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2014 ANNUAL REPORT





Efficiency Maine is the independent administrator for energy efficiency programs in Maine. Efficiency Maine's mission is to lower the cost and environmental impacts of energy in Maine by promoting cost-effective energy efficiency and alternative energy systems. Efficiency Maine does this primarily by delivering rebates on the purchase of high-efficiency lights and equipment to help customers save electricity, natural gas and heating fuels throughout the Maine economy. Efficiency Maine is governed by a stakeholder Board of Trustees with oversight from the Maine Public Utilities Commission.

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WHAT'S INSIDE

Table of Contents

List of Tables and Figures	1
Message from the Executive Director.....	2
Introduction	4
Business Programs.....	8
Business Incentive Program – Electric	8
Business Incentive Program – Natural Gas	10
Large Customer Program.....	10
Small Business Direct Install Pilot.....	13
Maine Advanced Buildings Program.....	14
Multifamily Programs.....	15
Multifamily Efficiency Program.....	15
Multifamily Efficiency Program – Program Evaluation.....	16
Low Income Multifamily Weatherization Program.....	16
Residential Programs.....	18
Retail Lighting Program.....	18
Appliance Rebate Program	19
Residential Appliance Program – Program Evaluation	21
Home Energy Savings Program.....	22
Low Income Heating Upgrades Programs.....	24
Low Income Weatherization Assistance Program by Maine Housing	25
Alternative Energy Programs	26
Solar/Wind Rebate Program.....	26
Community Renewable Energy Demonstration Grants.....	27
Cross-Cutting Strategies.....	28
Public Information and Outreach.....	28
Innovation Programs	30
Research and Evaluation.....	31
Data Management	32
Finance and Administration.....	33
Audited Financial Report	33
Written Policies and Procedures.....	35
Other Initiatives.....	36
ISO-NE Forward Capacity Market.....	36
Legislative Recommendations	36
Appendices.....	37
Appendix A.....	37
Appendix B.....	41
Appendix C.....	42
Appendix D	44
Infographic: FY 14 By the Numbers.....	46

List of Tables and Figures

Table 1: FY14 Costs and Savings for Electric Programs	6
Table 2: FY14 Costs and Savings for All Fuels and Natural Gas Programs	6
Table 3: FY14 Payments Made	7
Table 4: Business Incentive Program Measures Installed.....	8
Table 5: Business Incentive Program – Electric (kWh) Results	9
Table 6: Business Incentive Program – Natural Gas (MMBtu) Results.....	10
Table 7: Large Customer Program (kWh) Results	12
Table 8: Large Customer Program Reconciliation.....	13
Table 9: Small Business Direct Install Pilot (kWh) Results	13
Table 10: Maine Advanced Building Program Results	14
Table 11: Multifamily Efficiency Program (MMBtu) Results	16
Table 12: Low income Multifamily Weatherization Program Results.....	17
Table 12A: Low income Natural Gas Program Results	17
Table 13: Residential Lighting Program (kWh) Results	19
Table 14: Results by Measure under the FY14 Appliance Rebate Program	20
Table 15: Appliance Rebate Program (kWh) Results	20
Table 16: Residential Direct Install Program (MMBtu) Results.....	23
Table 17: Home Energy Savings/Loan Program (MMBtu) Results	23
Table 18: Low Income E-CHIP and Heat Pump Program (MMBtu) Results.....	24
Table 19: Weatherization Assistance Program Results	25
Table 20: Solar/Wind Rebate Program (MMBtu) Results.....	26
Table 21: Solar/Wind Rebate Program Modified Participant Cost Test (MPCT) Results.....	27
Table 22 Demonstration Grants Awarded.....	27
Table 23: Research and Evaluation Project Activity	32
Table 24: FY14 Funding Source	33
Table 25: FY14 Use of Funds	34
Table 26: Balance Sheet - Governmental Fund	35
Figure 1: Summary of the Trust’s FCA Actions	36
Table A1: FY14 Program Impacts: Electric Programs	38
Table A2: FY14 Program Impacts: All Fuels and Natural Gas Programs	38
Table A3: FY14 Benefit Cost Ratios: Electric Programs.....	40
Table A4: FY14 Benefit Cost Ratios: All Fuels and Natural Gas Programs	40
Table B1: Program Expenditures.....	41
Table C1: Efficiency Maine Trust FY15 Amended Budget as of 11/19/14.....	42
Table D1: Revenues from system benefit charges and Alternative Compliance Mechanism.....	44

MESSAGE FROM THE EXECUTIVE DIRECTOR

This Annual Report describes the activity of the Efficiency Maine Trust in Fiscal Year 2014 (FY14) -- the first year of the Trust's Second Triennial Plan. It also describes the first year of program activity since the Maine Legislature's enactment of the 2013 Omnibus Energy Act. That law stabilized the process for funding the Trust's electricity-saving programs and expanded critically important funding for programs that reduce heating demand and promote alternative heating systems. Much of the Trust's work this past year has focused on laying the groundwork and rolling out new programs and energy efficiency investments made possible by the passage of the Omnibus Energy Act.



Michael D. Stoddard,
Executive Director

FY14 saw several important accomplishments at the Trust. First, the Trust delivered Maine's least-cost energy resource -- energy efficiency -- to a record number of customers while helping to grow Maine's burgeoning energy services industry. Over the course of the year, the Trust invested \$36,435,129 in energy efficiency which will result in \$191,779,901 in avoided energy costs over the life of the measures installed. The benefits of those cost savings are directly experienced by the 261,228 participants in the Trust's programs last year. The benefits also extend to all electricity customers due to the price suppression effects of avoided energy production, transmission and distribution costs. In fact, energy efficiency is a growing part of Maine's electric grid and represents 3% of Maine's power on the hottest days of the year. The Trust delivers these "nega-watts," at an average cost of 2.3 cents per kilowatt hour (cents/kWh), far less than the average cost of wholesale electricity (and the standard offer rates) which last year were approximately 7 cents/kWh. The demand-side resources that the Trust helps to develop have once again proved to be the lowest cost resource in Maine.

Second, the Trust grew its network of energy contractors, installers and distributors. These energy contractors evaluate projects, provide advice and install high-efficiency equipment. As the Trust's programs and incentives have become more stable and predictable, more vendors are selling and contractors are installing energy efficient equipment and many long-time efficiency contractors have grown their businesses. The Trust's contractor network now numbers 681 Residential Program Vendors (Registered Vendors); 406 Business Program Vendors (Qualified Partners); 80 Multifamily

Program Vendors (Program Partners).¹ Many of these businesses participated in stakeholder events and provided feedback on programs and incentivized measures; without this critical collaboration, the Trust would not have been able to invest in so many efficiency projects over the past year. These contractors were especially important in the Trust's ability to invest in more all-fuel saving measures like air sealing, insulation and high-efficiency heating systems. Projects installed during FY14 will save 3,058,409 MMBtu, equivalent to 22,002,945 gallons of oil, over the life of the measures.

Third, the Trust developed innovative ways to deliver programs. While the contractor network grew and continues to deliver the majority of the Trust's programs, the Trust also made several changes to program delivery in order to meet the differing needs of the smallest and largest businesses in Maine. Small businesses can benefit from the lower cost of efficiency projects through the direct installation of high-efficiency lighting by a dedicated team of contractors. Small businesses can enjoy savings through this expedited, turn-key approach to delivering efficiency resources. The Trust's team also participated in a geo-targeted project to acquire efficiency resources on the Boothbay Harbor peninsula in order to avoid the cost of building a new transmission line. Program innovations also made it easier for Maine's largest businesses to develop efficiency projects by co-investing in technical studies and project assessments. Through the Innovation Program, the Trust explored new ways of identifying efficiency opportunities using smart grid technologies.

As efficiency programs expand in the year ahead, the Trust will work to incorporate improvements in program design, strategies and implementation.

