in Terms and Conditions for Distribution Service (TCDS). Partial payments would be applied first to any outstanding balances for energy, generation and/or distribution services. Where applicable, equipment rental or customer service charges will also be paid down prior to the energy efficiency loan.
Requirement of positive cash flow	Objective (aspirational) of positive cash flow. Savings to customers are not guaranteed, therefore clear disclosure and information is crucial.	WG discussed additional consideration for low/moderate income customers, with goal to increase access to EE funds for customers at 60-120% median income. Potential for EE loan to add financial burdens to this community. Also need to address customer eligibility, objective of positive cash flow, and loan term in relation to financial risks for specific financing offers.
Savings guarantee	No	Do not guarantee savings, but provide best estimates on savings, and clear disclosure. Also provide education to customers on optimal practices and monitoring results.
Remedy if estimated savings do not materialize	This is an efficiency program issue, not financing/OBR issue per se. Determined by underlying EE program; respond to concerns and resolve with customers who aren't satisfied.	If savings do not materialize because program is not designed or implemented properly, improve QA/QC.

Issue	Current Proposal	Comments
Nature of payment: fixed or floats with savings?	Fixed over the term of the loan	Prepayment allowed without penalty.
Eligible measures	Eligible measures TBD with an emphasis on non-portable measures.	Eligible measures should be cost effective approved measures and non-portable. List TBD
Customer eligibility	TBD	
Customer class	Residential	NOT for customers eligible for the low-income program (see above)
Owners vs. renters	Both eligible, but different offerings (see other matrix on issues in rental property)	Continue work on issues for renters in parallel.
Credit checks	No individual credit checks, with possibility of using utility repayment history as qualifier. FICO scores may be collected for data analysis purposes with appropriate disclosure and permissions but will not be used in underwriting decisions.	Emphasize/support pooled lending and pooled (diversified) risk. PAs continue to investigate legal issues from being party to a financial transaction and providing utility bill history as an underwriting criterion. Income verification may be required to protect <60% median income customers.
Customer bill payment history	Eligibility limited to customers that have been current on their electric bill for at least 12 (potentially as many as 24) consecutive months	12 months vs. 24 months, and for which customer segments. Unregulated fuel customers would rely on electricity bill history. Regulated fuel customers may be evaluated on one or both utility bills[3].

[3] Further research/review should be conducted concerning potential issues of a PA program relying on billing history for another fuel (*e.g.*, gas PA relying on electric billing history)

Issue	Current Proposal	Comments
Maximum loan amount	TBD for specific financing offer	Consider investment needed to achieve deeper savings. Could be minimum loan amounts per servicing issues and transaction costs.
Maximum term	TBD for specific financing offer	Measure life and lender terms will affect this. Terms as long as 10 years or more needed for some projects. Consider measure lives as one driver to extent possible.
Source of capital	Outside capital, separate from PA and program funds; excludes capital raised by PAs for other types of financing programs	Loan principal shall not include program monies from EE funds or PA shareholder funds. PAs are not the source of capital but portal to the customers and the primary collection path for repayment of loans.
Cost of capital	Being addressed related to source of capital, above (seeking lower cost capital)	
Disclosure requirement	Full and fair disclosure regarding measures, costs, savings, loan costs, cash flow, defaults, remedies, and use of payment history. Use plain language explanations (will need disclosures in multiple languages).	Disclosure must be: - complete and fair - clear and understandable (plain language) - concise so that someone will read it

Issue	Current Proposal	Comments
Customer interest rate	Unknown at this time. The objective is to offer attractive rates determined by market conditions and applied interest rate subsidy, if applicable.	Concern regarding 60-120% median income customer's ability to access financing and repay without hardship. Tiered interest rates based on income levels are problematic due to additional program complexity, investor concerns over credit quality and the need for greater income verification capabilities.
Collection procedures and protections	Collections subject to standard utility servicing efforts for non-serious delinquencies (anticipated to be 30-60 days). Loans delinquent > preset servicing term would be handed over to a special servicing entity to collections (similar to current utility practice of turning unpaid debts to special servicers for collection. Default and charge-off at 120 days (TBD). Future detailed terms and conditions to be developed.	Standard utility/PA collection procedures[4]. Uncollectibles at some point TBD would be turned over to a service agency. Funds collected from service agency will be used to reimburse injured party or loan loss reserve fund. The financial agreements will specify the duties and limitations for all loans servicing not directly involving the PAs. PAs request that cost recovery for related costs should be addressed and permitted.

[4] Further work on the details of collection procedures needs to be undertaken, including the treatment of customers installing electric and gas measures, as well as the role/selection of service agency.

Issue	Current Proposal	Comments
Who is at risk for defaults	Loan loss reserve or investors at risk for defaults.	Expectation of low default rates based on existing HEAT Loan defaults (< 1%). Funding for a loan loss reserve could come from federal sources, foundations, EE program funds (similar to how the EE program funds[5] pay for any defaults in the small business financing program currently) or other sources.
QC on measures / installations	QC on measures/installations (see above)	
Applicability of banking and consumer protection laws	OBR and financing program will be subject to compliance with all laws and regulations including banking/lending statutes.	Need to acquire better understanding of the requirements and the applicability of such laws to PAs as portal vs. provider of financing. The particular issues will become clearer as specific financing offerings are developed.

[5] Question remains if program funds meet GCA requirements for cost effectiveness.

2.4.2 SMALL C/I MATRIX (FROM 4/29/2010 VERSION WITH COMMENTS FROM WORKING MEMBERS)

On Bill Repayment of commercial energy efficiency loans is already offered through select utilities in Massachusetts. Current programs are financed with utility capital and ratepayer-backed recovery. Broadening the program to longer term loans and changing the expected capital source to the public markets has some implications for the delivery and structure of C&I OBR, but much of the program reflects existing best practices in business lending with OBR.

Issue	Current Proposal	Comments
Repayment obligation: should repayment be tied to the customer or to the meter?	Tied to the customer (owner or tenant).	Preference would be to tie the obligation to customer (owner or tenant) with disclosure requirement that obligation must be satisfied on sale of property or change of tenant. Tie to owner simplifies issues in most respects

Issue	Current Proposal	Comments
Termination for non-payment	UNDECIDED: Need to reduce risk of default through appropriate incentive structure.	**TERMINATION:** Termination (or at least the threat of shutoff) is important to the program to lower expected defaults and funding costs. Absent adequate incentives to encourage repayment capital providers will require significantly higher interest from the program with implications for EERF funds and/or adoption. Lack of termination also limits program negotiating position with capital providers and makes program more reliant on other measures such as property or fixture liens which may be more exclusionary and potentially more costly to maintain. **NON-TERMINATION:** The PAs' view is that the potential benefits of the termination option are outweighed by the potential detriments. The primary detriments are: 1) increased risks to participants relating to EE programs which could create a barrier to participation; 2) potential backlash and negative perceptions regarding EE efforts for disruptive service terminations that could force a business to shut; 3) job loss and economic harm to local communities associated with termination; and 4) potential expenses involved in terminating service where customer contests the action. The PAs operating small business financing efforts have experienced low default rates (1%-3% range is typical) to date and do not see need for termination threat, especially if other tools, *e.g*., loan loss reserves or back up programs, are implemented.

Issue	Current Proposal	Comments
Allocation of partial payments	Allocation of partial payments in similar manner as in Terms and Conditions for Distribution Service (TCDS).	Allocation of partial payments in similar manner as in Terms and Conditions for Distribution Service (TCDS). Partial payments would be applied first to any outstanding balances for energy, generation and/or distribution services. Where applicable, DPU approved tariffs on equipment rental or customer service charges will also be paid down prior to the energy efficiency loan.
Requirement of positive cash flow	Aspire to achieve positive cash flow for shorter payback measures. No limits on longer measures.	Positive cash flow not required as some measures have a significant payback period.
Savings guarantee	No	Do not guarantee savings, but provide best estimates on savings. Also provide education to customers on optimal practices and monitoring results.
Remedy if estimated savings do not materialize	Determined by underlying EE program; respond to and resolve with customers who aren't satisfied	If savings do not materialize because program is not designed or implemented properly, improve QA/QC.
Nature of payment: fixed or floats with savings?	Fixed over the term of the loan, but allowing for pre payment without penalty	Fixed over the term of the loan
Eligible measures	Eligible measures (regardless of fuel) TBD with an emphasis on non-portable measures.	Many programs specify only non-portable measures can qualify for financing limiting addressable opportunity, especially in leased space. Program desire to assist in deeper savings projects where some portion of measures may be considered portable. Details TBD
Customer eligibility	TBD	

Issue	Current Proposal	Comments
Customer class	Small commercial as defined by the program eligibility requirements and further defined by loan maximum	
Owners vs. renters	Both eligible.	Work to date focused more on issues in owner property. Renters currently participate in the small business program.
Credit checks	No individual credit checks for loans up to residential loan maximum (use utility bill history as per residential owner model) For loans greater than residential maximum (amount TBD), business or investment property level due diligence	Emphasize/support pooled lending and pooled (diversified) risk. PA's continue to investigate legal issues from being party to a financial transaction.
Customer bill payment history	Customer bill payment used for smaller loan amounts (up to residential maximum) with 12/24 month repayment history.	TBD. Eligibility limited to customers that have been current on their electric and/or Gas bill if applicable for at least 12 [24?] consecutive months. For larger loan balances, tenant / owner must meet traditional underwriting standards to be performed by financing entity (exact terms TBD)
Maximum loan amount	TBD	Consider investment needed to achieve deeper savings. Could be minimums per servicing issues and transaction costs.
Maximum term	TBD	Measure life and lender terms will affect this. Terms as long as 10 years or more needed for some projects. Term not to exceed existing lease, if applicable

Issue	Current Proposal	Comments
Source of capital	Outside capital sourced from market sources (similar to residential model).	Ultimately, preference not to use program monies from EE funds. Some PAs are currently using EE program funds as capital, and other PAs are using or proposing to use company funds (as a substitute for program funds or as a transition to other capital). PAs are not expected to be the source of capital but portal to the customers and the primary collection path for repayment of loans.
Cost of capital	Being addressed (See Source of capital, above)	Cost of capital will be determined by market forces, and program elements among other factors.
Disclosure requirement	Full and fair disclosure Full disclosure regarding measures, costs, savings, loan costs, cash flow, defaults, remedies, and use of payment history.	Disclosure must be complete and fair.
Customer interest rate	Unknown at this time.	TBD

Issue	Current Proposal	Comments
Collection procedures and protections	Standard utility procedures and protections. DPU would need to address any changes to utility collection procedures.	Standard utility/PA collection procedures. Uncollectibles at some point TBD would be turned over to a service agency. Funds collected from service agency will be used to reimburse injured party or loan loss reserve fund. The financial agreements will specify the duties and limitations for all loans servicing not directly involving the PAs. PAs request that cost recovery for related costs should be addressed and permitted.
Who is at risk for defaults	Capital provider or loan loss reserve at risk for defaults. Structure of credit enhancement (loan loss reserve fund) and financing initiative TBD	Expectation of low default rates based on existing small business program proxies (< 2%). Funding for a loan loss reserve could come from federal sources, foundations, EE program funds (similar to how the EE program funds[6] pay for any defaults in the small business financing program currently) or other sources.
QC on measures / installations	QC on measures / installations	
Applicability of banking and consumer protection laws	OBR and financing program will be subject to compliance with all laws and regulations including banking/lending statutes.	Need to get better understanding of the requirements and the applicability to PAs as portal vs. provider of financing.

[6] Question remains if program funds meet GCA requirements for cost effectiveness.

2.4.3. RESIDENTIAL RENTAL MATRIX (FROM 4/29/2010 VERSION WITH COMMENTS FROM WORKING MEMBERS)

Summary:

The workgroup has made progress in addressing the rental community, but significant issues remain unresolved despite the group's best efforts. Competing interests between tenant protections, low-mid income advocacy, financial community requirements and PA concerns, have made it difficult to find a collectively acceptable approach. Further discussions are required in this area, including some that go beyond the scope of the work group's activities (including addressing the potential for additional subsidies for rental and 60-120% income communities and PA concerns over implementation cost/complexity). Despite a lack of consensus on key issues, the workgroup's conversations have coalesced around a meter based obligation structure with certain elements widely supported.

Matrix Overview:

The On Bill Repayment workgroup has been working to improve the equitable distribution of System Benefit Charges to the rental community through the potential use of meter based repayment obligations. Two significant issues (among many) have been identified as major barriers to rental adoption of energy efficiency measures. The two issues are the split equity problems between tenant (receive energy savings) and landlords (pay higher costs for efficiency) and the economic disincentive to adopt energy efficiency measures. Both issues are structural problems that are unlikely to be solved by market forces in the foreseeable future and require a new approach to drive energy efficiency adoption.

As many council members are aware, the rental community is currently paying into System Benefit Charge (SBC) pools, but anecdotally[7] receiving very little of the benefits (rebates, interest rate buy-down or other subsidies applied toward energy efficiency improvement). Among the most significant barriers to energy efficiency (EE) adoption in the rental market are the split incentives problem between landlord (LL) and tenants and an economic disincentive to adopt EE measures. On Bill Repayment (OBR) provides one of the leading potential solutions for solving the split incentive issue through meter-based obligations that would split the savings and cost of improvements equitably between landlords and tenants.

For purposes of this report, \the group has focused on meter-based obligation structures because they tied the cost of financing improvements to the energy user substantially bridging the split equity problem. Meter obligations also had the added benefit of ensuring

[7] PAs are reviewing programs to determine use of SBCs among renters.

that the proper incentives remain in place to facilitate appropriate participant behavior. In order to appropriately balance the cost to the landlord (construction/remodel expenses) from adopting energy efficiency with the benefit expected to accrue to the tenant (energy bill savings), we have posited that a portion of the financing cost of improvements be allocated to the tenant (not to exceed expected savings) through a meter obligation. The landlord would be required to pay-in an upfront amount (which itself could be financed separately) equal to the amount needed to reduce the expected finance costs to some percentage below expected savings. All work would be based on voluntary agreement from both landlord and tenant subject to pre-agreed upon terms[8].

Although the Working Group has provisionally included a matrix reflecting this meter-based model, it should be emphasized that the members have not reached consensus on this model. While the matrix captures the thread of some discussions, it does not represent the view of the Working Group as a whole, and further discussions and analysis will be required before a consensus model can be established. In particular, the Program Administrators have not endorsed the model set forth in the matrix and have instead advanced their comments separately. These comments are preliminary, and the Program Administrators anticipate that significant further discussion (including discussions with representatives of the landlord and rental communities) and analysis will be required to develop a viable, mutually agreement repayment model for the rental sector.

Issue:	Proposed:	Comments:
Repayment obligation:	METER with Landlord (LL) guaranty	LL is required to guaranty as the primary recipient of benefit (new EE improvements to property). Tenant shares benefit through Meter based finance charges.
Allocation of partial payments:	EXISTING -	Allocation of partial payments in similar manner as in Terms and Conditions for Distribution Service (TCDS). Partial payments would be applied first to any outstanding balances for energy, generation and/or distribution services. Where

[8] See Appendix –Rental Agreement

Issue:	Proposed:	Comments:
		applicable, DPU approved tariffs on equipment rental or customer service charges will also be paid down prior to the energy efficiency loan.
Termination for non-payment, Eviction:	NONE – Landlord/tenant agreement would include eviction capability failure to pay rent. (Finance payments are deemed a rent surrogate just as a "green lease" that included higher rents for energy efficiency improvements would be and therefore non-payment could lead to eviction under this model)	No Termination for non-payment. Non-payment could, under certain circumstances, precipitate eviction due to failure to pay rental surrogate. This model raises the risk of eviction under certain circumstances. Clear protections needed.
Requirement of positive cash flow	Aspirational using best estimate. Extending loan duration or requiring LL to put down part of capital cost to lower tenant payments (see financial model for details). Landlord and Tenant must both approve measures to protect both parties.	The sum of landlord contribution and utility rebate should, using best estimates, result in positive cash flow for tenant. This is critical for tenants with income below 120% SMI. We need to determine whether that down payment is feasible for/attractive to landlords.
Savings guarantee	No, (see also "Nature of Charge" below)	
Remedy if savings do not materialize	Contractual agreement between LL and Tenant spells out both parties' legal obligations as well as future assumptions which are limited to best efforts and best analysis.	Ideally, there would be tenant recourse or a mechanism for adjusting the 'split' in cases where the retrofit does not turn out to be cash flow

Issue:	Proposed:	Comments:
	Tenant can move at lease expiry or break lease subject to existing terms.	positive. Tenants also need recourse if landlords violate the terms of the "green lease". More research needed on "green lease" models.
Nature of charge:	Financing charges are fixed for life of obligation. Energy costs/use will vary with weather/temperature, actual efficiency gains, and tenant behavior among other factors. This has to be made very clear to both the EEAC and landlord/tenant	
Eligible measures	Cost effective EE improvements as determined by DOER	These items should not be portable
Customer eligibility	Eligibility is determined by LL credit quality. Underwriting will follow traditional underwriting measures of an investment property and will not be based on tenant credit. (The LL has every incentive to screen the credit quality of tenants and due to guaranty will have further incentive to do so under OBR)	
Customer class	RESIDENTIAL RENTAL ONLY	
Owners vs. renters	RENTAL	
Credit checks	YES, related to LL and investment property	

Issue:	Proposed:	Comments:
Customer bill payment history	No, responsibility of the Landlord to ascertain credit quality of tenants.	Landlord should not be authorized to carry out additional tenant credit checks. Landlords have opportunity to check tenant credit at time of initial lease.
Maximum loan amount	TBD // limits per unit and property maximum	
Maximum term	TBD – Has implications for tenant cash flow and LL required upfront capital. Traditionally limited to expected measure life.	Maximum term to be determined by negotiations with capital provider
Source of capital	Outside capital sourced from market sources (similar to residential model).	Ultimately, preference not to use program monies from EE funds. PAs are not expected to be the source of capital but portal to the customers and the primary collection path for repayment of loans.
Disclosure requirement	YES, Landlord and Tenant must both have disclosed and agreed to: A best estimate of expected savings and financing charges Capital commitments (Landlord) and agreement to repay (Tenant) Authorization to allow detailed credit check (Landlord) Alteration of terms for eviction to include EE finance payment (Tenant) Landlord agreement to guaranty	Agreement to treat finance payments as rent proxy creates possibility of increased eviction risk that may be unacceptable. Need to establish leases i.e. "Green Lease" that would state responsibilities of landlords and tenants and offer suitable protections to ensure rents are not inappropriately increased or tenants inappropriately evicted for non-payment.

Issue:	Proposed:	Comments:
	EE finance payment backed by potential lien on investment property	
Interest rate	TBD	Subject to market conditions and subsidy $'s
Collection procedures/protections	Tenants will be responsible for contractually agreed upon finance charges. Terms related to failure to pay obligation will be spelled out in rental agreement and are expected to be similar to partial payment of rent. If normal collection measures (set forth in program Terms & Conditions - T&C) do not remedy loan, loan balance is turned over to special servicer that will contact the LL and seek remediation. Should contact the tenant if he/she is still living there. LL should be contacted after the servicer determines there is no recourse with the tenant. Remedy of the loan by the servicer (including LL payments, tenant remedy, etc.) will result in the METER based obligation being returned to the utility OBR program. Failure to remedy will result in default and associated collection measures.	
Who is at risk in case of Default	Investors / Loan Loss Reserve Fund (if applicable).	
Relationship to low income program	Low income LL/Tenant may choose to enter into these agreements subject to meeting	<60% qualifies for WAP and subsidized improvements. Low

Issue:	Proposed:	Comments:
	above criterion	income tenants may choose to enter into an established METER lease agreement, but new obligations will not be written to tenants <60% median income. In mixed buildings, where some tenants qualify for LEAN but not a majority, program needs to closely coordinate with LEAN, operationally, financially and otherwise.
QC on measures / installations	EXISTING measures are deemed adequate to monitor and verify installation.	Question – higher efficiency systems (boiler, solar hot water, etc.) may require regular maintenance to achieve projected efficiency. Can this be worked into agreements as the LL and Tenant have different incentives with respect to efficiency targeted maintenance?
Applicability of banking laws	OBR and Financing program will be subject to compliance with all laws and regulations including banking/lending statutes.	

3. ISSUES NOT ADDRESSED BY THE WORKING GROUP REPORT

As noted in earlier sections of this report, some issues raised by members of the Working Group were either peripheral to the group's charge to explore and recommend principles and mechanisms for on-bill repayment of outside financial capital resources that will be incorporated into the Program Administrator Energy Efficiency Investment Plans for the years 2011-2012 and beyond. These issues include:

- Status of customers whose income is above 60% of the statewide median income up to some higher level (initially posed as 60-120% of median);
- Service to residential renters compared to owners in the residential energy efficiency programs, characterized as "Mass Save" and including primarily the electric and gas [9] .
- The "Pay and Save" pilot program mandated under the Green Communities Act. The pilot was in progress during the course of the Working Group's discussions. An evaluative report was issued and made available for comment after the this round of Working Group meetings leading to this report was completed.

3.1 CUSTOMERS ABOVE 60% OF STATEWIDE MEDIANINCOME

Members of the Working Group, particularly those representing the Green Justice Coalition (GJC), advanced the position that residential customers whose income ranges above the 60% of state median income should be viewed as in the equivalent situation with respect to being asked to pay the customer share of energy efficiency measures, which is currently set at 25% of total measure costs. This position posed several difficulties for the Working Group's fulfillment of its charge.

First, the question of customer share of efficiency program costs was not in the Working Group's charge. The question is a policy question that had not been previously addressed by the EEAC or the DPU. The EEAC has recently formed an Equity Committee, which is presumably the venue for raising the issue in the Council. Further, since the DPU is the regulatory arbiter of determinations about the income eligibility boundaries of low income

[9] For the 2010-2012 period, Program Administrators have designed statewide multifamily energy efficiency programs that will serve buildings of more than four dwelling units. Additionally, the Low Income programs are offering a parallel multifamily program built upon the traditional Low Programs offered.

programs, additional work would have to be done to engage that body and develop a final determination.

Second, while the Working Group members acknowledged that the burden of energy costs certainly impacts customers whose income is above 60% of median, there was no agreement in the group about where to set the upper end of income with respect to thinking about different policies on customer contribution. It was noted that the federal Department of Housing and Urban Development (HUD) sets 80% of median as the upper range of low income for the purposes of determing eligibility for federal housing assistance. That's one marker but the Working Group did not have the time or resources to consider other possible markers, higher or lower than 120% of median income, that could be considered as an upper boundary. There was agreement that more work is needed to understand the issue and make recommendations. The general consensus was that this income –related question is certainly valid but this Working Group was not the most appropriate place to consider it.

3.2 SERVICE TO RENTERS

In a discussion somewhat similar to the question of income-related decisions, some members of the Working Group proposed intensive efforts to increase the percentage of residential program participants who are renters. Data in this area are scarce because PA's have not been required previously to report on the numbers or percentages of renters served under the PA's electric RCS program or the gas weatherization program, popularly known as Mass Save. The RCS legislation specifically is targeted to 1-4 family buildings, and as acknowledged elsewhere, until this year, there was no statewide multifamily program targeted to that residential sub-sector (we note that Low Income programs have done work in various types of multifamily low income housing over the years and are also launching a new multifamily effort in 2010). GJC presented census statistics indicating that statewide, 35% of dwelling units are occupied by renters, but fully developed PA or other data on what percentage of renters have been served are spotty at best, and need further work.

This is again an issue that while central to the question of equitable service among residential customers, is somewhat secondary to the question of how to finance and repay obligations in the OBR context. The Working Group had a number of detailed discussions involving members who have had many years' experience of working with renters and landlords and did not come to any clear consensus beyond the recognition that there are complex, legal, financial and regulatory issues, that property owners and managers are diverse in their composition e.g. owner-occupiers landlords at one end, corporate property managers at another and numberous variations in between. Further property owner perceptions of their own interests and the value of energy efficiency for them varies greatly. Most tenants pay their own utility costs, while the costs of capital improvement are borne by owners – with this common situation there is a widely recognized split incentive that works against finding an equitable balance of costs and benefits in rental housing, short of

regulatory or legislative solutions that would mandate certain efficiency practices. Such game changing initiatives are not currently on any legislative or regulatory agendas.

The Working Group member consensus is that the issue of equitable service to renters is important but the equity issue itself is not in the scope of the OBR Working Group and beyond a recommendation that further work concerning renters is needed, the Working Group has not gone beyond the development of what is admittedly an early step in the residential renter matrix.

3.3 PAY AND SAVE PILOT AND REPORT

While the OBR Working Group discussions were in progress, the DPU, in accordance with a mandate in the Green Communities Act (Chapter 169 of the Acts of 2008), ordered electric and gas utilities to conduct a financing pilot known as Pay and Save in each of their territories. As stated in the GCA, the pilot was limited to a maximum financed amount of $500 in residences and $1,000 for Small C/I participants. These amounts are considerably less than the financed investments contemplated in the drive to achieve deeper and broader savings under the GCA mandate to acquire all cost-effective energy efficiency. Indeed the existing Small C/I financing option offered by National Grid and others significantly exceeds the C/I limitation, with some thousands of customers participating in financing over the past several years.

At the conclusion of time- and finance-limited Pay and Save pilot programs, an evaluation for all the pilot programs was conducted by Black and Veatch. This evaluation will be posted on the EEAC website. The evaluation included a survey of participants and non-participants in the pilot. The evaluators concluded there was a high percentage of free ridership with respect to financing, that participation was limited and that many customers felt the financing option was more trouble than it was worth. The survey found some conflicting responses, including responses to questions with respect to whether increased financing would be attractive. The evaluation concluded that there was little interest in financing, a conclusion, which some parties, including DOER believed was not warranted by the limited nature of the pilot.

Despite the limited nature of the pilot there may be some lessons learned with respect to how customers view financing opportunities from their respective vantage points. To be successful, any financing/OBR repayment mechanisms must be perceived by customers as providing good value and being customer-friendly. Therefore there may be value in further exploration of what was observed in the pilot.

4. COMMENTS ON RENTAL UNITS AND OTHER ISSUES:

This section primarily presents comments made by Program Administrators but it also includes issues raised by other stakeholders in the course of the OBR discussions over several months and many meetings.

GENERAL COMMENT: The Program Administrators present these comments as a preliminary working proposal for a residential renter section. The PAs regard these comments as a straw/position paper intended to reflect the PAs' overarching concerns with the approach outlined in the rental matrix and as a means to focus discussion. The Program Administrators stress that the following section requires additional analysis, discussion, and vetting, and does **not** represent a consensus position.

Renters

- Overall, the PAs stress that the proposed rental option does not provide benefits over the owner option, but can create an unnecessarily complicated system that would insert the PAs into the relationship between landlords and tenants. The Program Administrators point out that the core beneficiary is the landlord by actually financing the difference between the total cost less the rebates, tax benefits and capital improvements to the property. The tenant benefits primarily by a reduction in energy bills, thereby potentially reducing the cost of rent or the utility bill.

- Instead of the approach outlined in the rental matrix, the Program Administrators propose developing a loan program for landlords (based on the owner-obligation scenario). Should the landlord wish to shift a portion of the cost to the tenant, that may be accomplished through a higher rent. This general approach would avoid complex billing, transaction-tracking and legal issues. For example, given that the state sanitary code requires landlords to provide the means for heat and hot water, making tenants responsible to pay (even if in a loan) for new heating/DHW systems may violate the state sanitary code. Furthermore, the PAs believe that the potential evictions associated with energy efficiency programs could be problematic and create unwanted "backlash" against the programs.

4.1 AT-RISK GROUPS

Several workgroup members have expressed concern over the implications of placing additional financial burdens on at-risk groups (<60% median income and 60-120% median

income). Although the model suggests setting financing costs at a safe margin[10] below expected savings, there was concern that this group could be vulnerable to volatile income streams and more exposed to eviction, etc. as a result of the additional fixed payment obligations. Several suggestions / issues are listed below. These comments do not reflect the consensus of the OBR Working Group (and some of the suggestions/issues are outside the scope of the OBR Working Group's efforts), but are presented to set forth suggestions/issues raised by some of the non-PA participants:

- Low income programs must be even better coordinated than before, as we increase outreach to low-to-moderate income communities and start to reach neighborhoods and multi-unit buildings that may be occupied by a range of household incomes, some below 60% of median income, some in the 60-120% median income range, and some above that.

- We need to be cautious about offering financing to households in the 60% to ~ 120% SMI range, as additional debt may adversely affect their financial security. There is still the issue of how to identify these customers and whether or not the utilities should be responsible for attempting to ID these customers and steer them to the appropriate EE programs.

- For households in the 60~120% range, the group discussed offering higher levels of rebates and incentives than for households above the 120% range[11].

- Outreach and marketing (such as community mobilization initiatives) to be specifically tailored towards these particular sectors, including landlords.

- In addition to getting to consensus on the renter matrix, several other steps must also be taken in order to ensure adequate participation and access to these programs by renters and 60-120% homeowners: thought this piece concerned renters, not owners.

- Restructure utility rebates/incentives and marketing/outreach.

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[10] The margin being the difference between finance payments and expected savings of which the target margin was never finalized although 10% and 15% were numbers used in discussions.

[11] Questions arose as to the appropriate level of increased incentives. The PAs believe this implies a tiered rebate/incentive system and further program segmentation. Further segmentation would need to be reviewed by the EEAC and DPU. [PA NOTE:Further program segmentation would require large administrative undertaking and collection of income data. Such a separate effort for this specified income sector is not mandated under the GCA (as opposed to Low Income programs, which are). This issue merits discussion but would be a change to existing DPU-approved plans. EMV work with allow some market research but with limits. and the research might not address overall program design.

- Program budgets should be allocated specific to renters and 60-120% homeowners. Programs should be designed specifically to the needs of these sectors. A market research consultant should be hired by the PAs to address both of these populations.

APPENDIX A -CASH FLOW MODEL OF COSTS, SAVINGS AND FINANCE

SOURCE: DOER [12]

Appendix- Financial Demonstration Model:

RENTAL BOILER & HOT WATER EXAMPLE

Assumptions:			Notes
N Gas Utility (yearly)	$	1,650	based on 1100 Therms @ $1.50 per Therm // Average for MA is 1,070 Therms or $1,650
% HVAC & Hot Water		95%	(May include some cooking, drying, fireplace, etc.)
Targeted Energy bef. Imp.	$	1,568	Amount targeted for upgrade and efficiency gains
Old Boiler Efficiency		65%	(Average of Natural Gas Fired Boiler pre 1975)
New Boiler Efficiency		90%	(Actual not AFUE - Targeted Boiler / Hot Water Efficiency)
Boiler Replacement Cost	$	10,000	(Estimate for equivalent boiler, hot water and install)
Utility Rebates	$	-	Rebate applied to interest rate buy down (See K19)
Fed Tax Credits	$	-	Assumes home owner qualifies for immediate tax credit
Net	$	10,000	

Energy Cost Inflation		3%		
				Dep/yr
Down		50.0%	$ 5,000	$ 364
Principle	$	5,000		

	Subsidized	Market
Interest Rate	0.0%	6.5%
Duration	144	months
Duration	12	years

Consumer Payment:

	Yearly	Monthly
Payment	$ 417	$ 35
Savings	$ 435	$ 36
Net	$ 19	$ 2
Savings Ratio		105%

PV of Subsidy	$	1,534
Discount Rate		6.5%

Energy Use

	Before	After	
Therms	1,100	810	
Cost	$ 1.50	$ 1.50	
Efficiency	65%	90%	
Heating Equiv.	679	679	
Cost	$ 1,650	$ 1,215	$ 435

Current boiler & hot water subsidy is $1,600 for >95%

[12] The data in this model was compiled by the DOER and has not been reviewed or verified by the Program Administrators.

ATTACHMENT B

NATIONAL GRID – GOVERNMENT GRANT FUNDING LIST

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov									
#	**Closing Date**	**Title**	**Agency**	**Funding Number**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
Energy-Related Grants Currently Open									
G-1	08/01/2010	Program Year 2010 Weatherization Formula Grants	National Energy Technology Laboratory	DE-FOA-0000216	Only available for States and Federally Recognized Native American Tribal Governments	08-01-10 due date may impact our ability to support Commonwealth's effort, if any.			
G-2	08/31/2010	State Energy Program (SEP) PY 2010 Formula Award Funding Opportunity Announcement	National Energy Technology Laboratory	DE-FOA-0000308	Only available for States	56 Awards (25M total program funding) **Has Mass Applied or is Considering proposing? Offer to assist Commonwealth?**			
Environment-Related Grants Currently Open									
G-3	09/02/2010	"MARKET-BASED APPROACHES TO REDUCING GREENHOUSE GAS EMISSIONS THROUGH ENERGY EFFICIENCY IN HOMES AND BUILDINGS"	Environmental Protection Agency	EPA-OAR-CPPD-10-11	State governments County governments City or township governments Public and State controlled institutions of higher education Native American tribal governments (Federally recognized) Private institutions of higher education	**Multiple awards;** 10 grants ranging in value from $60,000 - $180,000, and up to 4 large cooperative agreements ranging in value from $300,000 - $1,200,000 from this announcement, subject to the availability of funds, quality of evaluated proposals, and other applicable considerations. The total awarded amount is not expected to exceed $5,360,000. Have downloaded full announcement, RFP and EPA Grant Kit **May be an opportunity to support cities & towns**			
Housing-Related Grants Currently Open (http://portal.hud.gov/portal/page/portal/HUD/program_offices/administration/grants/fundsavail)									
G-4	02/16/2011	Assisted Housing Stability and Energy and Green Retrofit	Department of Housing and Urban Development	HUD-RA-01	Owners of properties receiving project-based assistance pursuant to section 202 of the Housing Act of 1959 (12 U.S.C. 17012), section 811 of the Cranston- Gonzalez National Affordable Housing Act (42 U.S.C. 8013, or Section 8 of the United States Housing Act of 1937 as amended (42 U.S.C. 1437f).	**No application associated with this announcement. Provides link to HUD portal for full announcements. None are currently open.** **This is what they have funded:** **Promoting Energy Efficiency and Creating Green Jobs** These investments are powerful vehicles for economic recovery because they work quickly, are labor-intensive, create jobs where they are needed most, and lead to lasting neighborhood benefits. Many will also reduce greenhouse gas emissions and save Americans money by retrofitting housing to make it more energy efficient. • **Public Housing Capital Fund**: $4 billion invested in energy efficient modernization and renovation of our nation's critical public housing inventory. • **Native American Housing**			

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov									
#	**Closing Date**	**Title**	**Agency**	**Funding Number**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
						• **Block Grants**: $510 million invested in energy efficient modernization and renovation of housing maintained by Native American housing programs, and the development of sustainable communities. • **Assisted Housing Energy Retrofit**: $250 million invested in energy efficient modernization and renovation of housing of HUD-sponsored housing for low-income, elderly, and disabled persons. • **Lead Hazard Reduction**: $100 million invested in lead based paint hazard reduction and abatement activities.			
Economic Development Administration Grants Currently Open									
G-5	09/30/2010	Economic Development Assistance Programs	Economic Development Administration	EDA06222009EDAP	**Not Applicable**				
"Other Funding" Grants Currently Open									
G-6	07/26/2010	Energy Audits and Renewable Energy Development Assistance Grants	Business and Cooperative Programs	RDCP-10-REAP-AUDITS	Eligible entities include a unit of State, tribal, or local government; institutions of higher education; rural electric cooperatives; or a public power entity. Additional Information on Eligibility: Citizenship - To be eligible, applicants, owned by private persons, must be at least 51 percent owned by persons who are either: 1) citizens of the United States (U.S.),the Republic of Palau, the Federated States of Micronesia, the Republic of the Marshall Islands, or American Samoa; or 2) legally admitted permanent residents residing in the U.S. Capacity to perform - The applicant must have sufficient capacity to perform the activities proposed in the application to ensure success. The Agency will make this assessment based on the information provided in the application. Legal authority and responsibility - Each applicant must have, or obtain, the legal authority necessary to carry out the purpose of the grant.	The energy audits and renewable energy development assistance program is designed to help agricultural producers and rural small businesses reduce energy costs and consumption and help meet the nation's critical energy needs. The 2008 Farm Bill mandates that the recipient of a grant that conducts an energy audit for an agricultural producer or a rural small business require the agricultural producer or rural small business to pay at least 25 percent of the cost of the energy audit, which shall be retained by the eligible entity for the cost of the audit. 30 Awards; $2.4 M Total Program Funding **07-26-10 due date may impact our ability to support any applications**			