- For the Business Incentive Program, there will be a significant shift in marketing strategy. In order to avoid oversubscribing the limited budget for this program in earlier years, the Trust relied almost exclusively on word-of-mouth to promote the program. This minimalist approach was insufficient to adequately inform business customers in FY14 about the benefits of efficiency and the array of opportunities to participate in this program. Moving forward, the Trust will implement a strategy that includes advertising on the radio and Internet and promoting the message of managing energy costs,

¹ There is some overlap in these numbers since some vendors and contractors service more than one program area.

in the face of rising prices, through energy efficiency.

- The Large Customer Program has previously used a passive approach to recruiting program participants. It incurred extremely low costs to deliver very large project savings by simply issuing competitive solicitations twice per year, on a fixed schedule, and waiting for proposals to be submitted. However, this approach did not fit well with the capital budgeting schedules of most businesses and did nothing to solve the barriers faced by businesses that lacked in-house expertise or budgets to design complex energy project proposals. In FY14, participation in this program fell below goals. The Trust is working to overcome these barriers by providing energy audits, subsidizing technical assistance to develop project proposals, and arranging briefings for targeted sub-sectors, such as paper mills, hospitals, ski resorts, and college campuses.
- The Multifamily Efficiency Program assisted property managers in making energy upgrades to nearly 1,800 apartments, but focus groups told us that the process was cumbersome and unpredictable. Looking ahead, the Trust is working to simplify participation in the program so that more apartments can be improved and the process will be easier and faster.
- The Trust always sets aside a portion of its budgets to save energy in low income homes. In FY14, our efforts to conserve natural gas included upgrading nearly 300 apartments. However, the costs to implement the program exceeded the value of the energy saved. In FY15, the Trust will search for ways to reduce program delivery costs and to find greater natural gas savings to improve the program's cost-effectiveness. This initiative will include closely reviewing a recently completed study about natural gas saving opportunities in the state and performing new research on the characteristics (age, condition, size, and quantity) of heating systems, building insulation, and appliances found in a sampling of Maine homes.
- The Appliance Rebate Program will be revamped in FY15. Taking lessons learned from a third-party evaluation of the program last year, the Trust will re-introduce rebates for a suite of eligible appliances. The program design will incorporate changes to ensure that customers have greater awareness

of the benefits of high-efficiency models and that the Trust receives better information about what is motivating customer choices.

- The Home Energy Savings Program will look for ways to increase the leveraging effect of rebates so that more customers can participate and those that do can achieve greater savings. The Trust will consider expanding the availability of loans to help consumers pay for project costs beyond what the rebates can cover.

Through continuous improvements, the Trust will strive in the year ahead to support the growth of Maine's contractor community while developing new ways to streamline program participation and expand the acquisition of cost-effective demand-side energy resources.

The program accomplishments that follow would not have been possible without the guidance and oversight of the Board, the Public Utilities Commission and a very engaged group of stakeholders. Together, we will acquire even more electric efficiency resources and grow our power plant of "nega-watts" as well as invest in more heat saving measures. ■

INTRODUCTION

The Annual Report of the Efficiency Maine Trust (the “Trust” or “Efficiency Maine”) describes activities during fiscal year 2014 (FY14), which covered the period from July 1, 2013 to June 30, 2014. It includes the budgets, activities and results for all programs and related activities administered by the Trust during FY14. In total, these programs generated 1,373,430,995 kWh and 3,058,409 MMBtu in cost-effective lifetime energy savings for Maine ratepayers. Some noteworthy impacts of the Trust’s programs include:

- Supporting 261,228 program participants;
- Saving 3,058,409 MMBtu over the full life of the measures installed or 22,002,945 gallons of oil equivalent;
- Saving 1,373,430,995 kWh over the full life of the measures installed;
- Avoiding \$191,779,901 in wasted energy costs;
- Investing \$36,435,129 to leverage \$39,165,293 by program participants;
- Delivering electricity savings at an average levelized cost of 2.3 cents/kWh compared with an average cost of supply of 7 cents/kWh; and,
- Delivering heating fuel savings at an average levelized cost of \$14.29/MMBtu, which is equivalent to \$1.99 per gallon of oil.

The Efficiency Maine Trust was created by State statute in 2009.² The purposes of the Trust include:

- Consolidating under one roof the funds for Maine’s consumer efficiency programs for all fuel types – electric, natural gas, heating oil and wood – together with consumer alternative energy programs;
- Integrating delivery of electric and thermal efficiency measures so the customer can have a one-stop shopping experience;
- Acquiring energy resources (efficiency and alternative energy) that cost less than traditional energy supply to help individuals and businesses meet their energy needs at the lowest cost; and,
- Helping to transform the energy market in Maine so that energy efficient products, alternative ener-

² See, Efficiency Maine Trust Act, Title 35-A, Maine Revised Statutes, Chapter 97.

gy equipment, and related energy services are more accessible and affordable to end-use customers.

The Trust is managed by a nine member board of trustees. During FY14, Trustees Naomi Mermin and John Rohman and Chairman James Atwell completed their terms. New Trustees Lennie Burke, of Norway Savings Bank, Kenneth Fletcher, formerly of the Governor’s Energy Office, and Scott Dunning, of the University of Maine, were appointed to the Board. Al Hodsdon, of A.E. Hodsdon Engineers, and David Barber, of AdvancePierre Foods, were voted Chair and Vice-Chair, respectively. Other Trustees who served during FY14 were Brent Boyles, Assistant Adjutant General of the Maine Army National Guard and formerly of Maine Public Service; attorney and former State Senator Douglas Smith; and Ex Officio members Patrick Woodcock, of the Governor’s Energy Office, and John Gallagher, of the Maine State Housing Authority.

FY14 is the fourth year of program activity since the Trust assumed responsibility for administering Efficiency Maine programs. From 2002-2010, the Efficiency Maine programs were administered by the Energy Division of the Maine Public Utilities Commission (MPUC), while from 2009-2010, Regional Greenhouse Gas Initiative (RGGI) funds for efficiency programs were administered by the Energy and Carbon Savings Trust. Prior to 2002, starting in the 1980s, energy efficiency programs – then called demand-side management (DSM) – were administered by the electricity utilities.

In FY14, the Trust continued to successfully implement and manage programs to promote energy efficiency, reduce energy costs for Maine ratepayers and increase their energy independence. To accomplish these tasks the Trust built upon a strong foundation created during the First Triennial Plan and commenced the process of implementing policy changes enacted through the Omnibus Energy Bill of 2013.

In the category of Business Programs, the Trust’s FY14 activities continued administration of the Business Incentive Program, serving both electricity customers and Until’s natural gas customers; the Large Customer Program; and the Maine Advanced Building Program targeting commercial new construction. In keeping with the Omnibus Energy Act, new elements of the Business Incentive Program and the Large Customer Program enabled customers to reduce their heating oil use through efficiency upgrades.

In the category of Multifamily Programs, FY14 saw the Trust continue its operation of a program promoting upgrades to market-based multifamily apartments and a separate initiative to serve larger apartment complexes serving low income eligible tenants.

For the Residential Programs, the Trust's FY14 campaign carried forward the Retail Lighting Program, the Appliance Rebate Program and the Low Income Program. These existing residential programs were complemented by the re-introduction of the Home Energy Savings Program and a new initiative to fund Low Income Heating Upgrades to implement provisions of the Omnibus Energy Act. Another new initiative in the residential sector was the Trust's administration of efficiency rebates for new residential customers of Summit Natural Gas.

For its Alternative Energy Programs, the Trust concluded the Solar/Wind Rebate Program with the remaining funds available for the program and funded a number of Community Renewable Energy Demonstration Grants. Those grants, funded through the Renewable Resources Fund, enabled the development of model renewable energy projects.

The Trust's FY14 Cross-Cutting Strategies included a significant effort in developing new Public Information and Outreach materials. The Trust also concluded pilots through the Innovation Program that explored how interval data could find conservation and efficiency opportunities in Maine buildings. As in past years, Cross-Cutting Strategies also included third-party evaluations of Efficiency Maine programs.

The overall expenditures and program strategies of the Trust were similar in FY14 to what was spent in FY13, with the notable exception that the Omnibus Energy Bill authorized the programs to shift the use of RGGI funds from electricity programs to saving any energy type, whether heating fuel, natural gas, electricity or biomass.