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov						
USDA Rural Development Special Initiatives For Community Facilities direct loans, guaranteed loans, and grants, section 343(a)(13) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)) defines "rural" and "rural area" as a "city, town, or unincorporated area that has a population of not more than 50,000 inhabitants."						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
Business and Cooperative Grant Assistance						
G-7	Repowering Assistance Program (Section 9004)	**Not Applicable**				
G-8	Bioenergy Program for Advanced Biofuels Payments to Advanced Biofuel Producers (Section 9005)	**Not Applicable**				
G-9	Rural Business Enterprise Grant (RBEG Program)	Rural public entities (towns, communities, State agencies, and authorities), Indian tribes and rural private non-profit corporations are eligible to apply for funding. At least 51 percent of the outstanding interest in any project must have membership or be owned by U.S. citizens or resident aliens.	The RBEG program provides grants for rural projects that finance and facilitate development of small and emerging rural businesses help fund distance learning networks, and help fund employment related adult education programs. To assist with business development, RBEGs may fund a broad array of activities.			
G-10	Rural Energy for America Program Grants/Energy Audit and Renewable Energy Development Assist (REAP/EA/REDA)Section 9007	Eligible entities include a unit of State, tribal, or local government; institutions of higher education; rural electric cooperatives; or a public power entity. The program is design to assist farmers, ranchers, and rural small businesses.	The REAP/EA/REDA Grant Program will provide grants for energy audits and renewable energy development assistance. **How much are the grants?** The grants are awarded on a competitive basis and can be up $100,000. Recipients of an energy audit are required to pay at least 25% of the cost of the audit. **What types of projects are eligible?** Energy audits and renewable energy development assistance will allow agriculture producers and rural small businesses to become more energy efficient and use renewable technologies. For all projects, the system must be located in a rural area, must be technically feasible, and must be owned by the applicant **How to Apply** To apply for Repowering Assistance Payments please contact your Rural Development State Office. See contact list) Section 9007-FY 2010 Notice of Funds Availability REAP-EA-REDA_5-27-2010 **NEED TO FIND OUT IF $ STILL AVAILABLE**			
G-11	Rural Energy for America Program Grants Renewable Energy Systems/Energy Efficiency Improvement Program (REAP/RES/EEI)Section 9007	The program is designed to assist farmers, ranchers and rural small businesses that are able to demonstrate financial need. All agricultural producers, including farmers and ranchers, who gain 50% or more of their gross income from the agricultural operations are eligible. Small businesses that are located in a rural area can also apply. Rural electric cooperatives may also be eligible to apply.	**Rural Energy For America Program Grants/Renewable Energy Systems/Energy Efficiency Improvement Program (REAP/RES/EEI)** The REAP/RES/EEI Grants Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to purchase and install renewable energy systems and make energy efficiency improvements. **How does the B&I Guaranteed Loan Program compare to the Rural Energy for America Program Guaranteed Loan and Grant?** To assist you in determining which program best fit your needs this comparison chart identifies the programs common and			

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov						
USDA Rural Development Special Initiatives For Community Facilities direct loans, guaranteed loans, and grants, section 343(a)(13) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)) defines "rural" and "rural area" as a "city, town, or unincorporated area that has a population of not more than 50,000 inhabitants."						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
			distinct requirements in an easy to read format **How much are the grants?** The grants are awarded on a competitive basis and can be up to 25% of total eligible project costs. Grants are limited to $500,000 for renewable energy systems and $250,000 for energy efficiency improvements. Grant requests as low as $2,500 for renewable energy systems and $1,500 for energy efficiency improvements will be considered. At least 20% of the grant funds awarded must be for grants of $20,000 or less. **What types of projects are eligible?** Most rural projects that reduce energy use and result in savings for the agricultural producer or small business are eligible as energy efficiency projects. These include projects such as retrofitting lighting or insulation, or purchasing or replacing equipment with more efficiency units. Eligible renewable energy projects include projects that produce energy from wind, solar, biomass, geothermal, hydro power and hydrogen-based sources. The projects can produce any form of energy including, heat, electricity, or fuel. **How to Apply** To apply for funding for the REAP Grant Program please contact your Rural Development State Office. Section 9007 9007-FY 2010 Notice of Solicitation of Applications_4-26-2010 **Energy Coordinators Contacts** **NEED TO FIND OUT IF $ STILL AVAILABLE**			
G-12	Rural Energy For America Program Grants (REAP Feasibility Study Grants)Section 9007	The program is designed to assist farmers, ranchers and rural small businesses. All agricultural producers, including farmers and ranchers, who gain 50% or more of their gross income from the agricultural operations are eligible. Small businesses that are located in a rural area also apply. Rural electric cooperatives may also be eligible to apply.	**SECTION 9007** **Rural Energy For America Program Grants** **(REAP Feasibility Study Grants)** The REAP/Feasibility Grant Program provides grants for energy audits and renewable energy development assistance. It also provides funds to agricultural producers and rural small businesses to conduct feasibility study for a renewable energy system. **How much are the grants?** The grants are awarded on a competitive basis and can be up to 25% of total eligible project costs. Grants are limited to			

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov						
USDA Rural Development Special Initiatives For Community Facilities direct loans, guaranteed loans, and grants, section 343(a)(13) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)) defines "rural" and "rural area" as a "city, town, or unincorporated area that has a population of not more than 50,000 inhabitants."						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
			\$50,000 for renewable energy feasibility studies. **What types of projects are eligible?** Eligible feasibility studies for renewable energy systems include projects that will produce energy from wind, solar, biomass, geothermal, hydro power and hydrogen-based sources. The energy to be produced includes, heat, electricity, or fuel. For all projects, the system must be located in a rural area, must be technically feasible, and must be owned by the applicant. **How to Apply** To apply for funding for the REAP Grant Program please contact your Rural Development State Office. **Energy Coordinators Contacts** **NEED TO FIND OUT IF \$ STILL AVAILABLE**			
G-13	Rural Economic Development Loan And Grant (REDLG)	To receive funding under the REDLG program (which will be forwarded to selected eligible projects) an entity must: • Have borrowed and repaid or pre-paid an insured, direct, or guaranteed loan received under the Rural Electrification Act or, • Be a not-for profit utility that is eligible to receive assistance from the Rural Development Electric or Telecommunication Program • Be a current Rural Development Electric or Telecommunication Programs Borrower	**RURAL ECONOMIC DEVELOPMENT LOAN AND GRANT (REDLG)** The REDLG program provides funding to rural projects through local utility organizations. **Under the REDLoan program, USDA provides zero interest loans to local utilities which they, in turn, pass through to local businesses (ultimate recipients) for projects that will create and retain employment in rural areas.** The ultimate recipients repay the lending utility directly. The utility is responsible for repayment to the Agency. Under the REDGrant program, USDA provides grant funds to local utility organizations which use the funding to establish revolving loan funds. Loans are made from the revolving loan fund to projects that will create or retain rural jobs. When the revolving loan fund is terminated, the grant is repaid to the Agency. **What types of projects are eligible?** REDLG grantees and borrowers pass the funding on to eligible projects. Examples of eligible projects include: • Capitalization of revolving loan funds • Technical assistance in conjunction with projects funded under a zero interest REDLoan • Business Incubators • Community Development Assistance to non-profits and public bodies (particularly job creation or enhancement) • Facilities and equipment for education and training for rural residents to facilitate economic development • Facilities and equipment for medical care to rural residents • Telecommunications/computer networks for distance learning or long distance medical care **How to Apply**			

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov						
USDA Rural Development Special Initiatives For Community Facilities direct loans, guaranteed loans, and grants, section 343(a)(13) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)) defines "rural" and "rural area" as a "city, town, or unincorporated area that has a population of not more than 50,000 inhabitants."						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
			To apply for funding for the REDLG program, please contact your Rural Development State Office. **Availability of Funds** During FY 2010, approximately $33.077 million is available for loans.			
G-14	Rural Business Opportunity Grants (RBOG)	**Not Applicable**				
G-15	Small Socially-Disadvantaged Producer Grant (SSDPG)	**Not Applicable**				
G-16	Value-Added Producer Grants (VAPG)	**Not Applicable**				
Housing and Community Facilities Grant Assistance						
G-17	Rural Housing Repair and Rehabilitation Grants	**Not Applicable**				
G-18	Housing Application Packaging Grants	**Not Applicable**				
G-19	Individual Water and Waste Grants	**Not Applicable**				
G-20	Self-Help Technical Assistance Grants	**Not Applicable**				
G-21	Technical and Supervisory Assistance Grants	**Not Applicable**				
G-22	Housing Preservation Grants	**Not Applicable**				
G-23	Farm Labor Housing Loans and Grants	**Not Applicable**				
G-24	Community Facilities Grants	**Not Applicable**				
G-25	Rural Community Development Initiative	**Not Applicable**				
Utilities Grants						

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov						
USDA Rural Development Special Initiatives For Community Facilities direct loans, guaranteed loans, and grants, section 343(a)(13) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)) defines "rural" and "rural area" as a "city, town, or unincorporated area that has a population of not more than 50,000 inhabitants."						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
G-26	High Energy Cost Grant Program	**Eligibility:** To be an eligible applicant under this program: • You must be an eligible applicant; • The grant project must serve an eligible extremely high energy cost community; • The proposed project must improve energy generation, transmission, or distribution facilities service an eligible community; and • The administrative costs of the project must not exceed 4 percent of grant funds. **Eligible Applicant:** You are eligible to apply if you are any of the following: • a legally-organized for-profit or nonprofit organization such as, but not limited to, a corporation, association, partnership (including a limited liability partnership), cooperative, or trust; • a sole proprietorship; • a State or local government, or any agency or instrumentality of a State or local government, including a municipal utility or public power authority; • an Indian tribe, a tribally-owned entity, and Alaska Native Corporation; • an individual or group of individuals; or • any of the above entities located in a U.S. Territory or other area authorized by law to participate in programs of the Rural Utilities Service or under the Rural Electrification Act.	**High Energy Cost Grant Program** **Purpose:** The High Energy Cost Grant Program provides financial assistance for the improvement of energy generation, transmission, and distribution facilities servicing eligible rural communities with home energy costs that are over 275 percent of the national average. **Eligible Energy Projects**: Grants under this program may be used for the acquisition, construction, installation, repair, replacement, or improvement of energy generation, transmission, or distribution facilities in communities with extremely high energy costs. On-grid and off-grid renewable energy projects, and energy efficiency, and energy conservation projects are eligible. **Denali Commission High Energy Cost Grants (CFDA 10.857)** are made to the Denali Commission for energy generation, transmission, and distribution facilities serving rural Alaskan communities with average home costs exceeding 275% of the national average. Visit the Denali Commission for more information. **State Bulk Fuel Revolving Fund Grants (CFDA 10.858)** are made to state government entities to establish and support revolving funds to provide a more cost-effective means of purchasing fuel for remote communities that are not served by surface transportation year round. State agencies that are interested in this program should consult the Agency Contact below for more information about eligibility and how to apply. • Program Regulations • Grants under this program have supported revolving loan program of the Alaska Energy Authority and the Alaska Department of Commerce, Community and Economic Development. **Contact Information** Karen Larsen Rural Development Electric Programs U.S. Department of Agriculture 1400 Independence Avenue, SW Stop 1560, Room 5165-South Washington, DC 20250-1560 Telephone: (202) 720-9545 Fax: (202) 690-0717 Email karen.larsen@wdc.usda.gov			
G-27	Denali Commission High Energy Cost Grants	**Not Applicable**				
G-28	State Bulk Fuel Revolving Fund Grants	**Not Applicable**				
G-29	Distance Learning and Telemedicine Grant Program	**Not Applicable**				
G-30	Public Television Digital Transition Grant Program	**Not Applicable**				

National Grid – Government Grant Funding List

Government Grants (Federal) www.grant.gov						
USDA Rural Development Special Initiatives For Community Facilities direct loans, guaranteed loans, and grants, section 343(a)(13) of the Consolidated Farm and Rural Development Act (7 U.S.C. 1991(a)(13)) defines "rural" and "rural area" as a "city, town, or unincorporated area that has a population of not more than 50,000 inhabitants."						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
G-31	Community Connect Grant Program	**Not Applicable**				
G-32	Weather Radio Transmitter Grant Program	**Not Applicable**				
G-33	Water and Waste Disposal Direct Loans and Grants	**Not Applicable**				
G-34	Emergency Community Water Assistance Grants (ECWAG)	**Not Applicable**				
G-35	Wastewater Revolving Fund Grants	**Not Applicable**				
G-36	Solid Waste Management Grants	**Not Applicable**				
G-37	Section 306C Water and Waste Disposal Grants to alleviate health risks	**Not Applicable**				
G-38	Section 306D Water and Waste Grants for Alaskan Villages, incl. technical assistance	**Not Applicable**				
G-39	Section 306E Grants for the Construction, Refurbishment and Servicing of Low and Moderate Income Individual Well Systems	**Not Applicable**				
G-41	Technical Assistance and Training Grants for Rural Waste Systems	**Not Applicable**				
G-42	Predevelopment Planning Grants	**Not Applicable**				

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National Grid – Government Grant Funding List

Government Grants (State)

Massachusetts Green Communities http://www.mass.gov/?pageID=eoeeasubtopic&L=3&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Green+Communities&sid=Eoeea)

#	Opportunity	Eligibility Requirements	Notes	Application Submitted	Level of Funding Requested	Anticipated Award Date
G-43	**Massachusetts Green Communities Grant**	**MUST Apply to be Designated a Green Community prior to submitting Grant. Current 2010 Grant Schedule is CLOSED:**				

DATE	EVENT
Friday – March 19, 2010	Begin accepting grant applications
Friday – May 14, 2010	Deadline for designation applications to be submitted by communities intending on submitting grant applications by May 28th
Friday – May 28, 2010	Grant Applications due
Monday – June 28, 2010	Announce Grant Awards

The Grant Program, an initiative of the Green Communities Division, provides funding to help municipalities pursue energy efficiency measures, large renewable energy projects, and innovative methods that use less fossil fuel.
Cities and towns can apply for the Grant Program after they have demonstrated that they have met the following five criteria and have been officially designated as a "Green Community."
Criterion #1: Provide as-of-right siting in designated locations for renewable/alternative energy generation, research & development, or manufacturing facilities

- Guidance for As-of-Right Siting of Renewable or Alternative Energy R&D or Manufacturing Facilities PDF
- Model As-of-Right Bylaw for Large-Scale Photovoltaic Installations Word
- Model As-of-Right Bylaw for Use of Wind Facilities PDF

Criterion #2: Adopted an expedited application and permit process for as-of-right energy facilities

- Guidance for Expedited Permitting Options - revised 3/26/10 Word

Criterion #3: Establish benchmark for energy use and developed a plan to reduce baseline by 20 percent within 5 years

- Sample Energy Reduction Action Plan Outline - revised 05/04/10 PDF

Criterion #4: Purchase only fuel-efficient vehicles

- Guidance and Model Policy for Purchasing only Fuel Efficient Vehicles Word

Criterion #5: Set requirements to minimize life-cycle energy costs for new construction; one way to meet these requirements is to adopt the new Board of Building Regulations and Standards (BBRS) Stretch Code

- Overview Summary of Stretch Code PDF
- Summary Table of Stretch Code PDF
- Stretch Code Adoption Process for a Town Word
- Residential Cash Flow Analysis - new 4/28/10 PDF
- Home Loan Investment Bank Case Study PDF
- Fidelity Bank Corporate Office and Branch Case Study PDF
- Question and Answer for Stretch Energy Code Appendix 120.AA PDF
- "The 'Stretch' Code – Upping the Ante for Cutting Energy Costs in Buildings" PDF by Marc Breslow (see page 1 of newsletter)
- Stretch Code Webinar: Presentation PDF
- Stretch Code Webinar: Presentation w/audio **(.wmv)**
- Independent HERS Raters [Mass. ENERGY STAR Homes]

The Green Communities Division will work closely with cities and towns to meet these criteria. To learn more, refer to the following guidelines:

- Qualification Guidelines for Green Community Grant Program PDF

If you want to participate in the Grant Program and are served by a municipal light plant (MLP), the MLP must adopt the Massachusetts Renewable Energy Trust's renewable energy charge.
The Grant Program's ambitious criteria are designed to tap Massachusetts cities and towns' potential to become models for how communities across the nation can manage their energy use and costs and advance the clean energy economy.
Approximately $7 million dollars is available for award in June 2010 to municipalities who meet these criteria. Below are the Program Opportunity Notice and Applications:

- Program Opportunity Notice for Green Communities Designation and Grant Award Word
- Green Communities Designation Form - revised 05/11/10 Word
- Green Communities Grant Program Application Word

National Grid – Government Grant Funding List

Government Grants (State)						
Massachusetts Executive Office of Housing and Economic Development						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
G-44	Section 8 Energy Retrofit Applications	Local Housing Authorities	Commonwealth and Local Housing Authority Jointly propose to US Housing and Urban Development (HUD). The following Communities have submitted Proposals Billerica Housing Authority - 15 River Street PDF Norwood Housing Authority - William Shyne Circle PDF Somerville Housing Authority - Bryant Manor, 75 Myrtle Street PDF Whitman Housing Authority - Harvard Court PDF			
Housing Energy Programs DHCD's Energy Programs provide eligible households assistance in the following areas: paying a portion of winter heating bills; heating system repair and replacement						
G-45	**Cold Relief Information**	The Low Income Home Energy Assistance Program assists low-income individuals and families with the cost of heating their homes during the winter season. The Program is managed by the DHCD in conjunction with 22 regional nonprofit and local government organizations.				
G-46	**Heating System Repair & Replacement Program (HEARTWAP)**	The Heating System Repair and Replacement Program provides heating system repair and replacement services to low-income households.				
G-47	**Low Income Home Energy Assistance (LIHEAP)**	Known commonly as Fuel Assistance, the Low Income Home Energy Assistance Program provides eligible households with help in paying a portion of winter heating bills.				
G48	**Weatherization Assistance Program (WAP)**	The Low Income Weatherization Assistance Program provides eligible households with full-scale home energy conservation services.				
Grant and Funding Programs In service to Massachusetts' residents and municipalities, the Division of Community Services offers programs, funding, and technical assistance to support the advancement towards self-sufficiency of low-income households and the revitalization of our cities and towns.						
G49	**Bridge Financing (BF)**	The Bridge Financing Program provides up to $2 million in short-term financing (eighteen months or less) to bridge funding timing gaps for ready-to-go projects that meet CDBG requirements.				
G50	**Community Development Action Grant (CDAG)**	The Community Development Action Grant Program (CDAG) provides funding to communities for projects that build local economies, eliminate blight, create jobs and produce workforce and affordable housing that would not occur by private enterprise alone.				
G51	**Community Development Block Grant (CDBG)**	The Community Development Block Grant Program is a federally funded, competitive grant program designed to address revitalization efforts and the needs of low- and moderate-income residents by supporting housing, community and economic development activities in small cities and towns throughout the Commonwealth				
G52	**Community Development Block Grant - Recovery Act Program (CDBG-R)**	The federal Department of Housing and Urban Development (HUD) has allocated $9.1 million from the American Recovery and Reinvestment Act (ARRA) to Massachusetts for distribution through the Massachusetts Community Development Block Grant (CDBG) Program. The money will be granted to non-entitlement cities and towns.				
G53	**Community Services Block Grant (CSBG)**	The Community Services Block Grant is a federally funded, poverty reduction program that was created to promote and provide an array of services and activities to encourage self-sufficiency and to make permanent improvements in the lives of low-income families and individuals.				
G54	**Economic Development Fund (EDF)**	The Economic Development Fund, a component of the Massachusetts Community Development Block Grant Program, provides funding for projects that create and/or retain jobs, improve the local and/or regional tax base, or otherwise enhance the quality of life in the community.				
G55	**Gateway Plus Action Grant**	Funding to 18 Gateway Cities to support local strategic planning efforts to increase diversity of housing options, increase economic opportunities, foster and strengthen civic engagement, and revitalize neighborhoods.				
G56	**Individual Development Account (IDA)**	The Individual Development Account is a state funded pilot program that provides funds for low to moderate income wage earners to reach self sufficiency and ultimately achieve homeownership.				
G57	**Massachusetts Downtown Initiative (MDI)**	The primary mission of the Massachusetts Downtown Initiative is to make downtown revitalization an integral part of community development in cities and towns across the Commonwealth.				
G58	**Neighborhood Housing Services (NHS)**	Neighborhood Housing Services Program assists residents and public/private entities to reinvest in urban neighborhoods in Boston, Cambridge, Chelsea, Quincy, and Springfield by rehabilitating housing and making it affordable for low and moderate-income families.				