As was the case last year, energy efficiency remained the lowest cost energy resource in Maine. On a levelized basis, the cost to save electricity by investing in efficiency upgrades averaged 2.3 cents/kWh and the cost to save heating fuels (heating oil, propane, natural gas, wood and kerosene) by weatherizing and installing high-efficiency heating equipment averaged \$14.29/MMBtu, which is equivalent to \$1.99/gallon. Energy efficiency continues to help Maine businesses and homes manage their energy costs, especially as energy prices

trend upward. The programs administered by the Trust played a critical role in helping Maine take advantage of energy efficiency, educating consumers about product models that save energy and helping them connect with vendors and contractors. The Trust's programs also provided financial incentives that spurred consumers to choose energy efficient options over less expensive, less efficient options, which will lower energy bills over the long term and put the Maine economy on a stronger footing. The success of the programs conducted in FY14 built valuable momentum that the Trust has carried into FY15 and positioned the Trust to deliver record-breaking savings.

The summary tables below illustrate the total energy savings and lifetime avoided energy costs associated with each of the programs administered by the Trust in FY14.³ Each table also shows the summary of the Trust's costs. These figures include the financial incentives given to customers ("participants") and the participants' cost-share to install energy upgrades. The costs also include the Trust's efforts to manage the programs, provide public information and outreach, hold training sessions and provide technical support, and conduct quality control, measurement and verification, and evaluation of each program. The benefit-to-cost ratio indicates the ratio of the financial benefits (from the lifetime avoided energy costs) to the combined costs of Efficiency Maine and participants.

As discussed in the Financial section of this report, the Trust invested over \$36 million in FY14 to fund the programs described above. Table 3 below provides a sum-

³ Savings values reported in the program summary tables and individual program tables are Adjusted Gross Savings unless otherwise indicated. Adjusted Gross Savings is the change in energy consumption and/or demand that results directly from program-related actions taken by participants in an Efficiency Maine program, regardless of why they participated, adjusted by factors developed through program evaluations. Periodically, Efficiency Maine enlists independent third-party contractors to evaluate the savings impacts of major programs. The evaluations develop factors to improve the accuracy of gross savings calculations based on installation rates and *in situ*, verified savings rates. These factors are used to derive the Adjusted Gross Savings. The evaluations also analyze program attribution, including identifying program participants who would have installed the same or equivalent efficiency measures on their own even if the program had not been offered ("freeridership") and the percentage of efficient equipment installed due to program influences even though no incentive or technical assistance was received ("spillover"). Factoring in freeridership and spillover delivers "Net Savings" which quantifies the savings directly (adjusted gross - freeridership) and indirectly (spillover) attributable to the program. Efficiency Maine publishes estimated freeridership and spillover factors in the Technical Reference Manuals.

mary of the Trust's payments during FY14.

The following sections of the Annual Report provide a short description of each of the programs referenced in these two tables. The descriptions are divided into five categories:

- Business Programs;
- Multifamily Programs;

- Residential Programs;
- Alternative Energy Programs; and
- Cross-cutting Strategies.

Each description generally includes a statement of the main purpose of the program, a brief explanation of the activities undertaken to implement the program, and a summary of quantifiable results. ■

Table 1: FY14 Costs and Savings for Electric Programs

Program	Annual kWh Savings	Lifetime kWh Savings	Efficiency Maine Costs	Participant Cost	Lifetime Energy Benefit	Cost/kWh (Lifetime)	Benefit to Cost Ratio
Business Incentive Program	38,037,703	502,361,585	\$6,473,179	\$7,207,311	\$39,547,030	\$0.027	2.89
Large Customer Program	11,124,852	136,599,453	\$2,356,143	\$1,990,320	\$10,146,576	\$0.032	2.33
Small Business Direct Install Program	1,096,528	14,254,864	\$295,494	\$208,275	\$1,201,069	\$0.035	2.38
Retail Lighting Program	102,742,906	619,941,161	\$6,398,681	\$529,022	\$49,749,957	\$0.011	7.18
Residential Appliances Program	7,154,510	75,780,932	\$3,264,224	-\$24,486	\$5,261,867	\$0.043	1.61
Low Income Multifamily Weatherization Program	1,414,000	24,493,000	\$2,155,828	\$0	\$5,988,924	\$0.088	2.78
Cross-Cutting Strategies			\$1,028,603				
Total	161,570,500	1,373,430,995	\$21,972,152	\$9,910,441	\$111,895,424	\$0.023	3.51

Table 2: FY14 Costs and Savings for All Fuels and Natural Gas Programs

Program	Annual MMBtu Savings	Lifetime MMBtu Savings	Efficiency Maine Costs	Participant Cost	Lifetime Energy Benefit	Cost/MMBtu (Lifetime)	Benefit to Cost Ratio
Maine Advanced Building Program	2,622	52,439	\$272,108	\$451,744	\$977,786	\$13.80	1.35
Multifamily Efficiency Program	24,066	407,946	\$3,719,793	\$2,578,310	\$9,674,780	\$15.44	1.54
Residential Direct Install Program	30,063	450,948	\$2,260,066	\$716,400	\$11,674,447	\$6.60	3.92
Home Energy Savings/PACE Program	61,698	1,298,009	\$5,183,417	\$21,363,650	\$47,445,694	\$20.45	1.79
Solar & Wind Rebate Program	4,356	87,113	\$428,947	\$3,024,981	\$1,985,355	\$39.65	0.57
Business Natural Gas Incentive Program	26,391	527,422	\$185,126	\$300,021	\$3,006,780	\$0.92	6.20
Low Income Heating Improvement Program	8,002	145,580	\$546,717	\$819,746	\$4,541,291	\$9.39	3.32
Low Income Natural Gas Program	4,448	88,952	\$664,780	\$0	\$578,344	\$7.47	0.87
Cross-Cutting Strategies			\$1,202,022				
Total	161,646	3,058,409	\$14,462,977	\$29,254,852	\$79,884,477	\$14.29	1.83

Table 3: FY14 Payments Made

Use of Funds	Amount (\$)
Administration	\$2,184,218
Residential Programs	\$19,569,778
· Low Income	\$3,870,147
· Non-Low Income	\$15,699,631
Business Programs	\$13,786,785
Cross Cutting Strategies	\$2,167,709
· Education and Awareness	\$41,463
· Evaluation	\$1,094,287
· Alternative Energy Program	\$525,264
· Innovation	\$506,695
Interagency Grants	\$260,309
Total Use of Funds-EMT	\$37,968,799
Agency Fund (15% Rate Relief)	\$1,657,553
Total Use of Funds-All Sources	\$39,626,352

BUSINESS PROGRAMS

Through its Business Programs, Efficiency Maine administers a wide variety of offerings for non-residential customers of all sizes. This class of customers includes small businesses; municipal and state governments; non-profits such as hospitals, schools and universities; commercial offices; warehouses; and large industrial manufacturers.

This section of the Annual Report describes the Business Programs delivered in FY14. Each section includes a description of the funding sources used for the program.

Business Incentive Program – Electric

The Business Incentive Program – Electric provides education, technical assistance, quality control and financial incentives for energy upgrades to Maine businesses of all sizes throughout the state. Funding for this program in FY14 came primarily through the electric system benefit charge, which was supplemented by funds from the Maine Yankee Settlement, RGGI, and the Forward Capacity Market. Last year, more than 1,800 businesses participated in the program and the Trust distributed more than \$4.6 million in financial incentives. The financial incentives fund a portion of the incremental cost of efficient electric equipment and are designed to entice businesses to install more energy efficient equipment than they would have otherwise. Businesses that participate in the program not only experience lower energy costs but often realize savings in other areas, such as lower maintenance costs or improvements in business processes due to the new energy efficient equipment. Technical support from the delivery team can help businesses achieve the full potential of the implemented measures. In total, the equipment installed through this program in FY14 will generate 502 million kWh of lifetime energy savings.