National Grid – Government Grant Funding List

Government Grants (State)						
Massachusetts Executive Office of Housing and Economic Development						
#	**Opportunity**	**Eligibility Requirements**	**Notes**	**Application Submitted**	**Level of Funding Requested**	**Anticipated Award Date**
G59	**Neighborhood Stabilization Program (NSP)**	NSP1 is a $54.8 million grant program from the Housing and Economic Recovery Act (HERA) awarded by the federal Department of Housing and Urban Development (HUD) to Massachusetts and four of its cities. These NSP funds are to be used primarily for the acquisition and rehabilitation of abandoned and foreclosed properties. NSP2 is a competitive grant program from the American Recovery and Reinvestment Act (ARRA) awarded by federal Department of Housing and Urban Development (HUD).				
G60	**Peer to Peer Technical Assistance Program**	The Peer-To-Peer Technical Assistance Program provides small grants to municipalities for short-term problem solving or technical assistance projects				
G-61	The Massachusetts Business Resource Team is a new service is available in Massachusetts under the Massachusetts Executive Office of Economic Development. The Business Resource Team is here to help businesses identify and access state programs and resources that match current needs. Whether you're expanding, relocating, hiring new employees or looking for working capital, the Massachusetts Business Resource Team can help you. 1-877-BIZ-TEAM					
G-62	Berkshire Growth					
G-63	Economic Development Council of Western Massachusetts					
G-64	How to Start a Business in Massachusetts					
G-65	MassDevelopment					
G-66	Massachusetts Office of Business Development					
G-67	Massachusetts Office of International Trade & Investment					
G-68	Massachusetts Port Authority					
G-69	Massachusetts Small Business Development Center Network					
G-70	Massachusetts State Government					
G-71	Procurement Technical Assistance Center					
G-72	U.S. Export Assistance Center					
G-73	State and Local Government on the Net					

ATTACHMENT C

NSTAR – ENERGY EFFICIENCY GRANT SEARCH FINDINGS

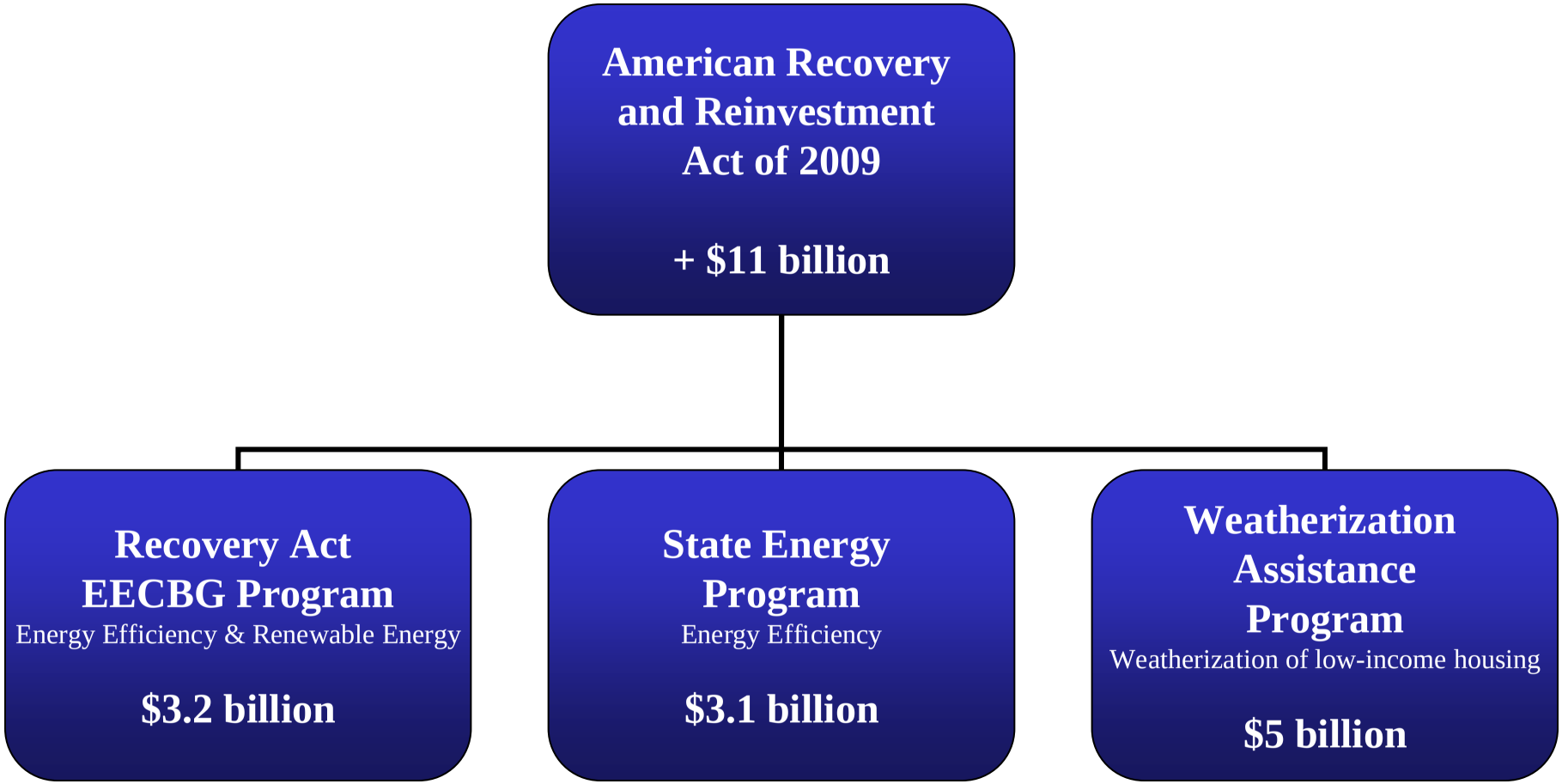
Energy Efficiency Grant Search Findings

June 2010

Summary

- Federal, state, and private sources of energy efficiency funding were researched
- Federal
  - The State Energy Program (SEP) PY 2010 is currently accepting applications
    - MA's portion of the SEP is $605,000
    - SEP requires 20% contribution by state
- State
  - No funding sources
- Private
  - Limited options available to non-profits and institutions

American Recovery and Reinvestment Act Funds



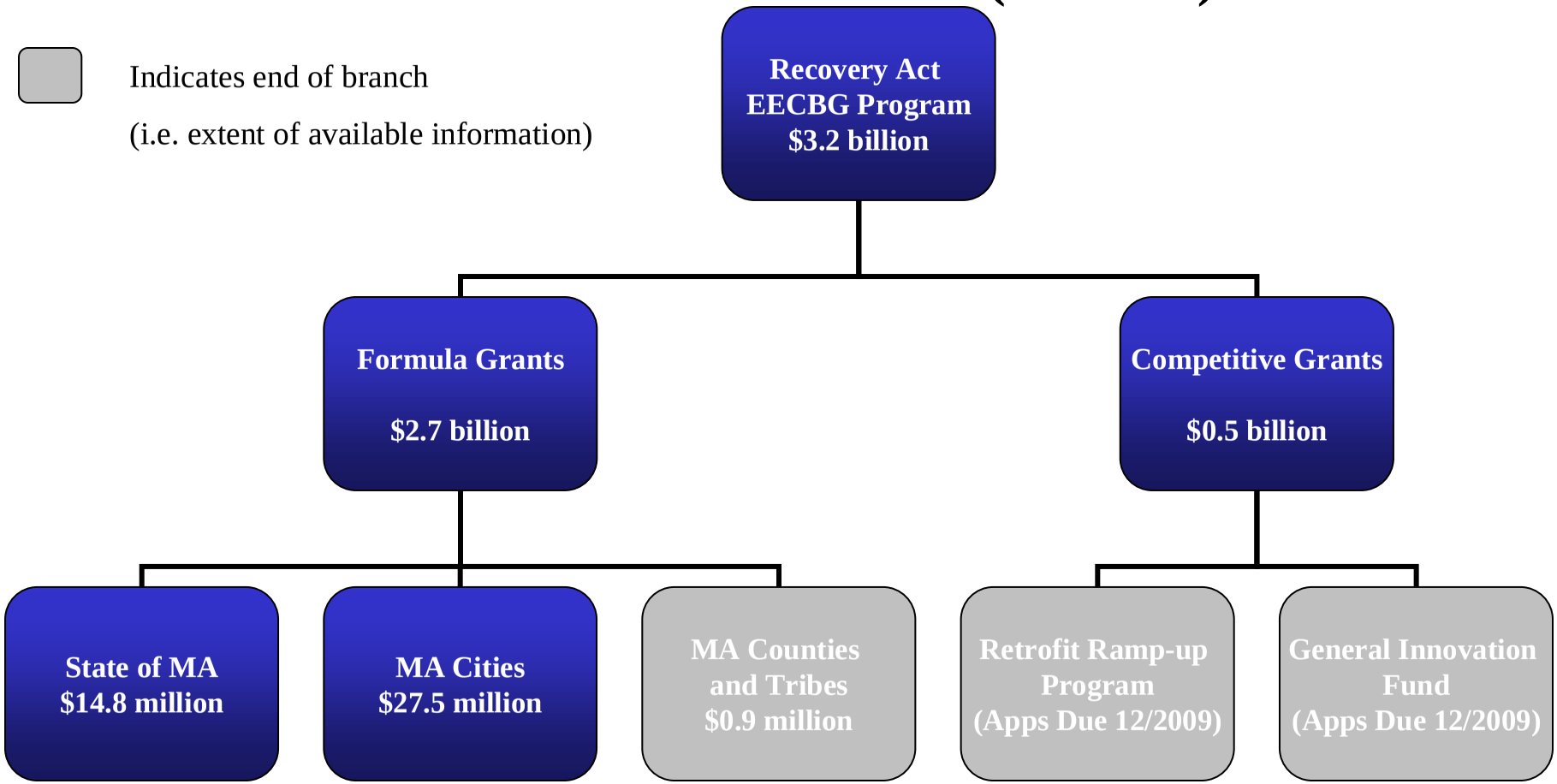
Sources:
http://www1.eere.energy.gov/wip/recovery_act.html

Recovery Act Energy Efficiency

Conservation Block Grant (EECBG)

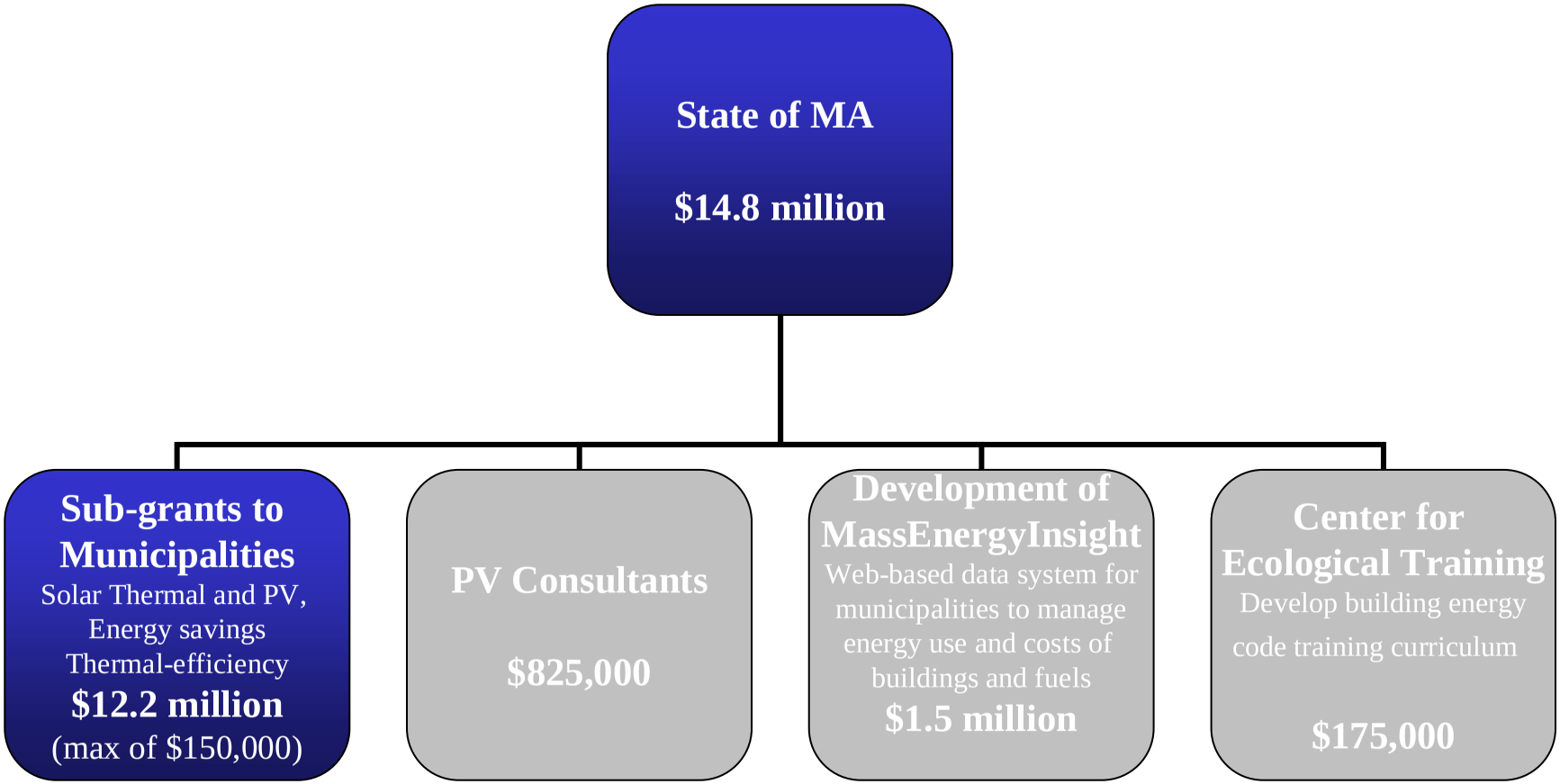
Indicates end of branch

(i.e. extent of available information)



Sources:
http://www1.eere.energy.gov/wip/eecbg.html; http://www1.eere.energy.gov/wip/eecbg_allocation.html;
http://www1.eere.energy.gov/wip/docs/eecbg_allocation_ma.xls; http://www1.eere.energy.gov/wip/eecbg_grants.html;
http://www1.eere.energy.gov/wip/pdfs/eecbg_competitive_foa148_amendment3.pdf

MA's Division of ARRA Funds



Source:
http://www.mass.gov/?pageID=eoeeaterminal&L=3&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Green+Communities&sid=Eoeea&b=terminalcontent&f=doer_green_communities_eecbg-prg&csid=Eoeea

MA's Division of ARRA Funds

Sub-grants to Municipalities

Solar Thermal and PV, Energy savings
Thermal-efficiency

$12.2 million

(max of $150,000)

- A list of the municipalities, their award, and the project type can be found at http://www.mass.gov/Eoeea/docs/doer/green_communities/grant_program/EECBG-Awards.xls

Source:http://www.mass.gov/Eoeea/docs/doer/green_communities/grant_program/EECBG-Awards.xls

MA's Division of ARRA Funds

MA Cities

Clean Technology and energy efficiency at municipalities and schools

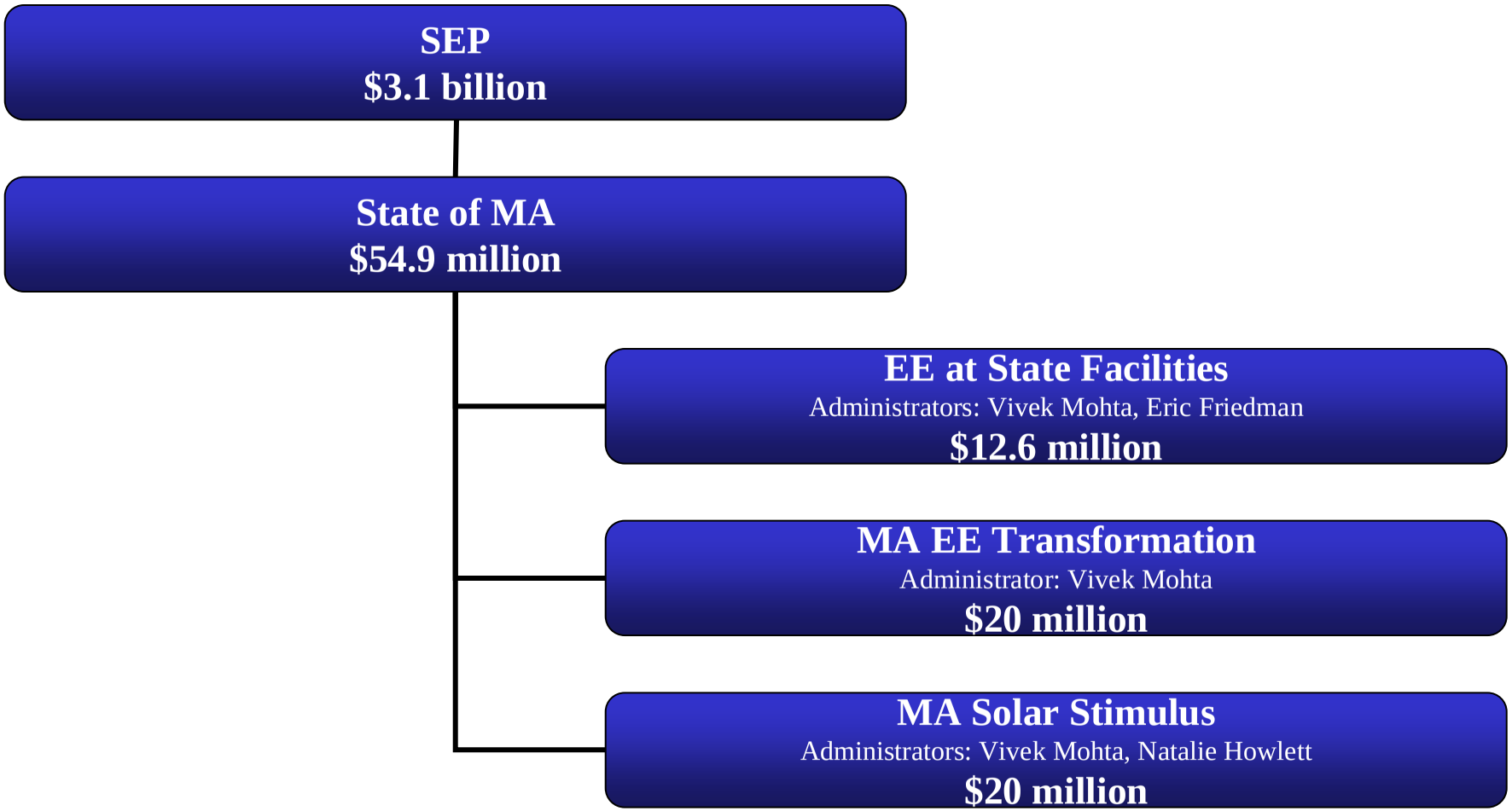
$27.5 million

Amherst	$162,000	Fitchburg	$168,000	Peabody	$494,200
Arlington	$159,700	Framingham	$657,000	Pittsfield	$189,100
Attleboro	$179,600	Haverhill	$542,700	Plymouth	$514,300
Barnstable	$202,400	Holyoke	$175,700	Quincy	$881,200
Beverly	$169,600	Lawrence	$651,300	Revere	$485,500
Billerica	$180,200	Leominster	$175,500	Salem	$174,300
Boston	$6,506,200	Lowell	$954,700	Somerville	$651,100
Brockton	$865,000	Lynn	$788,100	Springfield	$1,498,200
Brookline	$494,400	Malden	$501,500	Taunton	$519,600
Cambridge	$139,400	Marlborough	$178,000	Waltham	$630,500
Chelsea	$164,000	Medford	$504,000	Westfield	$170,300
Chicopee	$499,100	Methuen	$179,200	Weymouth	$485,800
Everett	$149,300	New Bedford	$869,300	Woburn	$174,600
Fall River	$861,300	Newton	$799,600	Worcester	$1,733,000

Total	$26,478,500

Source:
http://www.mass.gov/?pageID=eoeeaterminal&L=3&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Green+Communities&sid=Eoeea&b=terminalcontent&f=doer_green_communities_eecbg-prg&csid=Eoeea

State Energy Program (SEP)



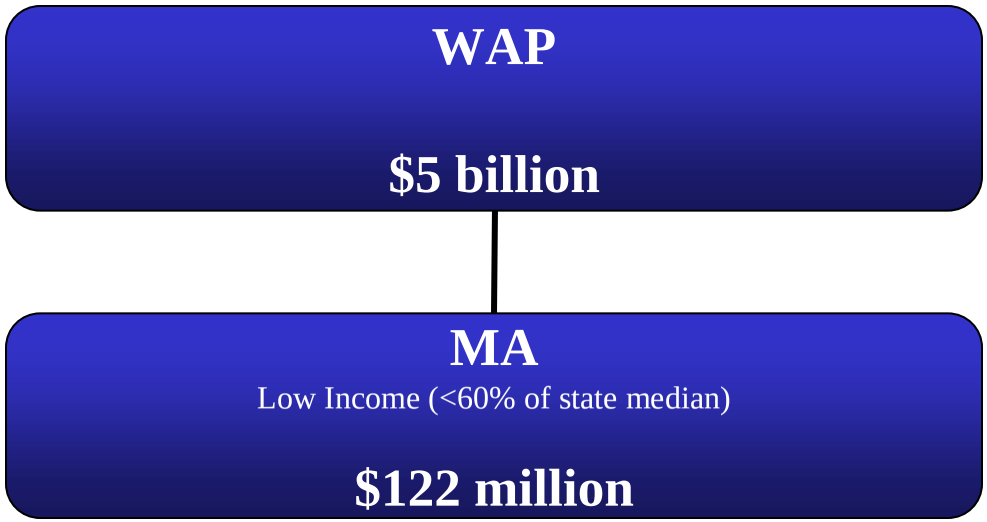
Notes: $1.9 million of the $54.9 million is for personnel and fringe benefits. $0.5 million is for indirect charges.
Sources: http://www1.eere.energy.gov/wip/recovery_act_sep.html; http://www1.eere.energy.gov/wip/recovery_act_states.html; http://www1.eere.energy.gov/wip/project_map/project_details_new.aspx?pid=24; http://www1.eere.energy.gov/wip/pdfs/arra_sep_plan_ma_20100408.pdf

State Energy Program (SEP)

Program Name	Implementation Date	Objective	Description	$ Amount
High Performance Buildings Program/MA EE Transformation	4/1/09-3/31/12	Demonstrate solutions to a number of long-standing challenges in improving building energy performance and facilitate market transformation	• Deep energy retrofit, outreach, education • Financing programs • Market transformation • $500K-$5M awards	$20M
Leading by Example/EE at State Facilities	4/1/09-3/31/12	Accelerate and expand clean energy projects at public buildings	• Accelerate pipeline of clean energy projects	$14.9M
MA Solar Stimulus	4/1/09-3/31/12	Fostering substantial expansion of the installed capacity of solar PV in MA	• Provide technical assistance • Provide financial incentives • Identify opportunities for market expansion	$20M
Total				$54.9M

Sources: http://www1.eere.energy.gov/wip/pdfs/arra_sep_plan_ma_20100408.pdf

Weatherization Assistance Program (WAP)



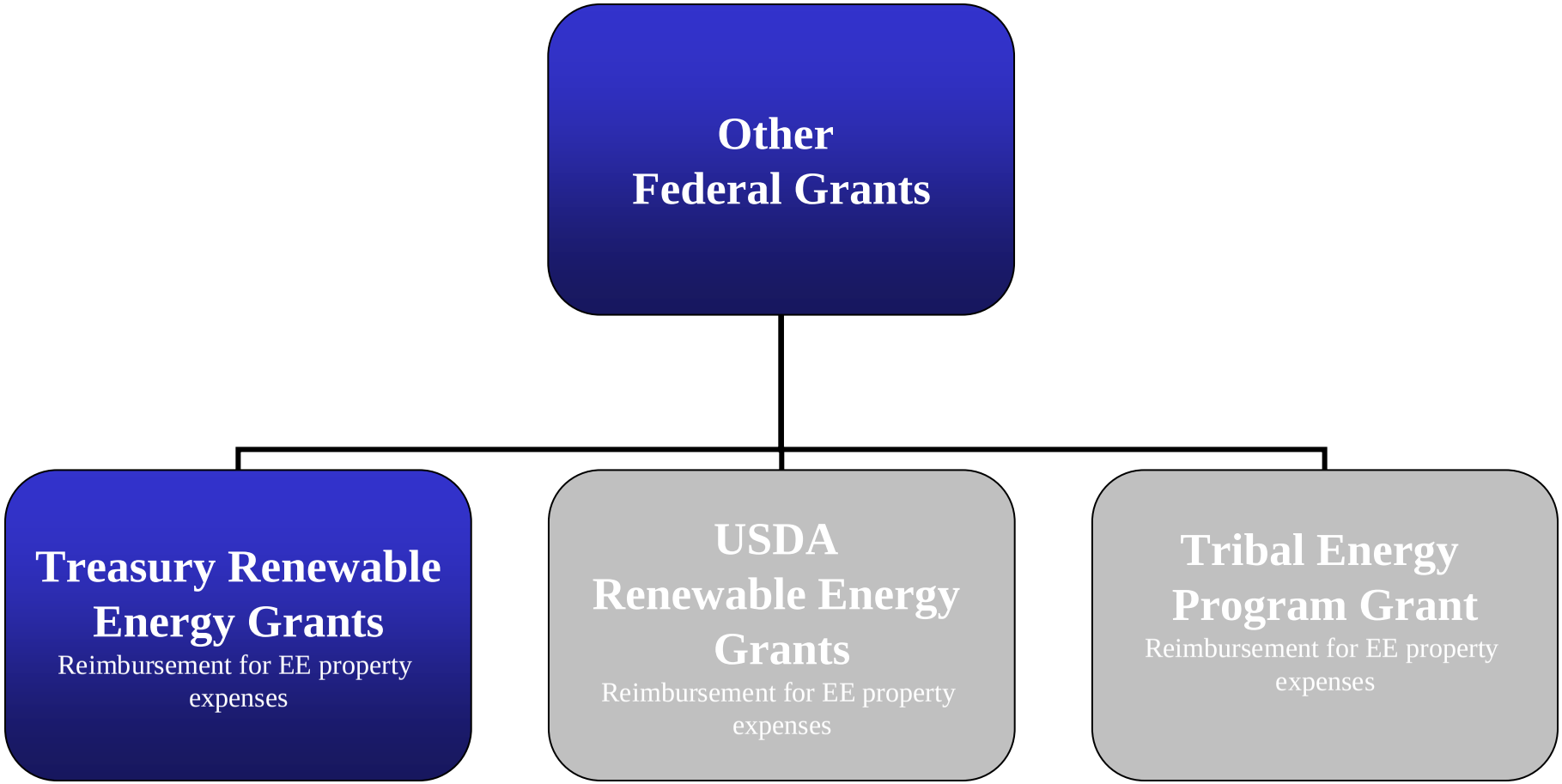
Sources:
http://www1.eere.energy.gov/wip/recovery_act_wap.html
http://www1.eere.energy.gov/wip/pdfs/wx_closeup_ma.pdf
http://www.mass.gov/Ehed/docs/dhcd/cd/wap/waprecoveryplan2009.pdf
http://www.mass.gov/?pageID=ehedterminal&L=3&L0=Home&L1=Community+Development&L2=Housing+Energy+Programs&sid=Ehed&b=terminalcontent&f=dhcd_cd_wap_wap&csid=Ehed

Weatherization Assistance Program (WAP)

II.3 Subgrantees **Tentative**			
Grantee	**City**	**Funding**	**Units**
Action for Boston Community Development	Boston	$ 10,042,805	1,423
ACTION, Incorporated	Gloucester	$ 8,506,370	1,182
Berkshire Community Action Council Inc.	Pittsfield	$ 3,007,805	423
Citizens for Citizens	Fall River	$ 8,572,490	1,214
Community Action of the Franklin, Hampshire and Quabbin	Greenfield	$ 4,653,995	657
Community Action Programs, Intercity	Chelsea	$ 10,256,750	1,450
Expiring Use/Preservation Special Project Initiative	Boston	$ 6,000,000	923
Greater Lawrence Community Action Council Inc.	Lawrence	$ 7,669,940	1,084
Housing Assistance Corporation	Hyannis	$ 2,881,175	405
Public Housing Special Project Initiative	Boston	$ 25,000,000	3,846
Quincy Community Action Programs	Quincy	$ 5,045,885	711
South Middlesex Opportunity Council	Framingham	$ 8,711,120	1,232
Springfield Partners in Community Action	Springfield	$ 8,466,965	1,199
Worcester Community Action Council	Worcester	$ 8,324,195	1,177
TOTALS		$ 117,139,495	16,926

Notes: Tentative allocation. Where did money end up?
David MacLellan is NSTAR Electric's Policy Advisor Council Member. (mass.gov/Ehed/docs/dhcd/cd/wap/waprecoveryplan2009.pdf)
Sources: http://www.mass.gov/Ehed/docs/dhcd/cd/wap/waprecoveryplan2009.pdf
http://www.bostonabcd.org/news/press-releases/documents/WeatherizationExpands32009.pdf

Other Federal Energy Efficiency 'Grant' Programs



Sources:
http://www.dsireusa.org/incentives/index.cfm?State=US&ee=1&re=1
http://www.treas.gov/recovery/docs/guidance.pdf
http://www.rurdev.usda.gov/rbs/busp/9006grant.htm
http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US07F&re=1&ee=1

Other Federal Energy Efficiency 'Grant' Programs

Treasury Renewable Energy Grants

Reimbursement for EE property expenses

Specified Energy Property	Credit Termination Date	Applicable Percentage of Eligible Cost Basis
Large Wind	Jan 1, 2013	30%
Closed-Loop Biomass Facility	Jan 1, 2014	30%
Open-loop Biomass Facility	Jan 1, 2014	30%
Geothermal under IRC sec. 45	Jan 1, 2014	30%
Landfill Gas Facility	Jan 1, 2014	30%
Trash Facility	Jan 1, 2014	30%
Qualified Hydropower Facility	Jan 1, 2014	30%
Marine & Hydrokinetic	Jan 1, 2014	30%
Solar	Jan 1, 2017	30%
Geothermal under IRC sec. 48	Jan 1, 2017	10%*
Fuel Cells	Jan 1, 2017	30%**
Microturbines	Jan 1, 2017	10%***
Combined Heat & Power	Jan 1, 2017	10%
Small Wind	Jan 1, 2017	30%
Geothermal Heat Pumps	Jan 1, 2017	10%

Sources:
http://www.treas.gov/recovery/docs/guidance.pdf

Green Communities Grant Program

Source:
http://www.mass.gov/?pageID=eoeeaterminal&L=3&L0=Home&L1=Energy%2c+Utilities+%26+Clean+Technologies&L2=Green+Communities&sid=Eoeea&b=terminalcontent&f=doer_green_communities_gc-grant-program&csid=Eoeea
http://www.mass.gov/Eoeea/docs/doer/green_communities/grant_program/Green_Communities_Grant_Program_2010_PON.doc

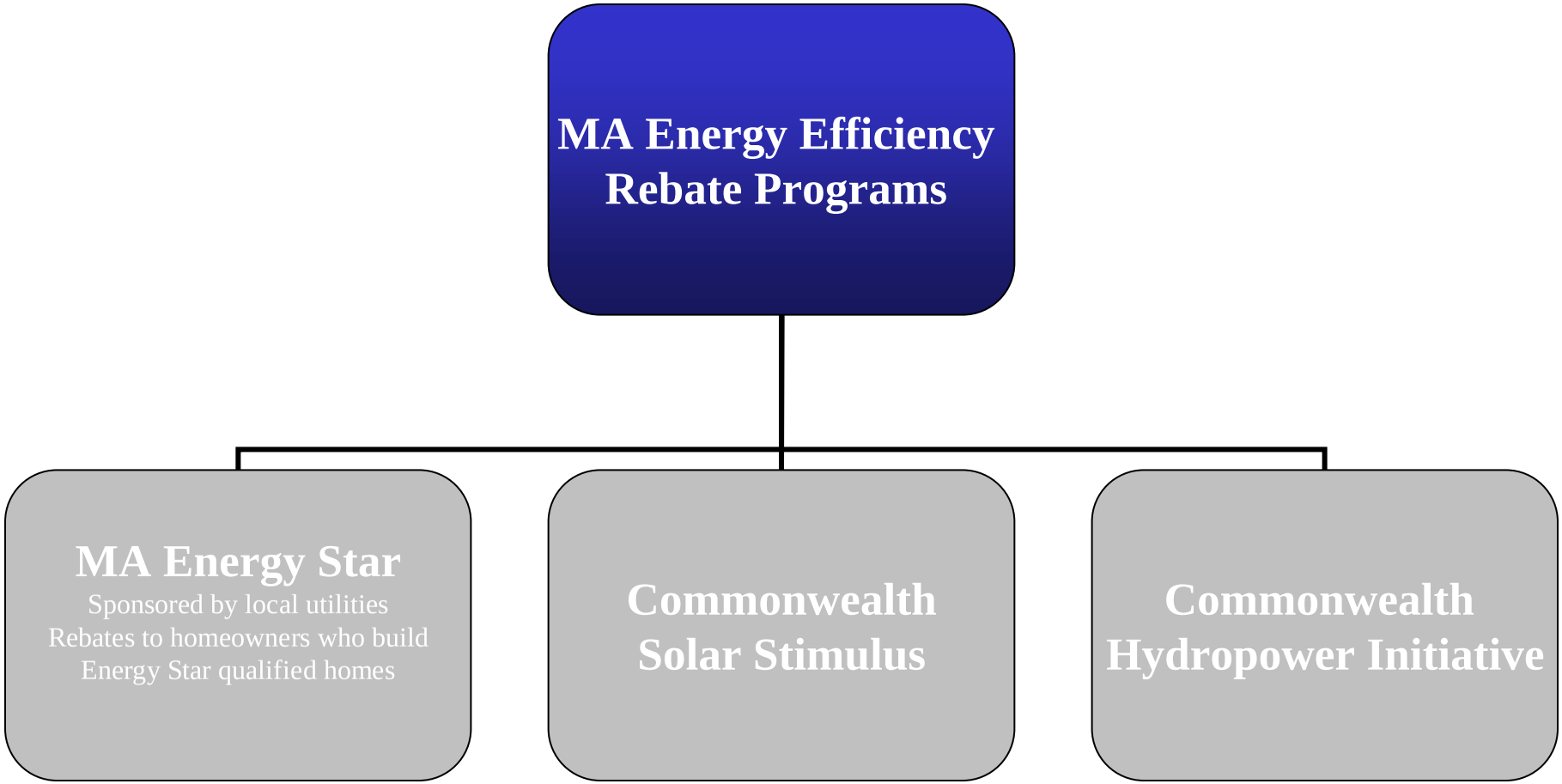
Green Communities Grant Program

As of May 21, 2010, the following 35 municipalities were designated ‘Green Communities’ and are therefore eligible for the Green Communities Grant.