FY14 Activities: The Business Incentive Program – Electric contains both prescriptive and custom paths for businesses to receive financial incentives. The prescriptive path offers a fixed incentive amount and covers the most common efficient electric equipment used in Maine businesses such as lighting, lighting controls, refrigeration, Heating, Ventilation and Air Conditioning (HVAC) units and variable speed drives. The custom path provides incentives, as well as technical assistance, for the purchase and installation of premium-efficiency electrical equipment not on the prescriptive program list or used in a unique application. In FY14, the custom

path supported higher efficient equipment installations used in new construction projects, renovation projects, or for the early replacement of functioning, but less efficient, equipment. The delivery team also markets and provides education about the prescriptive and custom paths throughout the state at trade shows, Chamber events, and association meetings.

Lighting continues to be the most popular upgrade among Maine businesses. Many businesses not only enjoy the energy savings granted by switching to high-efficiency lights but also the additional security stemming from a well-lit storefront, especially for businesses that stay open late. Table 4 below shows the number of projects performed under the Business Incentive Program. As seen in the table, prescription lighting projects make up a majority of the program.

Table 4: Business Incentive Program Measures Installed

Description	# of Projects	# of Participants
Prescriptive		
Prescriptive Agriculture	7	7
Prescriptive HVAC	86	65
Prescriptive Lighting	2,423	1,664
Prescriptive Refrigeration	60	27
Prescriptive Variable Speed Drives (VSD)	23	22
Prescriptive Comp. Air	26	25
Prescriptive Ductless Heat Pumps	45	43
Custom		
Custom Comp. Air	6	6
Custom HVAC	2	2
Custom Lighting	18	14
Custom Miscellaneous	10	9
Custom VFD	1	1
Total	2,707	1,885

High-efficiency light-emitting diode lights (LEDs) continue to be a growing area of the program. The program added several new LED prescriptive measures in FY14 including linear LED fixtures of interior space lighting, horizontal LED refrigerator case lighting and high-bay LED fixtures. The addition of these LED measures to the program will lead to increased energy savings for Maine ratepayers and long-term energy savings for Maine businesses.

In FY14, the Trust focused efforts on expanding and improving the Qualified Partners network. Efficiency Maine Qualified Partners assist customers with the selection of qualifying equipment and incentive applications. Qualified Partners are experienced vendors, contractors, suppliers and other professionals who supply, install, or advise customers about energy efficient equipment. In total, the Trust welcomed more than 400 new and recertified Qualified Partners to the program. One major improvement to the program was the creation of a Qualified Partners website. The new site was designed to meet the needs of the Trust's growing Qualified Partners network and gives them easy access to program announcements, updated Efficiency Maine documents (like the Technical Resource Manual), training opportunities, news, a program toolbox and several other features.

The Trust finished its participation in the Non-Transmission Alternative Pilot in the Boothbay Harbor region in FY14. The Boothbay region is served by a single electric transmission line that struggles to meet the growing demand on the grid during the busy tourist season. Most small businesses in the Boothbay region were using older lighting technology, such as hot, energy-intensive halogen and incandescent lamps. The Trust helped many of these local businesses upgrade to cool, efficient LED bulbs saving energy on lighting and air conditioning. The upgrades installed in the small businesses will both help accomplish the goal of deferring or eliminating the need to build an expensive transmission line, and allow the businesses to lower their monthly electric bills. More than 497,000 kWh in annual energy savings will be created from the projects completed in FY14 as part of the pilot.

FY14 Results: In FY14 the program moved to a new delivery team after a competitive bid process. Collaborative initiatives by the new delivery team and the Trust's management team enabled the program to cut delivery costs and increase performance relative to FY13. Delivery costs decreased 32% year-over-year while energy savings increased 15%. Table 5 below shows the results for the electric Business Incentive Program. During FY14 the program completed 2,707 projects for a total lifetime savings of 502 million kWh. The savings resulted in a benefit-to-cost ratio of 2.89. The Trust's FY14 results compare very favorably to FY13 where the Trust completed 2,022 projects and generated 390 million kWh in lifetime energy savings.



The Herbert Rexall Pharmacy upgraded to high-efficiency fluorescent T-8 bulbs in its Van Buren store through the Trust's Business Incentive Program. The improved quality of light will allow the store to preserve its original paneled ceilings and encourage customers to sit and enjoy more time at the pharmacy's old-fashioned soda counter. The pharmacy projects saving 2,734 kWh per year from the lighting retrofit.

Table 5: Business Incentive Program Electric (kWh) Results

Total Participants	1,885
Total Projects	2,707
Annual kWh Savings	38,037,703
Lifetime kWh Savings	502,361,585
Efficiency Maine Costs	\$6,473,179
Participant Costs	\$7,207,311
Lifetime Energy Benefit	\$39,547,030
Benefit to Cost Ratio	2.89

FY15 Plans: In FY15, the Trust plans to improve the Business Incentive Program by adding incentives for new HVAC and refrigeration measures. The new incentives are designed to create interest in those technologies and diversify the sources of savings beyond the heavy contribution from lighting in the business sector. The Trust will also be moving its screw-in lighting options to the retail program in FY15. This change will allow businesses to receive rebates for their screw-in lighting purchases simply by going to their local retailer instead of submitting applications through a Qualified Partner. This approach will streamline the lighting portion of the program and helps the management team focus on advanced lighting measures.

Business Incentive Program – Natural Gas

The Business Incentive Program – Natural Gas provides commercial, industrial, municipal, non-profit and institutional customers access to technical assistance and financial incentives for the installation of “top tier” energy efficient equipment. Funding for this program stems from an assessment on natural gas utility ratepayers. In FY14, these assessments applied only to Unitil Natural Gas customers and as such, the program only offered prescriptive incentives for customers in the Unitil Natural Gas service territory. The program focuses on premium-efficiency boilers, furnaces and heaters (and their associated controls) as well as efficient gas-fired commercial kitchen equipment.

FY14 Activities: The Business Incentive Program for natural gas saving measures is managed by the Trust using the same delivery team as its counterpart to save electricity. There is significant overlap in the natural gas customers to whom this program is targeted, as well as among the contractors and vendors who install efficient equipment, with the Business Incentive Program for electricity saving measures. By consolidating delivery of these two programs, the Trust avoids duplicating costs and improves uniformity of messaging and program design. Many of the improvements made to the electric program were also extended to the natural gas program, including the establishment of the new Qualified Partner website. In addition, the Trust markets the natural gas program at trade shows and industry events and continually seeks out new customers in Unitil’s service territory.

FY14 Results: Table 6 below shows the results for the Business Incentive Program – Natural Gas. During FY14 the program completed 88 projects in more than 61 businesses for a total lifetime savings of 527,422 MMBtu. The savings resulted in a benefit-to-cost ratio of 6.20. FY14 was the second full year of the natural gas program. In FY14 the program generated 125% more savings relative to the prior year. The Trust attributes these increased savings to a greater understanding of the high-efficiency gas equipment supply chain market and changing incremental costs. The program also took advantage of synergies resulting from the Electric and Natural Gas programs being administered by the same team in parallel to drive down program costs and improve the benefit-to-cost ratio.

Table 6: Business Incentive Program Natural Gas (MMBtu) Results

Total Participants	61
Total Projects	88
Annual MMBtu Savings	26,391
Lifetime MMBtu Savings	527,422
Efficiency Maine Costs	\$185,126
Participant Costs	\$300,021
Lifetime Energy Benefit	\$3,006,780
Benefit to Cost Ratio	6.20

FY15 Plans: The Trust is exploring ways to enhance access to and participation in the Business Incentive Program – Natural Gas as the program becomes more mature and prepares to expand to more utility territories in FY15 and/or FY16. Expansion of the prescriptive measures path and introduction of a custom path are under consideration. The addition of a custom track would allow the Trust to capture savings from businesses holding significant potential energy saving opportunities that are not addressed with the limited menu of measures available through the prescriptive path. Finally, the Trust plans to pursue additional marketing opportunities to create program awareness and drive higher participation. One promising market for the program is new customers that have already decided to transition to natural gas. These customers are in the process of purchasing new equipment in order to accommodate a different fuel source and the Trust believes the natural gas program offers an excellent opportunity to encourage these businesses to purchase more efficient equipment than they would have otherwise.

The Trust will begin laying the foundation for the program’s expansion to other utility territories and utility customers in FY15. The Trust has already made filings at the PUC to implement the expansion and plans to begin expanding the program in FY15.

Large Customer Program

The Large Customer Program provides financial incentives that leverage private investment in large-scale electrical savings projects. The program is targeted at the largest energy consumers in the state. These customers have an average demand above 400 kW and include hospitals, paper mills, large manufactures and organizations that have multiple facilities like college campuses or grocery chains. These large businesses

and institutions have many competing needs for their limited capital budgets, which create a significant barrier for investment in energy efficiency projects. Incentives paid by the Large Customer Program help reduce the initial capital cost of large-scale electrical savings projects. Additionally, the delivery team provides technical support. The funds and resources from the program enable projects to satisfy corporate return-on-investment criteria that would not otherwise be possible without the Trust's involvement. In FY14 it was funded with a combination of revenues from RGGI, the Maine Power Reliability Program Settlement, the Forward Capacity Market, the Maine Yankee Settlement, and the system benefit charge on electric ratepayers. In FY14, the program joined with Maine businesses to start 14 projects. These projects let the businesses make important facility improvements and free up operating budgets. Collectively, the projects' awarded funds in FY14 will save the businesses more than \$26.8 million on their electricity bills over the life of the equipment thanks to the Large Customer Program.

FY14 Activities: Projects under the Large Customer Program often take months to go from the planning stage to awarding a contract. The Trust continually reaches out to potential customers to look for energy efficiency opportunities. By the end of FY14, the Trust conducted at least one meeting per week with potential customers. These meetings typically involve visiting a customer's premises and learning about their specific needs in order to identify potential energy saving projects and customize the project design.

Although the Trust began the year with no "pipeline" of projects under consideration, at the conclusion of FY14 the Trust had awarded contracts for commitments of more than \$1.7 million in financial incentives. These projects are estimated to generate more than 11.12 million kWh in energy savings.

During FY14, the Trust made several modifications to the design of the Large Customer Program. These modifications facilitated the program's success in lining up commitments in FY14 and created a significant influx of well-designed project proposals into the pipeline for FY15 and beyond. The objective of the design modifications was to better align the program with the realities of the way in which large customers review and approve complex and capital-intensive energy saving projects.

The first change was a shift to a Program Opportunity Notice (PON) model. Previously, the Trust would issue one or two Requests for Proposals (RFP) for potential



C&L Aviation was a notable recipient of a Large Customer Program incentive from the Efficiency Maine Trust in FY14. C&L opened a new aircraft painting facility in Bangor and partnered with the Trust to install energy-efficient air handling systems using special heat recovery units and variable speed fans. Conventional painting operations frequently exchange air to keep air quality standards high, but fresh air must be heated to 90 degrees to support the paint stripping process. The new system will enable filtered, pre-heated air to displace 80% of the outside air otherwise needed for ventilation purposes. C&L Aviation anticipates saving about \$433,700 per year in natural gas heating costs.

projects each year. The proposals were all due by a fixed deadline. The Trust would then select which ones to pursue within available budgets. The PON model allows the Trust to work with large customers throughout the year to develop potential projects. The notices appear on the Opportunities section of the Trust's website and the Trust continuously markets the program to potential customers. The RFP model was changed due to feedback from customers. By offering an opportunity notice year round, potential customers under the program can evaluate the feasibility of an efficiency project at an appropriate point in their capital budgeting process rather than developing proposals under the constraints of an arbitrary RFP deadline. The feedback from shifting to the PON model has been positive and the Trust anticipates continuing to run the program in this fashion for the foreseeable future.

During FY14, the program made a second change by offering scoping audits and incentives for technical assistance. Scoping audits entail a high-level review of a facility's energy data and baseline infrastructure. The goal is to identify efficiency project opportunities that are immediately ready for action or that could be eligible for a follow-up Technical Assistance Study. Scoping audits, offered at no charge for large customers, also provide a chance for the Trust team to develop support for the investment among the company staff. Where a Technical

Assistance Study is indicated, the Trust will cost-share a technical and engineering analysis using an engineering firm of the customer's choosing. The Trust covers 50% of the cost for studies and will supplement this by paying an additional 25% of the technical assistance in the event the company moves forward and completes the project.

A third modification to the program design in FY14 was the introduction of an initiative to promote Extra-Large (XL) projects through the Large Customer Program. The Trust found there were several opportunities in the market for very-large-scale energy efficiency projects but these projects face their own unique set of obstacles and required additional protection of the Trust's interests. The XL program provides larger incentives, allows the Trust to take a financial interest in the project and increases transparency around the project and the customer's financials. In FY14 no projects were awarded under the XL program, but the Trust anticipates projects under the program in FY15.

Finally, with proceeds from the Regional Greenhouse Gas Initiative (RGGI) the Trust launched a dedicated PON seeking projects that would deliver greenhouse gas (GHG) emission reductions through the installation of more efficient equipment. The program sought out projects such as industrial insulation, heat exchangers and boiler controls. The Trust launched the PON in December of 2013 with a goal of investing \$2.3 million. By the close of the fiscal year, the Trust had committed \$1.1 million to five projects leveraging \$6.2 million in private investment. The Trust is not reporting the results of these projects in FY14 because none of them were completed in this fiscal year. The costs and savings associated with these projects will be reported, after they are completed, presumably in the FY15 Annual Report.

FY14 Results: Table 7 below shows the results for the Large Customer Program. During FY14 the program awarded incentives to 7 projects for a total lifetime savings of 137 million kWh. The savings resulted in a benefit-to-cost ratio of 2.33. This ratio is higher than FY13 where the program resulted in a benefit-to-cost ratio of 1.56. The \$1.7 million in incentives paid by the Trust leveraged \$2.0 million in private investment.

Table 7: Large Customer Program (kWh) Results

Total Participants	6
Total Projects	7
Annual kWh Savings	11,124,852
Lifetime kWh Savings	136,599,453
Efficiency Maine Costs	\$2,356,143
Participant Costs	\$1,990,320
Lifetime Energy Benefit	\$10,146,576
Benefit to Cost Ratio	2.33

The Trust fell short of its FY14 goal in projects by 63%. Many of the projects that the Trust anticipated awarding by the end of June slipped in to FY15. As a result, the Trust is starting FY15 with \$18 million of incentive requests for cost-effective saving opportunities in the program's pipeline. While not all of the projects are expected to come to fruition, the increased activity is a mark of a successful outreach strategy.

FY15 Plans: The Large Customer Program opens FY15 with 29 potential projects in various stages of planning. This is largely due to the hard work and expanded activities of the program that began in the second half of FY14, and compares very favorably with the level of customer interest that was experienced at the outset of FY14. The Trust anticipates many of these projects will have award contracts by the end of FY15. In addition, the Trust expects to award its first contracts under the XL Large Customer Program during FY15. Finally, the Trust will continue to improve the program, as was done during FY14.

Reconciliation: Prior to FY14, Large Customer Program projects were reported in the year in which the project was started and reflected anticipated savings based on the proposed project and energy efficiency modeling. Starting in FY14, Large Customer Program projects are reported in the year in which the project is completed. This shift in timing allows the reported savings to be based on the realized savings achieved from the final implementation of the project. The Trust is confident that this change to Large Customer Program reporting will provide greater insight and accuracy.

The Large Customer Program often involves complex projects that require multiple years to fully implement. The anticipated costs and savings of projects started in FY12 and FY13 were reported in the Annual Reports for the years in which they were started (or awarded by the Trust). For projects completed in FY14, this Annual Re-

port includes the realized savings – effectively causing savings for those projects to be reported in two Annual Reports. Table 8 shows the anticipated savings reported in FY12 and FY13 for affected projects, along with their respective realized savings reported in FY14. This table will be published in each Annual Report to identify savings that have been reported twice due to the shift in reporting methodology.