ACTON	GREENFIELD	LINCOLN	PALMER
ANDOVER	HAMILTON	LOWELL	PITTSFIELD
ARLINGTON	HANOVER	MASHPEE	SALEM
ATHOL	HOLYOKE	MEDFORD	SPRINGFIELD
BECKET	HOPKINTON	MELROSE	SUDBURY
BELCHERTOWN	KINGSTON	MONTAGUE	TYNGSBOROUGH
CAMBRIDGE	LANCASTER	NATICK	WENHAM
CHELMSFORD	LENOX	NEWTON	WORCESTER
EASTHAMPTON	LEXINGTON	NORTHAMPTON	

Source: http://www.mass.gov/Eoeea/docs/doer/green_communities/grant_program/052010_gcp_towns.pdf

State Energy Efficiency Rebate Programs

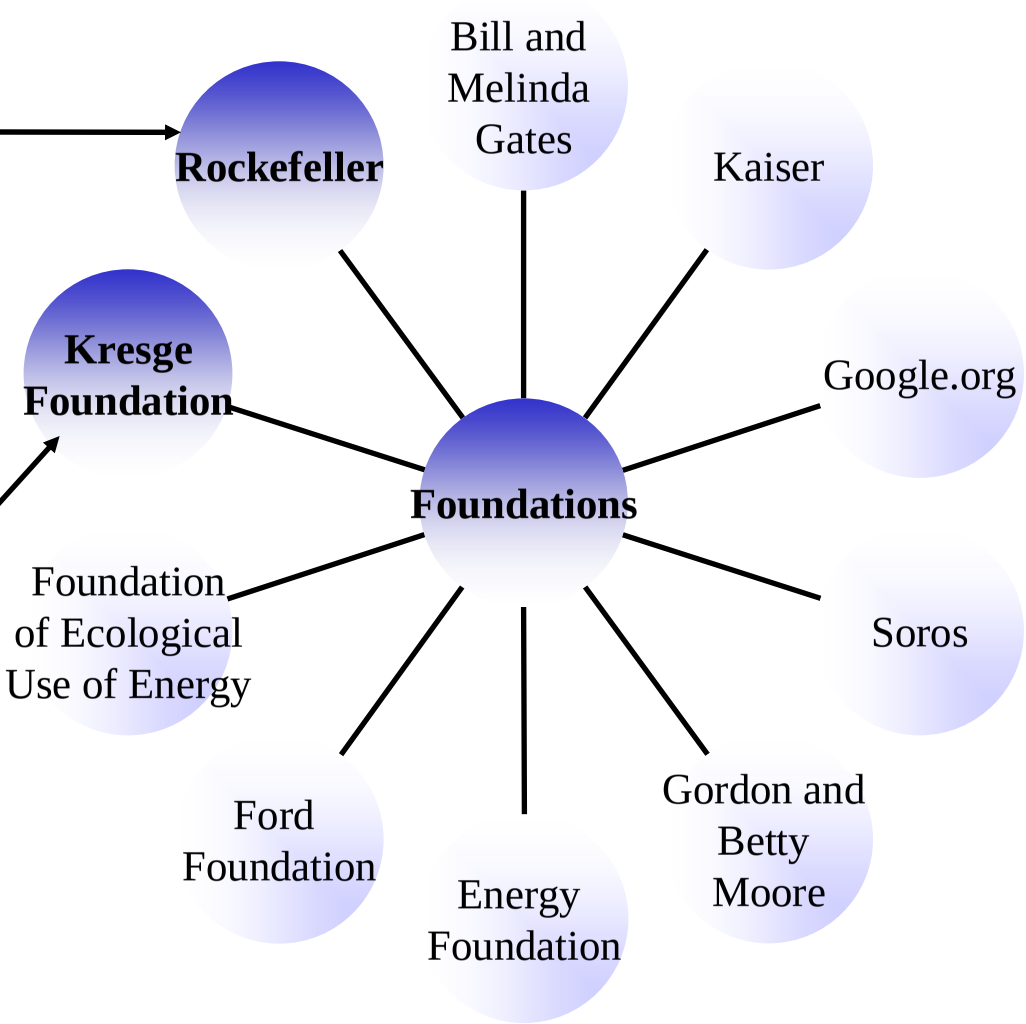


Sources: http://www.massenergystarhomes.com/; http://www.massenergystarhomes.com/homebuilders/value.htm; http://www.masscec.com/index.cfm?pid=11052; http://www.masstech.org/Grants_and_Awards/comm_hydro_09/hydro_09.html

Private Sector Research

No current EE grants but Charleston, SC received $250K

Non-profits and gov't entities. Foundation has Southeast and Midwest Focus



Notes:
Foundations identified by reviewing the top philanthropists from businessweek and personal knowledge (http://www.businessweek.com/interactive_reports/philanthropy_individual.html)
http://www.kresge.org/index.php/what/environment_program/energy_efficiency/http://www.kresge.org/index.php/what/environment_program/energy_efficiency/
http://www.rockefellerfoundation.org/what-we-do/current-work/developing-climate-change-resilience
http://www.postandcourier.com/news/2010/may/26/grant-to-boost-citys-green-goals/

Appendix 10. Variance Analysis Consistent with the Department's Memorandum dated June 22, 2010

This Appendix identifies (1) all programs for which savings, costs, or benefits vary by more than 20 percent from planned values; (2) all programs with a benefit/cost ratio less than one; and (3) all programs that the Program Administrator intends to discontinue.

1. Table 1 summarizes the planned and reported costs, savings, and benefits associated with each BCR Activity and the corresponding variance between the planned and reported values. An explanation follows why program-level savings, costs, or benefits varied by more than 20 percent from planned values.
2. There is no section identifying all programs with a benefit/cost ratio less than one, since the Cape Light Compact does not have any programs with a benefit/cost ratio less than one.
3. There is also no section identifying all programs that the Program Administrator intends to discontinue, since the Cape Light Compact does not plan to discontinue any programs.

Variance Summary

TABLE 1										
		PA Costs ($)			Net Lifetime Savings (MWh)			Benefits ($)[1]		
Sector	BCR Activity	Plan[2]	Report	Variance[3]	Plan[2]	Report	Variance[3]	Plan[2]	Report	Variance[3]
Residential	A02a Residential Lost Opportunity	$ 1,028,413	$ 442,635	-57%	5,975	2,023	-66%	$ 3,650,409	$ 1,163,373	-68%
Residential	A02b Energy Star HVAC	$ 347,753	$ 62,539	-82%	1,895	498	-74%	$ 956,954	$ 264,201	-72%
Residential	A03a Residential Retrofit 1-4	$ 2,360,062	$ 2,826,273	20%	34,282	29,838	-13%	$ 17,668,466	$ 13,745,762	-22%
Residential	A04a Residential Lighting	$ 633,615	$ 404,361	-36%	76,019	12,885	-83%	$ 10,208,585	$ 1,775,504	-83%
Residential	A04b Residential Appliances	$ 255,804	$ 226,509	-11%	2,654	4,684	76%	$ 774,119	$ 1,513,556	96%
Low Income	B03a Low-Income Retrofit 1-4	$ 1,122,962	$ 824,610	-27%	6,339	4,259	-33%	$ 3,550,402	$ 3,454,183	-3%
Low Income	B03b Low-Income Retrofit Multifamily	$ 409,214	$ 169,814	-59%	1,215	193	-84%	$ 2,349,996	$ 909,542	-61%
C&I	C02a C&I Lost Opportunity	$ 359,183	$ 466,762	30%	5,936	14,425	143%	$ 1,175,997	$ 2,716,446	131%
C&I	C03a Large C&I Retrofit	$ 740,775	$ 448,602	-39%	13,883	35,170	153%	$ 2,540,552	$ 5,098,054	101%
C&I	C03b Small C&I Retrofit	$ 2,809,853	$ 3,029,003	8%	59,896	59,663	0%	$ 10,695,408	$ 10,178,248	-5%
Residential	**Subtotal**	**$ 4,625,647**	**$ 3,962,316**	**-14%**	**120,825**	**49,928**	**-59%**	**$ 33,258,532**	**$ 18,462,396**	**-44%**
Low Income	**Subtotal**	**$ 1,532,176**	**$ 994,424**	**-35%**	**7,554**	**4,451**	**-41%**	**$ 5,900,398**	**$ 4,363,725**	**-26%**
C&I	**Subtotal**	**$ 3,909,811**	**$ 3,944,366**	**1%**	**79,716**	**109,258**	**37%**	**$ 14,411,957**	**$ 17,992,748**	**25%**
	Total	**$ 10,067,635**	**$ 8,901,106**	**-12%**	**208,095**	**163,637**	**-21%**	**$ 53,570,887**	**$ 40,818,869**	**-24%**

Notes

1. Benefits include capacity and energy DRIPE

2. As approved in D.P.U. 07-47, The Cape Light Compact's Proposed Second Amendment to its Approved Energy Efficiency Plan: 2007-2012 (the "2009 EEP").

3. Variance is calculated as (Report - Plan)/Plan

Variance Analysis

Table 1 and the following analysis respond to the request in a Hearing Officer Memorandum regarding Annual Reports from June 22, 2010[1] for sections identifying all programs for which savings, costs, or benefits vary by more than 20 percent from planned values and explaining the reasons behind this variance.

Analysis Highlights

In general, there are three explanations for underspending in 2009:

1. The 2009 EEP featured aggressive spending goals that were 72% higher than proposed Supplemental 2008 EEP expenditures. The implementation of several BCR Activities and measures were delayed due to the May 2009 approval of the 2009 EEP. The key BCR Activities and measures impacted include:

    - the Major Renovation Pilot within Residential Lost Opportunity;
    - Residential HVAC;
    - the Deep Energy Retrofit Pilot within Residential Retrofit 1-4;
    - the CHP measure with Residential Retrofit 1-4;
    - the solar hot water measure within Residential Retrofit 1-4;
    - LED fixtures within Residential Lighting; and,
    - TVs and Set Top Boxes within Residential Appliances.

    Program roll-out occurred in June and July for these BCR Activities and measures, which resulted in underspending in the associated BCR Activities.

2. A lag in RGGI fund receipts resulted in a lack of funding available to support program roll out. $4,365,173 in RGGI funds were anticipated in support of 2009 program implementation. More than half of these funds were received at the end of 2009 ($1,228,372 in December 2009) or in early 2010 ($1,303,801 in February 2010). This lag impacted all BCR Activities.

3. The economic downturn dampened participant uptake for several BCR Activities. This includes the following:

    - Residential Lost Opportunity, where increases in Low Income uptake did not offset decreases in Non-Low Income uptake. Additionally, while there was activity in the Green Affordable Homes program, there were no completed units in 2009;
    - Residential Lighting, where bulb sales were down; and,
    - Low-Income Retrofit 1-4.

[1] Hearing Officer Memorandum, RE: 2009 Annual Reports, June 22, 2010.

Analysis By BCR Activity

Residential BCR Activities

Residential Lost Opportunity

PA Costs ($): As stated above, the late approval affected implementation of the Major Renovation pilot program. Additionally, the economic downturn affected uptake in the non-low income new construction market and slowed progress in the Green Affordable Homes program.

Net Lifetime Savings (MWh): Lower expenditures due to lower uptake resulted in lower savings.

Benefits ($): Lower expenditures due to lower uptake resulted in lower savings, which drove lower benefits.

ENERGY STAR® HVAC

PA Costs ($): As stated above, underspending in this program was primarily the result of the late approval and delayed program implementation.

Net Lifetime Savings (MWh): Lower expenditures due to the delay in program implementation resulted in lower savings.

Benefits ($): Lower expenditures due to the delay in program implementation resulted in lower savings, which drove lower benefits.

Residential Retrofit 1-4

PA Costs ($): Despite underspending in the Deep Energy Retrofit pilot and CHP and solar hot water measures, the program overspent its budget for the year. Program dollars were reallocated from the pilot and CHP and solar hot water measures to other measures that were in higher demand.

Benefits ($): Despite overspending, benefits were lower than planned. This is due to a higher than planned uptake for measures with lower savings and lower benefits such as CFLs, programmable thermostats, and domestic hot water instant savings measures (which includes faucet aerators, low flow showerheads, and pipe and tank wrap) as compared to measures with higher savings and benefits such as insulation, air sealing and heating system and refrigerator replacements to. The economic downturn may have been a contributing factor as well since the participant costs for measures with lower savings and benefits are lower.

Residential Lighting

PA Costs ($): The underspending in this program was due to the late approval, which delayed implementation of new measures such as LED fixtures. Also, the economic downturn affected sales of CFL bulbs and other lighting products.

Net Lifetime Savings (MWh): Lower sales of CFL bulbs and other lighting products resulted in lower than projected savings. Furthermore, declines in two key assumptions

resulted in the significant decrease in net lifetime MWh savings, despite the increase in the installation rate from 84% to 97% due to the 2008 Residential Lighting Markdown Impact Evaluation[2] that offset some of the decline.

1. The 2009 program year study entitled *Results of the Multistate CFL Modeling Effort*[3] reduced the net-to-gross ratio from 139% to 41%.
2. The 2008 Residential Lighting Markdown Impact Evaluation[4] reduced the deemed gross annual kWh savings for CFL screw-in bulbs from 57 to 47.

Benefits ($): The significant decrease in net lifetime MWh savings drove the significant decrease in benefits.

Residential Appliances

Net Lifetime Savings (MWh): Savings were substantially higher than planned, due to the higher than planned uptake on two measures with particularly high savings: ECM Heaters and Refrigerators.

Benefits ($): As savings were substantially higher than planned, benefits were substantially higher than planned. The variance in benefits was even higher than the variance in savings due to the fact that there are additional non-electric benefits associated with ECM Heaters.

Low-Income BCR Activities

Low-Income Retrofit 1-4

PA Costs ($): The underspending in this program was due to lower than projected participation.

Net Lifetime Savings (MWh): Lower spending contributed to lower than projected savings. Greater uptake of measures with significant non-electric benefits has offset declines in electric benefits. As a result, there is little variance in benefits despite a significant variance in savings.

Low-Income Retrofit Multifamily

PA Costs ($): The underspending in this program was due to lower than projected measure uptake, likely due to the economic downturn.

Net Lifetime Savings (MWh): Lower spending contributed to lower than projected savings.

Benefits ($): Lower spending contributed to lower than projected savings, which drove lower benefits.

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[2] *Residential Lighting Markdown Impact Evaluation* by Nexus Market Research, RLW Analytics, Inc, and GDS Associates, January 20, 2009.

[3] *Results of the Multistate CFL Modeling Effort*, NMR Group, Inc., February 4, 2010.

[4] *Residential Lighting Markdown Impact Evaluation* by Nexus Market Research, RLW Analytics, Inc, and GDS Associates, January 20, 2009.

Commercial and Industrial BCR Activities

Due to the low number of participants in any given year, Cape Light Compact generally experiences a high variance in savings and benefits for all C&I BCR Activities.

C&I Lost Opportunity

PA Costs ($): The overspending in this program was due to higher uptake than projected.

Net Lifetime Savings (MWh): Savings were higher than projected due to a higher uptake of non-lighting measures than projected. Non-lighting measure have higher savings than lighting measures.

Benefits ($): Benefits were higher than projected due to a higher uptake of non-lighting measures than projected. Non-lighting measures have higher savings, and therefore, higher benefits, than lighting measures.

Large C&I Retrofit

PA Costs ($): The underspending in this program was due to lower uptake than projected. The economic downturn may have made it difficult for larger companies and organizations to pay the participant costs associated with larger projects.

Net Lifetime Savings (MWh): Despite underspending, savings were significantly higher than planned. This is due to a higher uptake of non-lighting measures than projected. Non-lighting measure have higher savings than lighting measures.

Benefits ($): Benefits were higher than projected due to a higher uptake of non-lighting measures than projected. Non-lighting measures have higher savings, and therefore, higher benefits, than lighting measures.

Appendix 11. Cape Light Compact's Year End 2009 Town Program Activity Reports

The following are the Cape Light Compact's Year End 2009 Town Program Activity Reports. The Cape Light Compact is providing these reports in response to a D.P.U. request during the Cape Light Compact's 09-119 proceeding.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: All
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	48,215	63,189.36	61	506,001	642,511.84	458	644,449.00	99.7%
Low-Income Multi-Family	4,417	10,248.70	15	28,246	63,037.39	45	73,050.00	86.3%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	52,632	73,438.06	76	534,247	705,549.23	503	717,499.00	
LI % of Total	0.9%	4.3%	4.6%	3.0%	10.8%	4.6%	17.5%	
Residential New Construction	26,419	43,518.99	17	230,592	236,260.26	168	0.00	0.0%
Energy Star Lighting	2,193,041	80,508.51	384	5,040,135	202,361.23	3,800	0.00	0.0%
Energy Star Appliance	65,218	30,300.00	356	310,406	152,225.00	1,966	0.00	0.0%
Residential Conservation Service	414,514	303,033.57	674	3,260,769	2,184,641.55	3,955	1,934,464.00	112.9%
Energy Star HVAC	10,612	15,044.00	33	45,060	50,144.00	95	0.00	0.0%
Res Subtotal	2,709,804	472,405.07	1,464	8,886,962	2,825,632.04	9,984	1,934,464.00	
Res % of Total	47.7%	27.6%	89.2%	49.6%	43.1%	91.4%	47.2%	
C&I New Construction	0	1,468.83	6	66,116	26,749.38	21	0.00	0.0%
C&I Large Retrofit	646,048	89,045.66	4	1,470,906	278,867.32	20	0.00	0.0%
C&I Small Retrofit	1,261,621	436,960.94	63	3,807,812	1,474,876.05	297	1,446,021.00	102.0%
C&I Govt Small	640,560	452,331.50	14	1,244,667	859,601.40	54	0.00	0.0%
C&I Govt Large	0	3,435.41	3	1,008,114	107,264.01	9	0.00	0.0%
C&I Govt New Construction	283,740	176,893.84	4	554,394	255,130.37	17	0.00	0.0%
C&I Products & Services	83,248	4,573.00	7	359,732	25,625.61	22	0.00	0.0%
C&I Subtotal	2,915,217	1,164,709.18	101	8,511,741	3,028,114.14	440	1,446,021.00	
C&I % of Total	51.3%	68.1%	6.2%	47.5%	46.2%	4.0%	35.3%	
Report Total	5,677,653	1,710,552.31	1,641	17,932,950	6,559,295.41	10,927	4,097,984.00	
Budget Comparison					4,365,066.83		4,097,984.00	106.5%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Aquinnah
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	0	0.00	0	0	0.00	0	773.00	0.0%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	88.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	0	0.00	0	0	0.00	0	861.00	
LI % of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%	
Residential New Construction	1,829	2,334.40	1	1,829	2,534.40	1	0.00	0.0%
Energy Star Lighting	0	0.00	0	18,126	297.00	4	0.00	0.0%
Energy Star Appliance	0	0.00	0	100	50.00	1	0.00	0.0%
Residential Conservation Service	0	0.00	0	700	1,155.78	6	4,643.00	24.9%
Energy Star HVAC	0	0.00	0	0	0.00	0	0.00	0.0%
Res Subtotal	1,829	2,334.40	1	20,755	4,037.18	12	4,643.00	
Res % of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	74.0%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	0	0.00	0	774.52	0.0%
C&I Govt Small	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	0	0.00	0	0	0.00	0	774.52	
C&I % of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.3%	
Report Total	1,829	2,334.40	1	20,755	4,037.18	12	6,278.52	
Budget Comparison					1,155.78		6,278.52	18.4%

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: **Barnstable**
Program Name: **CLC Energy Efficiency Program**
Program Period: **2009**
Current Dates: **11/01/09 - 11/30/09**
Cumulative Dates: **01/01/09 - 11/30/09**

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	11,105	11,399.45	11	118,491	146,436.54	96	145,968.00	100.3%
Low-Income Multi-Family	2,649	9,072.46	8	5,597	25,036.44	31	16,546.00	151.3%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	13,754	20,471.91	19	124,088	171,472.98	127	162,514.00	
LI % of Total	0.7%	4.1%	8.1%	2.7%	12.6%	6.5%	19.5%	
Residential New Construction	5,727	2,617.75	2	51,324	58,811.12	39	0.00	0.0%
Energy Star Lighting	397,711	17,534.55	19	1,339,916	66,148.83	698	0.00	0.0%
Energy Star Appliance	11,628	5,580.00	65	54,999	27,605.00	352	0.00	0.0%
Residential Conservation Service	76,847	44,200.10	99	537,726	333,809.72	628	337,370.00	98.9%
Energy Star HVAC	2,253	1,964.00	3	7,179	7,776.00	14	0.00	0.0%
Res Subtotal	494,166	71,896.40	188	1,991,144	494,150.67	1,731	337,370.00	
Res % of Total	26.2%	14.4%	79.7%	43.2%	36.3%	88.7%	40.5%	
C&I New Construction	0	95.00	1	10,086	6,527.28	5	0.00	0.0%
C&I Large Retrofit	616,314	86,330.00	2	1,076,345	154,573.59	7	0.00	0.0%
C&I Small Retrofit	473,394	141,163.08	18	847,393	304,984.23	63	334,156.31	91.3%
C&I Govt Small	0	597.24	2	56,098	26,427.33	6	0.00	0.0%
C&I Govt Large	0	1,935.41	2	0	2,061.76	3	0.00	0.0%
C&I Govt New Construction	283,740	176,036.15	2	368,898	197,441.38	4	0.00	0.0%
C&I Products & Services	2,688	1,313.00	2	135,026	3,875.00	5	0.00	0.0%
C&I Subtotal	1,376,136	407,469.88	29	2,493,846	695,890.57	93	334,156.31	
C&I % of Total	73.0%	81.5%	12.3%	54.1%	51.1%	4.8%	40.1%	
Report Total	1,884,055	499,838.19	236	4,609,078	1,361,514.22	1,951	834,040.31	
Budget Comparison					810,266.93		834,040.31	97.1%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: **Bourne**
Program Name: **CLC Energy Efficiency Program**
Program Period: **2009**
Current Dates: **11/01/09 - 11/30/09**
Cumulative Dates: **01/01/09 - 11/30/09**