Table 8: Large Customer Program Reconciliation

Year Started/Proposed	2012	2013
Anticipated Savings Reported in Year Project Started [kWh/y]	7,589,986	3,069,373
Realized Savings in 2014 [kWh/y]	2,196,522	3,164,793
Anticipated Savings Reported for Projects that were not Pursued [kWh]	7,705,949	4,546,111

Small Business Direct Install Pilot

The Small Business Direct Install pilot was launched as a pilot program in FY13 and concluded in December 2013. The pilot was launched to test the effectiveness of integrating marketing and direct installation of measures with on-bill financing and to improve the accessibility of energy efficiency opportunities for Maine's small businesses. Funds from the electric system benefit charge were used for this pilot program. The pilot targeted two communities with significant numbers of small businesses and different program outreach efforts were tested in each community.

FY14 Activities: After the initial experience with the pilot in FY13, the Trust investigated how the program could be improved prior to launching the Small Business Direct Install Program in FY15. The Trust continued to make numerous improvements to the pilot in FY14 in order to gather as much information as possible about what would increase customer participation most effectively. As a result, the pilot completed exponentially more projects in FY14 than FY13. However, it is important to note that much of the groundwork for the pilot's success in FY14 was laid the previous year. One of the changes made to the program was a renewed focus on marketing and contractor availability. In addition, the Trust found that combining the energy audit and measure installation improved the program's performance. This "one-stop shopping" approach was a key factor in engaging with the Maine small businesses that have



Industrial Street Laundromat in Presque Isle installed 31 high-efficiency lights and anticipates saving more than \$850 per year. According to owner Todd Hedrich, customers think the space looks so much better than before they assume he has changed the floors and the walls. In fact, the only renovation was replacing inefficient T-12s with high-efficiency T-8 bulbs. The result has been a better quality of light for customers and employees as well as a significant reduction in electric consumption.

many competing needs. The contract to deliver the program was awarded to TRC Energy Services after a competitive bidding process at the end of FY14.

FY14 Results: Table 9 below shows the results for the Small Business Direct Install Pilot for the six months the pilot was active in FY14. During FY14 the pilot completed 180 projects for a total lifetime savings more than 14 million kWh. The savings resulted in a benefit-to-cost ratio of 2.38. This represents improvement over FY13 where the pilot completed 17 projects for a lifetime energy savings of 152,414 kWh and due to the start-up costs of launching a new initiative, had a benefit-to-cost ratio of only 0.97.

Table 9: Small Business Direct Install Pilot (kWh) Results

Total Participants	108
Total Installs	180
Annual kWh Savings	1,096,528
Lifetime kWh Savings	14,254,864
Efficiency Maine Costs	\$295,494
Participant Costs	\$208,275
Lifetime Energy Benefit	\$1,201,069
Benefit to Cost Ratio	2.38

FY15 Plans: The Trust is placing a particular emphasis on helping more small businesses take advantage of energy efficiency opportunities in FY15. It is rolling out a

Small Business Direct Install initiative during FY15 on a much larger scale than in the pilot program, using funds from the electric system benefit charge. The program will launch in September in Van Buren, Caribou, Fort Kent and Madawaska. The program will only be offered for a limited time in each area and will slowly expand to other regions of the state throughout FY15.

Maine Advanced Buildings Program

The Maine Advanced Buildings Program for commercial new construction offers comprehensive strategies to help Maine property owners, developers, architects and engineers design new buildings that will achieve significant energy savings. The program accomplishes this by offering education and financial incentives. The program also shares best practices from buildings that successfully completed the program in the past. Because of this, the education and guidance offered by the Trust continues to improve. The program is only open to new construction commercial buildings and does not include multifamily buildings. In FY14, this program was funded principally with RGGI revenues plus some electric system benefit charge funds.

FY14 Activities: The Trust rolled out the current version of the program in March 2014. One major change to the program was the Trust re-instituted the financial incentives designed to promote new construction consistent with Maine Advanced Building standards. The financial incentives were suspended in FY13 due to limited funding. The Trust was able to re-institute the incentives in FY14 because of a change in Maine law that allowed the Trust to use more RGGI revenues for “all fuels” saving measures. Financial incentives are \$1.75 per square foot and are split between the building owner and the build-

ing design team. The incentives are capped at \$175,000 per building. In FY14, the program also increased its requirements. Previously the program required the designs of new buildings be 15-20% more energy efficient than the Maine Uniform Building and Energy Code. Currently the program requires new building designs be 30-35% more efficient.

FY14 Results: The Maine Advanced Buildings Program completed 3 projects in FY14. This represents more than 220,000 square feet of new energy efficient commercial space. These businesses will enjoy lower energy bills for years to come because of the program. The program generated 52,439 MMBtu in lifetime energy savings at a benefit-to-cost ratio of 1.35. The savings per project increased compared to last fiscal year when the program completed 5 projects for a total lifetime energy savings of 39,869 MMBtu at a benefit-to-cost ratio of 1.11. Table 10 below shows the results of the program.

Total Participants	3
Total Buildings	3
Annual MMBtu Savings	2,622
Lifetime MMBtu Savings	52,439
Efficiency Maine Costs	\$272,108
Participant Costs	\$451,744
Lifetime Energy Benefit	\$977,786
Benefit to Cost Ratio	1.35

FY15 Plans: The Trust plans to continue marketing the current version of the program and explore new ways to create interest in energy efficiency among Maine’s construction and development community. ■

MULTIFAMILY PROGRAMS

In 2012, the Trust launched a Multifamily Efficiency Program that provides incentives for building owners to install energy efficiency measures in multifamily buildings that have between five and 20 apartment units. Since then, the Trust has deployed two significant programs designed to address the energy efficiency needs of the more than 50,000 multi-family housing units in the state. Each program is designed to serve a distinct customer base. One program is income neutral and the other program focuses on units housing Low Income Home Energy Assistance Program (LIHEAP) eligible consumers.

This section of the Annual Report describes the Multifamily Programs delivered in FY14. Each section includes a description of the funding sources used for the program.

Multifamily Efficiency Program

The Multifamily Efficiency Program (MEP) provides financial incentives for building owners to install energy efficiency measures in multifamily buildings that have more than five units. Multifamily buildings are traditionally underserved by the energy efficiency industry nationwide, and the Trust's program is designed to help these buildings receive the attention they deserve in Maine. The program currently provides comprehensive retrofit services and prescriptive energy efficiency measures designed to reduce energy consumption in these buildings. The program also provides a free energy benchmarking report to building owners about their units. The reports provide an excellent opportunity to market the program and communicate the benefits of energy efficiency. The report compares a building's energy use with other similarly sized multifamily buildings in Maine, and includes a fuel and electricity cost comparison; a list of suggested improvements, including estimated payback, energy cost savings, and installation costs; and an estimate of how much the property owner might save if they install a set of prescribed measures. The report helps building owners make informed decisions about their participation in the program.

This program was launched more than two years ago using a U.S. Department of Energy (DOE) Better Buildings Program grant. The DOE funding ended in March 2014. Once federal grant dollars were exhausted, the program continued through the end of FY14 using RGGI funds.

FY14 Activities: The Trust made several major changes to the program in FY14, many of which brought the

program more in line with other Efficiency Maine programs. The changes were based, in part, on feedback from prior building owner participants at two focus groups held in September 2013. The building owners offered valuable input based on their experiences with the program. A new version of the program launched in February 2014 and included new incentive pathways for prescriptive and custom projects. The prescriptive path, which was not previously offered, was designed like other Efficiency Maine programs where participants receive financial incentives for installing specified individual energy efficiency measures. Similar to how it operated with DOE funding, the program continues a custom path option, offering a per-unit incentive if the building can generate a whole building energy reduction of at least 20%.



Marcus Woods was one of many apartment buildings participating in the Trust's Multifamily Program in FY14. Over the course of the program, more than 3,700 apartment units were "benchmarked" (analyzed for their energy usage patterns and compared to similar buildings) and more than 1,900 underwent energy upgrades including building envelope and heating system improvements. Those completed at Marcus Woods are projected to reduce fuel and electricity costs by \$8,483 per year.

One major change to the program in FY14 was the elimination of an overarching, whole building energy reduction requirement. Under DOE funding, a building was only eligible for the program if they could generate energy savings of at least 20% of the building's energy footprint. The Trust found this was a major hurdle that prevented many building owners from participating in the program if they could not generate the required savings or did not have the capital to fund a large energy saving project. Now these building owners can pursue

a prescriptive path to purchase energy saving measures more suited to their needs and in line with their budgets. For those building owners interested in an overall energy efficiency plan, the custom path is still available.

Another improvement to the Multifamily Efficiency Program was in the area of marketing. Program marketing expanded to reach new multifamily buildings and older buildings that had an audit or benchmark but did not continue with the program, often for the reasons mentioned above. The delivery team also attended several landlord meetings in FY14 and grew the program's partner network to more than 40 partners.

FY14 Results: Table 11 below shows the results for the Multifamily Efficiency Program. In FY14, the program incentivized 1,733 retrofits in 193 buildings. It also produced 1,277 benchmarks during the fiscal year. The program achieved its aggressive goal of 1,800 units in March 2014, after which the program scaled back as DOE funding ended. Using RGGI funds, the Trust continued the program through the balance of FY14 and into FY15.

Table 11: Multifamily Efficiency Program (MMBtu) Results

Total Participants	193
Total Apartments	1,733
Annual MMBtu Savings	24,066
Lifetime MMBtu Savings	407,946
Efficiency Maine Costs	\$3,719,793
Participant Costs	\$2,578,310
Lifetime Energy Benefit	\$9,674,780
Benefit to Cost Ratio	1.54

FY15 Plans: The Trust plans to continue ramping up the program by helping past participants upgrade additional properties and working with new property owners to upgrade their properties. As before, the focus will be on driving demand for energy upgrades and streamlining the program process to make participation easy. In the new fiscal year, the program plans to incorporate program design improvements that will facilitate a “prescriptive” incentive approach and greater use of the Trust’s online incentive processing system. These changes will take some time and effort and are expected initially to slow the pace of retrofits. However the changes should, over time, result in higher participation levels and lower administrative costs.

Multifamily Efficiency Program – Program Evaluation

The Trust contracted with Opinion Dynamics (supported by Lexicon Energy Consulting) to conduct a comprehensive independent evaluation of the Multifamily Efficiency Program for the period of July 2012 through September 30, 2013. The Trust routinely evaluates its programs in order to assess the effectiveness of a program in achieving its savings goals and to learn how the Trust can refine its programs to improve performance and customer satisfaction. The evaluation was also performed to fulfill requirements outlined in the Better Buildings State Energy Program grant contract between the Trust and the DOE. The Trust considered feedback from the evaluation when transitioning the program.

The evaluation consisted of numerous steps including engineering reviews of 33 projects; site visits of 10 projects; a review of the MEP Prescriptive Tool; an assessment of net impacts; an assessment of cost effectiveness; interviews with MEP deliver team members and Program Partners; and a survey of participating MEP building owners. The evaluation calculated a cost effectiveness of 1.16 using the Total Resource Cost (TRC) test, slightly better than the 0.99 that the Trust initially reported in its FY13 Annual Report. The evaluation found that projects funded through this program contributed to a total savings of 248,916 kWh, or 3,771 kWh per project on average. The evaluation also calculated a Net-to-Gross ratio of 0.90 due to a relatively low 11% freerider-ship level and a spillover level of 1%. The full evaluation report is available at the Trust’s website.

Low Income Multifamily Weatherization Program

The Trust complies with a statutory requirement that certain prescribed minimum funding levels be used for the benefit of electricity and natural gas Maine customers who are LIHEAP-eligible.⁴ The purpose of the Trust’s

4 LIHEAP is the Low income Home Energy Assistance Program, managed by the Maine State Housing Authority, which uses federal funds to help defray the costs of home heating for Maine households at or below 170% of the Federal Poverty Guidelines. The Low Income Multifamily Weatherization Program is just one of the ways the Trust meets its statutory obligation to benefit the low-income sector in Maine. A portion of the required spending level is allocated to the Retail Lighting Program where funds are used to discount high-efficiency bulbs purchased at retail by low-income households and to distribute such bulbs through the Good Shepherd Food Bank and the state’s food pantries for low-income Mainers.

Low Income Multifamily Weatherization Program is to increase the efficiency of electricity and natural gas use in LIHEAP-eligible, multifamily homes in Maine. For buildings containing in buildings of two or more units, the program weatherized electrically heated residential units throughout the state and natural gas units in Unutil's service territory. The program relied on electric system benefit charge funds to fund projects in electrically heated units and natural gas utility assessments from Unutil for projects in gas heated units. This program complements the federally funded Weatherization Assistance Program (WAP) that is administered by the Maine State Housing Authority, but uses different funding and administration and pursues objectives that focus on cost-effective utility ratepayer savings.

FY14 Activities: The program offered several types of upgrades depending on the source of heat and the condition of the building: high-efficiency heat pumps for electrically heated apartments, efficient lighting for all, hot water saving measures for units with electrically heated water, heating system upgrades for natural gas heated properties and envelope improvements for buildings heated with either electricity or Unutil natural gas. The Trust was able to weatherize nearly all of the eligible, low-income multifamily units in Maine over the course of the program. The program was launched in January 2012 and in January 2014 the Trust began winding down program activity. The program was discontinued at the end of the fiscal year as all cost effective steps had been taken in virtually all eligible properties. In addition to weatherizing units, the Trust also revisited some previously weatherized properties to install compact fluorescent light bulbs (CFLs) and faucet aerators in FY14.

FY14 Results: In FY14, the Trust helped 710 electrically heated low-income units in 33 buildings and 297 natural gas heated low-income units in 15 buildings. Together, the units will save 24.49 million kWh and 88,952 MMBtu over the lifetime of measures installed. Tables 12 and 12A below show the results of the programs.

Table 12: Low Income Multifamily Weatherization Program Results

Total Participants	33
Total Apartments	710
Annual kWh Savings	1,414,000
Lifetime kWh Savings	24,493,000
Efficiency Maine Costs	\$2,155,828
Participant Costs	\$-
Lifetime Energy Benefit	\$5,988,924
Benefit to Cost Ratio	2.78

Table 12A: Low Income Natural Gas Program Results

Total Participants	15
Total Projects	297
Annual MMBtu Savings	4,448
Lifetime MMBtu Savings	88,952
Efficiency Maine Costs	\$664,780
Participant Costs	\$-
Lifetime Energy Benefit	\$578,344
Benefit to Cost Ratio	0.87

FY15 Plans: By the end of FY14, nearly all multifamily buildings that met this program's eligibility criteria – i.e., primarily heated with electricity, occupied by LI-HEAP-eligible customers, and presenting cost-effective energy weatherization opportunities – had been served by the program. With the opportunity among this group of buildings effectively exhausted, the Trust discontinued directing electric conservation funds through this channel at the end of FY14.

However, in FY15 the Trust's natural gas conservation funds will continue to be delivered through this channel for the benefit low-income customers. At the outset of FY15, the Trust is evaluating the program and awaits the results of a final customer satisfaction survey. The survey will only cover units that received a heat pump as part of their weatherization. The Trust also is exploring alternative ways to invest weatherization funds to benefit low-income customers beyond multifamily buildings and to pilot new measures or revised program design. ■

RESIDENTIAL PROGRAMS

Efficiency Maine's Residential Programs reach Mainers throughout the state. Residential Programs seek to promote the efficient use of electricity, natural gas, and other heating fuels in Maine homes (in addition to the multifamily homes described in the prior section). The programs help Mainers to make energy efficiency choices and save money. The program will help homeowners and renters to save more than \$119 million during the lifetime of the energy efficiency measures that were purchased and installed in FY14.

This section of the Annual Report describes the Residential Programs delivered in FY14.⁵ Each section includes a description of the funding sources used for the program.

Retail Lighting Program

The Retail Lighting Program is the program that reaches the most Mainers. The program allows people from all over the state to replace their older light bulbs with energy efficient CFLs and LEDs. CFLs and LEDs use much less energy than traditional light bulbs while providing the same amount and quality of light.