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	2,620	4,773.60	4	29,561	33,669.42	27	38,474.00	87.5%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	4,361.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	2,620	4,773.60	4	29,561	33,669.42	27	42,835.00	
LI % of Total	0.5%	2.7%	3.0%	2.1%	5.5%	3.3%	15.8%	
Residential New Construction	2,554	1,499.76	2	39,815	54,628.30	39	0.00	0.0%
Energy Star Lighting	15,884	599.30	45	167,495	5,947.44	372	0.00	0.0%
Energy Star Appliance	2,780	1,450.00	20	15,501	7,740.00	110	0.00	0.0%
Residential Conservation Service	31,437	18,565.60	49	178,034	118,284.78	238	112,005.00	105.6%
Energy Star HVAC	92	416.00	1	92	416.00	1	0.00	0.0%
Res Subtotal	52,747	22,530.66	117	400,937	187,016.52	760	112,005.00	
Res % of Total	11.0%	12.5%	88.6%	27.8%	30.6%	91.6%	41.3%	
C&I New Construction	0	166.25	1	17,770	3,732.61	2	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	249,648	79,974.65	7	495,349	181,154.31	28	116,475.62	155.5%
C&I Govt Small	173,811	70,988.86	2	372,878	167,278.28	6	0.00	0.0%
C&I Govt Large	0	0.00	0	0	2,537.50	2	0.00	0.0%
C&I Govt New Construction	0	0.00	0	95,305	31,535.25	3	0.00	0.0%
C&I Products & Services	0	1,600.00	1	28,970	4,737.50	2	0.00	0.0%
C&I Subtotal	423,459	152,729.76	11	1,010,272	390,975.45	43	116,475.62	
C&I % of Total	88.4%	84.8%	8.3%	70.1%	63.9%	5.2%	42.9%	
Report Total	478,827	180,034.02	132	1,440,770	611,661.39	830	271,315.62	
Budget Comparison					333,108.51		271,315.62	122.8%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Brewster
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	0	0.00	0	16,577	9,335.40	15	22,427.00	41.6%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	2,542.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	0	0.00	0	16,577	9,335.40	15	24,969.00	
LI % of Total	0.0%	0.0%	0.0%	4.0%	4.0%	2.8%	15.4%	
Residential New Construction	0	0.00	0	3,695	2,717.16	5	0.00	0.0%
Energy Star Lighting	6,599	169.00	24	108,444	3,630.95	179	0.00	0.0%
Energy Star Appliance	2,440	1,300.00	14	16,861	8,410.00	113	0.00	0.0%
Residential Conservation Service	12,156	9,087.26	27	162,554	117,137.09	206	100,399.00	116.7%
Energy Star HVAC	813	932.00	2	8,712	9,208.00	16	0.00	0.0%
Res Subtotal	22,008	11,488.26	67	300,266	141,103.20	519	100,399.00	
Res % of Total	78.6%	68.2%	95.7%	72.0%	60.3%	95.2%	61.7%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	5,714	4,731.95	2	46,494	20,631.53	6	37,261.60	55.4%
C&I Govt Small	0	0.00	0	49,847	60,970.00	2	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	23.75	1	0.00	0.0%
C&I Products & Services	289	625.00	1	3,960	2,025.00	2	0.00	0.0%
C&I Subtotal	6,003	5,356.95	3	100,301	83,650.28	11	37,261.60	
C&I % of Total	21.4%	31.8%	4.3%	24.0%	35.7%	2.0%	22.9%	
Report Total	28,011	16,845.21	70	417,144	234,088.88	545	162,629.60	
Budget Comparison					147,104.02		162,629.60	90.5%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Cape Cod
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	40,463	59,065.76	53	479,688	612,537.45	436	608,167.00	100.7%
Low-Income Multi-Family	4,417	10,248.70	15	20,605	57,293.18	39	68,936.00	83.1%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	44,880	69,314.46	68	500,293	669,830.63	475	677,103.00	
LI % of Total	0.9%	5.2%	4.3%	3.0%	11.2%	4.6%	18.1%	
Residential New Construction	23,022	39,010.89	15	185,813	218,956.50	153	0.00	0.0%
Energy Star Lighting	1,957,617	73,482.51	378	4,704,165	192,528.65	3,555	0.00	0.0%
Energy Star Appliance	64,178	29,830.00	346	306,010	150,565.00	1,930	0.00	0.0%
Residential Conservation Service	388,607	291,074.87	652	3,073,384	2,075,917.67	3,750	1,726,896.00	120.2%
Energy Star HVAC	10,519	14,628.00	32	44,875	49,312.00	93	0.00	0.0%
Res Subtotal	2,443,943	448,026.27	1,423	8,314,248	2,687,279.82	9,481	1,726,896.00	
Res % of Total	49.2%	33.8%	89.7%	49.4%	44.8%	91.4%	46.3%	
C&I New Construction	0	1,350.08	5	66,116	24,060.06	18	0.00	0.0%
C&I Large Retrofit	646,048	89,045.66	4	1,470,906	278,867.32	20	0.00	0.0%
C&I Small Retrofit	1,261,621	436,960.94	63	3,745,433	1,453,728.20	290	1,327,782.89	109.5%
C&I Govt Small	203,858	94,401.72	10	800,835	498,076.94	47	0.00	0.0%
C&I Govt Large	0	3,435.41	3	1,008,114	107,074.01	8	0.00	0.0%
C&I Govt New Construction	283,740	176,893.84	4	554,394	255,130.37	17	0.00	0.0%
C&I Products & Services	83,248	4,573.00	7	359,732	25,625.61	22	0.00	0.0%
C&I Subtotal	2,478,515	806,660.65	96	8,005,530	2,642,562.51	422	1,327,782.89	
C&I % of Total	49.9%	60.9%	6.0%	47.6%	44.0%	4.1%	35.6%	
Report Total	4,967,338	1,324,001.38	1,587	16,820,070	5,999,672.96	10,378	3,731,781.89	
Budget Comparison					4,199,476.50		3,731,781.89	112.5%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Chatham
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	0	0.00	0	14,054	17,027.16	12	11,342.00	150.1%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	1,286.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	0	0.00	0	14,054	17,027.16	12	12,628.00	
LI % of Total	0.0%	0.0%	0.0%	2.3%	9.8%	2.9%	8.8%	
Residential New Construction	0	100.00	1	2,773	592.23	3	0.00	0.0%
Energy Star Lighting	285,381	9,076.00	12	310,495	10,191.25	110	0.00	0.0%
Energy Star Appliance	3,040	1,600.00	19	17,032	8,840.00	112	0.00	0.0%
Residential Conservation Service	13,476	7,295.89	21	148,486	84,602.27	154	75,638.00	111.9%
Energy Star HVAC	813	932.00	2	997	1,764.00	3	0.00	0.0%
Res Subtotal	302,710	19,003.89	55	479,784	105,989.75	382	75,638.00	
Res % of Total	99.9%	95.2%	96.5%	79.5%	61.2%	91.2%	52.9%	
C&I New Construction	0	732.58	1	0	732.58	1	0.00	0.0%
C&I Large Retrofit	0	0.00	0	25,458	15,524.19	2	0.00	0.0%
C&I Small Retrofit	430	223.60	1	82,350	32,607.64	19	54,666.75	59.6%
C&I Govt Small	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	476.20	1	0.00	0.0%
C&I Products & Services	0	0.00	0	1,642	877.80	2	0.00	0.0%
C&I Subtotal	430	956.18	2	109,450	50,218.41	25	54,666.75	
C&I % of Total	0.1%	4.8%	3.5%	18.1%	29.0%	6.0%	38.2%	
Report Total	303,140	19,960.07	57	603,288	173,235.32	419	142,932.75	
Budget Comparison					134,237.07		142,932.75	93.9%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Chilmark
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	0	0.00	0	2,741	1,131.30	1	129.00	877.0%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	15.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	0	0.00	0	2,741	1,131.30	1	144.00	
LI % of Total	0.0%	0.0%	0.0%	5.1%	6.7%	2.8%	0.6%	
Residential New Construction	0	0.00	0	39,040	5,816.97	2	0.00	0.0%
Energy Star Lighting	0	0.00	1	3,019	134.10	11	0.00	0.0%
Energy Star Appliance	340	120.00	3	540	220.00	5	0.00	0.0%
Residential Conservation Service	3,727	1,030.63	2	8,712	9,535.58	17	18,764.00	50.8%
Energy Star HVAC	0	0.00	0	0	0.00	0	0.00	0.0%
Res Subtotal	4,067	1,150.63	6	51,311	15,706.65	35	18,764.00	
Res % of Total	100.0%	100.0%	100.0%	94.9%	93.3%	97.2%	80.1%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	0	0.00	0	4,505.28	0.0%
C&I Govt Small	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	0	0.00	0	0	0.00	0	4,505.28	
C&I % of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.2%	
Report Total	4,067	1,150.63	6	54,052	16,837.95	36	23,413.28	
Budget Comparison					10,666.88		23,413.28	45.6%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Dennis
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	4,057	3,515.25	4	41,297	54,716.83	44	48,205.00	113.5%
Low-Income Multi-Family	0	0.00	0	13,240	31,080.50	1	5,464.00	568.8%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	4,057	3,515.25	4	54,537	85,797.33	45	53,669.00	
LI % of Total	1.0%	2.9%	1.7%	4.0%	15.4%	4.4%	20.1%	
Residential New Construction	0	300.00	2	0	400.00	3	0.00	0.0%
Energy Star Lighting	305,181	9,151.88	92	467,506	15,264.74	405	0.00	0.0%
Energy Star Appliance	6,498	3,060.00	36	29,893	14,870.00	196	0.00	0.0%
Residential Conservation Service	31,957	76,693.22	94	230,616	207,761.56	334	127,094.00	163.5%
Energy Star HVAC	718	3,228.00	8	2,251	4,676.00	11	0.00	0.0%
Res Subtotal	344,354	92,433.10	232	730,265	242,972.30	949	127,094.00	
Res % of Total	86.0%	76.5%	97.9%	53.8%	43.6%	93.1%	47.6%	
C&I New Construction	0	0.00	0	5,859	995.75	1	0.00	0.0%
C&I Large Retrofit	0	0.00	0	22,410	4,756.00	1	0.00	0.0%
C&I Small Retrofit	51,816	24,811.38	1	476,070	210,257.66	21	86,471.99	243.2%
C&I Govt Small	0	0.00	0	5,152	3,250.00	1	0.00	0.0%
C&I Govt Large	0	0.00	0	62,215	9,600.00	1	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	51,816	24,811.38	1	571,706	228,859.41	25	86,471.99	
C&I % of Total	12.9%	20.5%	0.4%	42.1%	41.0%	2.5%	32.4%	
Report Total	400,227	120,759.73	237	1,356,509	557,629.04	1,019	267,234.99	
Budget Comparison					503,816.55		267,234.99	188.5%

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Eastham
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	55	1,335.00	1	17,405	24,753.23	17	18,432.00	134.3%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	2,089.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	55	1,335.00	1	17,405	24,753.23	17	20,521.00	
LI % of Total	0.0%	3.6%	1.7%	2.8%	10.7%	4.7%	21.2%	
Residential New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
Energy Star Lighting	1,767	34.00	8	105,433	3,231.90	96	0.00	0.0%
Energy Star Appliance	2,280	1,200.00	15	9,425	4,580.00	74	0.00	0.0%
Residential Conservation Service	17,558	9,475.23	29	117,559	75,599.30	159	58,421.00	129.4%
Energy Star HVAC	92	416.00	1	1,533	1,448.00	3	0.00	0.0%
Res Subtotal	21,697	11,125.23	53	233,950	84,859.20	332	58,421.00	
Res % of Total	13.4%	30.2%	88.3%	37.3%	36.8%	91.0%	60.3%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	173,592	74,845.00	1	0.00	0.0%
C&I Small Retrofit	61,743	23,796.69	5	115,613	39,122.68	12	17,888.15	218.7%
C&I Govt Small	0	0.00	0	8,068	6,462.75	1	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	78,000	625.00	1	78,457	807.29	2	0.00	0.0%
C&I Subtotal	139,743	24,421.69	6	375,730	121,237.72	16	17,888.15	
C&I % of Total	86.5%	66.2%	10.0%	59.9%	52.5%	4.4%	18.5%	
Report Total	161,495	36,881.92	60	627,085	230,850.15	365	96,830.15	
Budget Comparison					139,475.21		96,830.15	144.0%

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Edgartown
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	1,368	647.40	1	8,296	5,933.49	5	9,216.00	64.4%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	1,045.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	1,368	647.40	1	8,296	5,933.49	5	10,261.00	
LI % of Total	0.7%	0.3%	7.7%	2.7%	2.5%	3.9%	8.7%	
Residential New Construction	1,569	2,173.70	1	1,569	2,853.70	2	0.00	0.0%
Energy Star Lighting	228	4.00	1	31,943	1,012.70	67	0.00	0.0%
Energy Star Appliance	300	150.00	3	1,010	430.00	9	0.00	0.0%
Residential Conservation Service	5,516	2,204.75	5	27,478	16,829.07	42	67,126.00	25.1%
Energy Star HVAC	0	0.00	0	0	0.00	0	0.00	0.0%
Res Subtotal	7,613	4,532.45	10	62,000	21,125.47	120	67,126.00	
Res % of Total	3.7%	2.2%	76.9%	19.8%	8.8%	93.0%	57.1%	
C&I New Construction	0	118.75	1	0	118.75	1	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	40,529	10,444.52	1	40,131.38	26.0%
C&I Govt Small	195,236	199,741.00	1	201,968	202,028.73	2	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	195,236	199,859.75	2	242,497	212,592.00	4	40,131.38	
C&I % of Total	95.6%	97.5%	15.4%	77.5%	88.7%	3.1%	34.1%	
Report Total	204,217	205,039.60	13	312,792	239,650.96	129	117,518.38	
Budget Comparison					33,207.08		117,518.38	28.3%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: **Falmouth**
Program Name: **CLC Energy Efficiency Program**
Program Period: **2009**
Current Dates: **11/01/09 - 11/30/09**
Cumulative Dates: **01/01/09 - 11/30/09**

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	4,220	12,839.20	8	66,446	114,506.45	62	83,327.00	137.4%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	9,445.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	4,220	12,839.20	8	66,446	114,506.45	62	92,772.00	
LI % of Total	0.7%	7.6%	3.8%	3.7%	14.7%	4.9%	18.4%	
Residential New Construction	4,881	2,334.24	1	25,367	19,419.61	19	0.00	0.0%
Energy Star Lighting	331,402	12,225.40	34	566,740	22,066.31	304	0.00	0.0%
Energy Star Appliance	17,310	6,360.00	49	43,750	19,765.00	232	0.00	0.0%
Residential Conservation Service	73,243	46,079.14	99	459,410	346,726.27	571	235,810.00	147.0%
Energy Star HVAC	1,533	1,448.00	3	8,476	8,176.00	11	0.00	0.0%
Res Subtotal	428,369	68,446.78	186	1,103,744	416,153.19	1,137	235,810.00	
Res % of Total	68.3%	40.7%	89.4%	62.1%	53.3%	90.4%	46.8%	
C&I New Construction	0	95.00	1	16,847	7,206.01	2	0.00	0.0%
C&I Large Retrofit	0	2,310.66	1	54,932	15,853.54	4	0.00	0.0%
C&I Small Retrofit	192,906	84,383.78	10	405,165	180,505.68	43	175,408.69	102.9%
C&I Govt Small	0	181.28	1	62,705	36,784.19	6	0.00	0.0%
C&I Govt Large	0	0.00	0	55,900	7,634.00	1	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	1,615	60.00	1	12,757	1,615.00	3	0.00	0.0%
C&I Subtotal	194,521	87,030.72	14	608,306	249,598.42	59	175,408.69	
C&I % of Total	31.0%	51.7%	6.7%	34.2%	32.0%	4.7%	34.8%	
Report Total	627,109	168,316.70	208	1,778,496	780,258.06	1,258	503,990.69	
Budget Comparison					641,738.40		503,990.69	127.3%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Harwich
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	4,247	4,920.30	5	29,867	33,438.07	22	32,738.00	102.1%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	3,711.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	4,247	4,920.30	5	29,867	33,438.07	22	36,449.00	
LI % of Total	2.4%	10.7%	4.0%	1.7%	7.3%	3.2%	19.0%	
Residential New Construction	7,548	3,061.04	4	16,810	24,339.48	23	0.00	0.0%
Energy Star Lighting	111,226	4,144.40	47	296,845	11,101.58	263	0.00	0.0%
Energy Star Appliance	3,292	1,600.00	17	20,767	10,635.00	132	0.00	0.0%
Residential Conservation Service	27,617	16,175.94	48	201,612	128,926.50	221	102,527.00	125.7%
Energy Star HVAC	0	0.00	0	1,717	2,280.00	5	0.00	0.0%
Res Subtotal	149,683	24,981.38	116	537,751	177,282.56	644	102,527.00	
Res % of Total	86.3%	54.3%	92.8%	30.9%	38.9%	93.3%	53.3%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	6,161	3,540.62	2	232,943	85,855.62	19	53,316.05	161.0%
C&I Govt Small	13,424	11,099.56	1	29,203	64,014.56	2	0.00	0.0%
C&I Govt Large	0	1,500.00	1	889,999	85,240.75	1	0.00	0.0%
C&I Govt New Construction	0	0.00	0	23,036	9,671.13	2	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	19,585	16,140.18	4	1,175,181	244,782.06	24	53,316.05	
C&I % of Total	11.3%	35.1%	3.2%	67.4%	53.7%	3.5%	27.7%	
Report Total	173,515	46,041.86	125	1,742,800	455,502.69	690	192,292.05	
Budget Comparison					248,220.19		192,292.05	129.1%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: **Marthas Vineyard**
Program Name: **CLC Energy Efficiency Program**
Program Period: **2009**
Current Dates: **11/01/09 - 11/30/09**
Cumulative Dates: **01/01/09 - 11/30/09**

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	7,752	4,123.60	8	26,313	29,974.39	22	36,282.00	82.6%
Low-Income Multi-Family	0	0.00	0	7,641	5,744.21	6	4,114.00	139.6%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	7,752	4,123.60	8	33,954	35,718.60	28	40,396.00	
LI % of Total	1.1%	1.1%	14.8%	3.1%	6.4%	5.1%	11.0%	
Residential New Construction	3,397	4,508.10	2	44,779	17,303.76	15	0.00	0.0%
Energy Star Lighting	235,424	7,026.00	6	335,970	9,832.58	245	0.00	0.0%
Energy Star Appliance	1,040	470.00	10	4,396	1,660.00	36	0.00	0.0%
Residential Conservation Service	25,907	11,958.70	22	187,385	108,723.88	205	207,568.00	52.4%
Energy Star HVAC	92	416.00	1	185	832.00	2	0.00	0.0%
Res Subtotal	265,861	24,378.80	41	572,714	138,352.22	503	207,568.00	
Res % of Total	37.4%	6.3%	75.9%	51.5%	24.7%	91.6%	56.7%	
C&I New Construction	0	118.75	1	0	2,689.32	3	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	62,379	21,147.85	7	118,238.11	17.9%
C&I Govt Small	436,702	357,929.78	4	443,832	361,524.46	7	0.00	0.0%
C&I Govt Large	0	0.00	0	0	190.00	1	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	436,702	358,048.53	5	506,211	385,551.63	18	118,238.11	
C&I % of Total	61.5%	92.6%	9.3%	45.5%	68.9%	3.3%	32.3%	
Report Total	710,315	386,550.93	54	1,112,880	559,622.45	549	366,202.11	
Budget Comparison					165,590.33		366,202.11	45.2%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: **Mashpee**
Program Name: **CLC Energy Efficiency Program**
Program Period: **2009**
Current Dates: **11/01/09 - 11/30/09**
Cumulative Dates: **01/01/09 - 11/30/09**

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	1,136	648.50	1	23,119	16,311.55	22	50,138.00	32.5%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	5,683.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	1,136	648.50	1	23,119	16,311.55	22	55,821.00	
LI % of Total	1.6%	1.9%	1.3%	3.6%	8.6%	3.9%	23.9%	
Residential New Construction	0	0.00	0	0	130.00	1	0.00	0.0%
Energy Star Lighting	11,076	1,422.40	9	188,623	8,681.12	169	0.00	0.0%
Energy Star Appliance	4,680	2,500.00	26	27,770	14,805.00	136	0.00	0.0%
Residential Conservation Service	16,372	8,544.15	36	203,730	85,177.38	213	112,199.00	75.9%
Energy Star HVAC	72	316.00	1	956	1,564.00	4	0.00	0.0%
Res Subtotal	32,200	12,782.55	72	421,079	110,357.50	523	112,199.00	
Res % of Total	45.1%	37.1%	93.5%	66.2%	58.3%	93.2%	47.9%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	54,116	4,614.00	1	0.00	0.0%
C&I Small Retrofit	23,220	9,971.18	2	94,082	31,420.27	6	66,024.94	47.6%
C&I Govt Small	14,781	10,485.63	1	43,420	25,686.56	7	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	554.90	1	0	752.50	2	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	38,001	21,011.71	4	191,618	62,473.33	16	66,024.94	
C&I % of Total	53.3%	61.0%	5.2%	30.1%	33.0%	2.9%	28.2%	
Report Total	71,337	34,442.76	77	635,816	189,142.38	561	234,044.94	
Budget Comparison					132,909.20		234,044.94	56.8%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Oak Bluffs
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	5,130	2,476.50	4	9,408	13,997.00	10	10,633.00	131.6%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	1,205.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	5,130	2,476.50	4	9,408	13,997.00	10	11,838.00	
LI % of Total	5.0%	3.1%	22.2%	5.5%	11.6%	7.1%	13.8%	
Residential New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
Energy Star Lighting	0	0.00	0	16,109	471.10	59	0.00	0.0%
Energy Star Appliance	100	50.00	1	1,501	440.00	10	0.00	0.0%
Residential Conservation Service	11,083	7,409.35	12	53,719	29,741.54	56	47,588.00	62.5%
Energy Star HVAC	0	0.00	0	0	0.00	0	0.00	0.0%
Res Subtotal	11,183	7,459.35	13	71,329	30,652.64	125	47,588.00	
Res % of Total	10.9%	9.4%	72.2%	41.3%	25.5%	88.7%	55.4%	
C&I New Construction	0	0.00	0	0	2,570.57	2	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	5,769	2,624.64	1	26,466.21	9.9%
C&I Govt Small	86,040	69,828.00	1	86,040	70,342.90	2	0.00	0.0%
C&I Govt Large	0	0.00	0	0	190.00	1	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	86,040	69,828.00	1	91,809	75,728.11	6	26,466.21	
C&I % of Total	84.1%	87.5%	5.6%	53.2%	62.9%	4.3%	30.8%	
Report Total	102,353	79,763.85	18	172,546	120,377.75	141	85,892.21	
Budget Comparison					46,363.18		85,892.21	54.0%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Orleans
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	1,375	1,175.50	1	5,308	3,646.15	6	15,660.00	23.3%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	1,775.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	1,375	1,175.50	1	5,308	3,646.15	6	17,435.00	
LI % of Total	0.8%	2.2%	1.5%	0.7%	1.2%	1.6%	11.5%	
Residential New Construction	2,312	598.10	1	31,894	17,530.62	9	0.00	0.0%
Energy Star Lighting	18,558	1,234.67	13	183,492	7,796.07	94	0.00	0.0%
Energy Star Appliance	1,360	700.00	11	7,400	3,450.00	55	0.00	0.0%
Residential Conservation Service	7,211	9,704.89	26	114,618	91,982.60	164	65,772.00	139.9%
Energy Star HVAC	1,604	1,764.00	4	4,485	3,828.00	8	0.00	0.0%
Res Subtotal	31,045	14,001.66	55	341,889	124,587.29	330	65,772.00	
Res % of Total	17.6%	26.2%	84.6%	42.3%	42.0%	89.2%	43.3%	
C&I New Construction	0	0.00	0	15,554	2,295.12	3	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	392.00	1	0.00	0.0%
C&I Small Retrofit	142,983	37,869.08	8	318,300	111,374.39	25	68,796.26	161.9%
C&I Govt Small	0	0.00	0	91,882	48,494.09	2	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	656	350.00	1	34,909	5,583.72	3	0.00	0.0%
C&I Subtotal	143,639	38,219.08	9	460,645	168,139.32	34	68,796.26	
C&I % of Total	81.6%	71.6%	13.8%	57.0%	56.7%	9.2%	45.3%	
Report Total	176,059	53,396.24	65	807,842	296,372.76	370	152,003.26	
Budget Comparison					207,003.14		152,003.26	136.2%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: **Provincetown**
Program Name: **CLC Energy Efficiency Program**
Program Period: **2009**
Current Dates: **11/01/09 - 11/30/09**
Cumulative Dates: **01/01/09 - 11/30/09**

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	741	440.05	1	8,086	19,432.56	10	14,500.00	134.0%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	1,644.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	741	440.05	1	8,086	19,432.56	10	16,144.00	
LI % of Total	2.7%	7.0%	5.9%	6.7%	23.5%	7.7%	15.0%	
Residential New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
Energy Star Lighting	912	16.00	2	7,032	261.00	33	0.00	0.0%
Energy Star Appliance	300	150.00	3	800	400.00	8	0.00	0.0%
Residential Conservation Service	23,368	4,697.26	9	64,089	36,299.01	69	36,368.00	99.8%
Energy Star HVAC	0	0.00	0	720	516.00	1	0.00	0.0%
Res Subtotal	24,580	4,863.26	14	72,641	37,476.01	111	36,368.00	
Res % of Total	89.4%	77.7%	82.4%	59.8%	45.4%	85.4%	33.8%	
C&I New Construction	0	261.25	1	0	261.25	1	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	2,185	693.73	1	28,831	18,482.47	4	54,927.93	33.6%
C&I Govt Small	0	0.00	0	7,095	3,982.31	2	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	531.87	1	0.00	0.0%
C&I Products & Services	0	0.00	0	4,811	2,379.30	1	0.00	0.0%
C&I Subtotal	2,185	954.98	2	40,737	25,637.20	9	54,927.93	
C&I % of Total	7.9%	15.3%	11.8%	33.5%	31.1%	6.9%	51.1%	
Report Total	27,506	6,258.29	17	121,465	82,545.77	130	107,439.93	
Budget Comparison					74,214.04		107,439.93	69.1%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Sandwich
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	3,912	6,228.70	7	35,266	44,203.14	31	35,702.00	123.8%
Low-Income Multi-Family	1,768	1,176.24	7	1,768	1,176.24	7	4,047.00	29.1%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	5,680	7,404.94	14	37,034	45,379.38	38	39,749.00	
LI % of Total	5.9%	19.7%	13.5%	4.5%	12.0%	5.1%	16.1%	
Residential New Construction	0	0.00	0	5,847	1,217.15	2	0.00	0.0%
Energy Star Lighting	41,342	2,687.56	20	263,710	12,079.45	270	0.00	0.0%
Energy Star Appliance	1,870	910.00	19	12,800	6,255.00	115	0.00	0.0%
Residential Conservation Service	24,975	15,254.89	43	228,097	173,738.07	291	136,380.00	127.4%
Energy Star HVAC	1,625	1,864.00	4	3,878	3,832.00	8	0.00	0.0%
Res Subtotal	69,812	20,716.45	86	514,332	197,121.67	686	136,380.00	
Res % of Total	72.1%	55.0%	82.7%	62.1%	52.0%	91.2%	55.3%	
C&I New Construction	0	0.00	0	0	925.39	1	0.00	0.0%
C&I Large Retrofit	0	0.00	0	34,319	7,904.00	2	0.00	0.0%
C&I Small Retrofit	21,332	9,232.49	3	183,518	84,553.22	19	70,390.30	120.1%
C&I Govt Small	0	0.00	0	59,100	42,627.38	4	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	302.79	1	0	920.29	2	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	21,332	9,535.28	4	276,937	136,930.28	28	70,390.30	
C&I % of Total	22.0%	25.3%	3.8%	33.4%	36.1%	3.7%	28.6%	
Report Total	96,824	37,656.67	104	828,303	379,431.33	752	246,519.30	
Budget Comparison					303,670.67		246,519.30	123.2%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Tisbury
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	1,254	999.70	3	5,868	8,912.60	6	11,342.00	78.6%
Low-Income Multi-Family	0	0.00	0	7,641	5,744.21	6	1,286.00	446.7%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	1,254	999.70	3	13,509	14,656.81	12	12,628.00	
LI % of Total	0.3%	1.0%	23.1%	2.7%	9.5%	8.0%	14.2%	
Residential New Construction	0	0.00	0	2,341	4,636.19	2	0.00	0.0%
Energy Star Lighting	235,196	7,022.00	4	255,085	7,559.40	69	0.00	0.0%
Energy Star Appliance	200	100.00	2	945	370.00	8	0.00	0.0%
Residential Conservation Service	4,114	1,111.50	2	54,677	32,110.70	51	38,689.00	83.0%
Energy Star HVAC	92	416.00	1	92	416.00	1	0.00	0.0%
Res Subtotal	239,602	8,649.50	9	313,141	45,092.29	131	38,689.00	
Res % of Total	60.5%	9.0%	69.2%	62.8%	29.2%	87.3%	43.5%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	16,081	8,078.69	5	37,669.81	21.4%
C&I Govt Small	155,426	86,425.00	1	155,824	86,762.85	2	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	155,426	86,425.00	1	171,905	94,841.54	7	37,669.81	
C&I % of Total	39.2%	90.0%	7.7%	34.5%	61.4%	4.7%	42.3%	
Report Total	396,282	96,074.20	13	498,555	154,590.64	150	88,986.81	
Budget Comparison					54,846.20		88,986.81	61.6%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Truro
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	0	0.00	0	9,098	11,445.63	11	5,929.00	193.0%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	672.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	0	0.00	0	9,098	11,445.63	11	6,601.00	
LI % of Total	0.0%	0.0%	0.0%	13.2%	16.1%	9.3%	14.4%	
Residential New Construction	0	28,500.00	2	2,014	30,432.18	2	0.00	0.0%
Energy Star Lighting	570	8.00	4	6,972	214.00	31	0.00	0.0%
Energy Star Appliance	0	0.00	0	1,070	510.00	11	0.00	0.0%
Residential Conservation Service	2,885	3,050.97	12	48,368	27,036.89	60	27,663.00	97.7%
Energy Star HVAC	813	932.00	2	1,533	1,448.00	3	0.00	0.0%
Res Subtotal	4,268	32,490.97	20	59,957	59,641.07	107	27,663.00	
Res % of Total	100.0%	100.0%	100.0%	86.8%	83.9%	90.7%	60.5%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	0	0.00	0	11,422.89	0.0%
C&I Govt Small	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	0	0.00	0	0	0.00	0	11,422.89	
C&I % of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	25.0%	
Report Total	4,268	32,490.97	20	69,055	71,086.70	118	45,686.89	
Budget Comparison					38,482.52		45,686.89	84.2%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Wellfleet
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	696	3,558.20	2	11,441	16,071.27	11	10,247.00	156.8%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	1,161.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	696	3,558.20	2	11,441	16,071.27	11	11,408.00	
LI % of Total	5.0%	25.1%	6.9%	5.3%	16.1%	5.1%	17.6%	
Residential New Construction	0	0.00	0	2,527	4,420.05	5	0.00	0.0%
Energy Star Lighting	2,166	60.00	4	13,167	521.63	60	0.00	0.0%
Energy Star Appliance	500	250.00	5	3,426	1,480.00	31	0.00	0.0%
Residential Conservation Service	5,224	6,667.28	16	66,861	51,320.73	97	35,788.00	143.4%
Energy Star HVAC	0	0.00	0	720	516.00	1	0.00	0.0%
Res Subtotal	7,890	6,977.28	25	86,701	58,258.41	194	35,788.00	
Res % of Total	56.4%	49.2%	86.2%	40.1%	58.3%	90.2%	55.3%	
C&I New Construction	0	0.00	0	0	403.75	1	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	5,401	3,580.67	1	17,960	8,311.50	6	17,528.78	47.4%
C&I Govt Small	0	71.25	1	0	593.75	1	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	67,155	13,778.00	1	0.00	0.0%
C&I Products & Services	0	0.00	0	32,800	2,550.00	1	0.00	0.0%
C&I Subtotal	5,401	3,651.92	2	117,915	25,637.00	10	17,528.78	
C&I % of Total	38.6%	25.7%	6.9%	54.6%	25.6%	4.7%	27.1%	
Report Total	13,987	14,187.40	29	216,057	99,966.68	215	64,724.78	
Budget Comparison					75,703.50		64,724.78	117.0%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: West Tisbury
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	0	0.00	0	0	0.00	0	4,189.00	0.0%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	475.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	0	0.00	0	0	0.00	0	4,664.00	
LI % of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.6%	
Residential New Construction	0	0.00	0	0	1,462.50	8	0.00	0.0%
Energy Star Lighting	0	0.00	0	11,688	358.28	35	0.00	0.0%
Energy Star Appliance	100	50.00	1	300	150.00	3	0.00	0.0%
Residential Conservation Service	1,467	202.47	1	42,099	19,351.21	33	30,758.00	62.9%
Energy Star HVAC	0	0.00	0	92	416.00	1	0.00	0.0%
Res Subtotal	1,567	252.47	2	54,179	21,737.99	80	30,758.00	
Res % of Total	100.0%	11.5%	66.7%	100.0%	90.1%	98.8%	69.7%	
C&I New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Large Retrofit	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Small Retrofit	0	0.00	0	0	0.00	0	8,690.91	0.0%
C&I Govt Small	0	1,935.78	1	0	2,389.98	1	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Subtotal	0	1,935.78	1	0	2,389.98	1	8,690.91	
C&I % of Total	0.0%	88.5%	33.3%	0.0%	9.9%	1.2%	19.7%	
Report Total	1,567	2,188.25	3	54,179	24,127.97	81	44,112.91	
Budget Comparison					19,351.21		44,112.91	43.9%

**All information presented is preliminary and subject to change.

Program Activity by Town

http://www.capelightcompactenergysave.com/activity.htm

Town Name: Yarmouth
Program Name: CLC Energy Efficiency Program
Program Period: 2009
Current Dates: 11/01/09 - 11/30/09
Cumulative Dates: 01/01/09 - 11/30/09

	Current Period			Cumulative for Reporting Period				
Program	Annual kWh Savings	Actual Expenditures	Number of Participants	Annual kWh Savings	Actual Expenditures	Number of Participants	Budget	Actual % of Budget
Low-Income Single-Family	6,299	8,232.01	8	53,671	67,544.05	50	75,078.00	90.0%
Low-Income Multi-Family	0	0.00	0	0	0.00	0	8,510.00	0.0%
LI Special Projects	0	0.00	0	0	0.00	0	0.00	0.0%
LI Subtotal	6,299	8,232.01	8	53,671	67,544.05	50	83,588.00	
LI % of Total	1.2%	14.5%	5.3%	3.4%	14.2%	4.3%	20.4%	
Residential New Construction	0	0.00	0	3,748	4,318.60	3	0.00	0.0%
Energy Star Lighting	427,842	15,119.35	45	678,295	25,392.38	471	0.00	0.0%
Energy Star Appliance	6,200	3,170.00	47	44,515	21,220.00	253	0.00	0.0%
Residential Conservation Service	24,281	15,583.05	44	311,624	197,515.50	345	163,462.00	120.8%
Energy Star HVAC	92	416.00	1	1,625	1,864.00	4	0.00	0.0%
Res Subtotal	458,415	34,288.40	137	1,039,807	250,310.48	1,076	163,462.00	
Res % of Total	88.0%	60.3%	91.3%	66.4%	52.5%	93.2%	39.9%	
C&I New Construction	0	0.00	0	0	980.32	1	0.00	0.0%
C&I Large Retrofit	29,734	405.00	1	29,734	405.00	1	0.00	0.0%
C&I Small Retrofit	24,688	12,988.04	2	401,365	144,467.00	19	163,046.63	88.6%
C&I Govt Small	1,842	977.90	2	15,387	11,505.74	7	0.00	0.0%
C&I Govt Large	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Govt New Construction	0	0.00	0	0	0.00	0	0.00	0.0%
C&I Products & Services	0	0.00	0	26,400	1,175.00	1	0.00	0.0%
C&I Subtotal	56,264	14,370.94	5	472,886	158,533.06	29	163,046.63	
C&I % of Total	10.8%	25.3%	3.3%	30.2%	33.3%	2.5%	39.8%	
Report Total	520,979	56,891.35	150	1,566,364	476,387.59	1,155	410,096.63	
Budget Comparison					409,526.55		410,096.63	99.9%

**All information presented is preliminary and subject to change.