The Retail Lighting Program collaborates with ENERGY STAR® lighting manufacturers and retailers to lower the price of CFLs and LEDs funded primarily through the electric system benefit charge, the Maine Yankee Settlement funds, the Maine Power Reliability Settlement and the Forward Capacity Market revenues. Last year more than 400 retailers participated, including a range of big-box, hardware, and grocery stores. The program currently reaches retailers in all parts of the state. In addition to lowering energy costs for customers, the program provides education to customers and retailers about the benefits of efficient lighting.

FY14 Activities: The Retail Lighting Program had significant activity in FY14. An increase in LED sales was particularly noteworthy. In FY14, the program incentivized 113,376 LEDs, a major increase from the prior year. This increase was driven by product improvements, declining prices and an expansion in the number of stores offering LEDs, although CFL sales still account for the bulk of program activity. In FY14, the Trust incentivized



Tammy Lunn, a member of the Efficiency Maine Retail Team, staffed a CFL distribution table at a Bingham Food Pantry event. The Trust offers a number of programs for low-income Mainers to reduce their energy costs, including an initiative with the Good Shepherd Food Bank and food pantries across the state to distribute high-efficiency bulbs. High-efficiency CFLs are in stock at Good Shepherd Food Bank, a hub that serves more than 300 food pantries. These pantries in turn serve more than 40,000 individuals each month.

2,430,052 CFLs, or 96% of the bulbs purchased/given away through the program. In total, the program incentivized 2,543,428 million bulbs. This is an increase of 27% over FY13 and the most the program has ever done in a single year.

One focus of the program is education, outreach and training. In FY14, the program's field representatives trained 8,235 store personnel and customers about the program and the benefits of energy efficient lighting. The program held 77 in-store promotions.

The lighting program is also one of the main ways utilized by the Trust to reach low-income Mainers and make sure they benefit from the Trust's energy efficiency efforts. For example, the program provides efficient light bulbs to food programs, food pantries, and food banks across the state. The program distributed CFLs to 114 food bank events. The food bank events are part of the program's low-income efforts.

FY14 Results: Table 13 below shows the results for the Retail Lighting Program. During FY14, the program incentivized 2,543,428 blubs for a total lifetime energy savings of 620 million kWh. These savings will help lower current and future energy prices for all Mainers. The

⁵ Under contract to Summit Natural Gas of Maine, the Trust administers certain rebates for weatherization and heating system upgrades that are paid for through Summit's regulated rates. The activities and results of this initiative are not reported in this Annual Report. Summit will report the results of the initiative separately.

savings resulted in a benefit-to-cost ratio of 7.18.⁶

In FY14, the baseline for the Retail Lighting Program changed due to more stringent federal requirements for bulbs, raising the baseline assumed to be installed by the typical Mainer and reducing energy savings attributed to the program. FY14 also includes impact from the anticipated federal standards that will come into effect in 2020.⁷ Nonetheless, the Retail Lighting Program is reporting 13.9% higher savings per bulb in 2014 compared to 2013. This increase was driven in part by applying the results of the 2012 program evaluation that revealed 4% of bulbs sold through the retail program were installed in a commercial setting. Because bulbs in commercial spaces tend to operate significantly longer each day than bulbs in a residential setting, the overall energy savings from the program increased. Coincidence of this savings with periods of peak demand on the grid also increased. At the same time, increased electrical savings were being realized, the delivery team was able to drive more bulb sales with smaller incentives and lower delivery costs. The average incentive per bulb dropped from \$1.96 in FY13 to \$1.92 in FY14. Delivery costs decreased by 17.5% from FY13 to FY14. The combination of higher savings and lower costs resulted in an increased benefit cost ratio.

Table 13: Residential Lighting Program (kWh) Results

	Total Participation	Low Income Participation
Total Participants	223,108	30,279
Total Bulbs	2,543,428	345,182
Annual kWh Savings	102,742,906	13,943,765
Lifetime kWh Savings	619,941,161	84,135,386
Efficiency Maine Costs	\$6,398,681	\$868,398
Participant Costs	\$529,022	\$71,796
Lifetime Electricity Benefit	\$49,749,957	\$6,751,821
Benefit to Cost Ratio	7.18	7.18

6 The benefit-to-cost ratio and the lifetime electricity benefit reflect the quantity and monetary value of electricity savings only. These metrics do not reflect the interactive effects of switching to high-efficiency lights which, because they emit very little waste heat, require homeowners to use slightly more energy from their heating systems during heating season than if they retained the inefficient lights. Studies in other states indicate that customers' savings from using more efficient lights significantly outweigh the impacts of the interactive heating effects.

7 To account for the 2020 federal standards, lifetime savings for bulbs installed in 2014 are calculated for six years.

FY15 Plans: One planned change to the Retail Lighting Program in FY15 will be to add screw-in LEDs from the Business Incentive Program. This change will give Maine businesses the convenience of receiving an incentive for their screw-in lighting purchases simply by making their purchase at a local retailer, providing a supplement to the traditional process of accessing rebates through the Business Incentive Program. Under this approach, lighting wholesalers and distributors will also participate in the Retail program, which will make point-of-purchase discounts available to a wide-range of electrical contractors and lighting installers.

Appliance Rebate Program

The Trust works with 114 appliance retailers throughout the state under the Appliance Rebate Program in order to educate sales staff on the benefits of ENERGY STAR® electrical appliances and offer rebates for customer purchases of energy efficient units. The program is funded primarily through the electric system benefit charge, the Maine Yankee Settlement funds, the Maine Power Reliability Settlement, and Forward Capacity Market. At

The Trust's Appliance Retail Program incentivized heat pump water heaters, an emerging energy efficient technology. The Program undertook a significant education campaign to introduce the technology to the Maine marketplace, including instructional videos, social media posts, and trainings for retail sales personnel. 2,035 heat pump water heaters were installed in Maine homes during the last fiscal year.



the beginning of FY14 these appliances included refrigerators, clothes washers, dehumidifiers, water heaters, freezers, air conditioners and air purifiers.

FY14 Activities: The Trust offered seven appliance rebates between the beginning of the fiscal year and the end of October 2013. The program experienced an unexpected surge of demand as the economy emerged from the effects of the recession and customers shopped for household appliances after several years of belt-tighten-

ing. The room air conditioner rebate was especially popular with customers during the particularly hot weather in the summer of 2013.

In FY14, program field representatives also trained 1,620 store personnel and customers and participated in 77 in-store promotions focused on both efficient lighting and appliances. These sessions were held at retailers throughout the state including both national and local stores. At each of these events the delivery team would discuss the benefits of heat pump water heaters and energy efficiency. The program also ran a very successful referral promotion. This promotion helped reverse a temporary decline in sales that occurred at the beginning of the year after a federal heat pump water heater tax credit ended.

FY14 Results: The program was so popular with consumers that by the fall of 2013, the Trust was forced to discontinue rebates on all but one appliance to conserve funds so that the program could remain available through the remainder of the fiscal year. The sole appliance receiving promotion through this program for the final three-quarters of the year was heat pump water heaters.

In FY14, the Trust paid out \$2,622,700 in rebates through this program and generated 75,780,932 kWh in lifetime savings. Table 14 below shows the number of measures rebated by the program and average savings per appliance.

Table 14: Results by Measure under the FY 14 Appliance Rebate Program

Appliance	Number of Rebates	Annual kWh Savings per Appliance
Dehumidifiers	2,014	162
Room Air Conditioners	11,052	10
Room Air Purifiers	106	746
Freezers	649	83
Clothes Washers	5,336	162
Refrigerators	6,679	125
HE Elec. Water Heater	72	205
Heat Pump Water Heater	2,035	2,324
Ductless Heat Pump	102	1,386

The Trust chose to focus its rebates on the promotion of heat pump water heaters for a number of reasons. First, heat pump water heaters generate a large amount of savings per appliance. Table 14 above shows that heat

pump water heaters generate more savings per measure than any other appliance offered under the program. Second, heat pump water heaters are an emerging, high-efficiency technology and the Trust saw an opportunity to push the appliances into becoming much more popular among Maine customers. The Trust succeeded with this goal and rebated more than 2,000 heat pump water heaters in FY14. Finally, the Trust surmised that heat pump water heaters would have the lowest freeridership rates of the appliances previously offered. This hypothesis was confirmed in the evaluation discussed below. As part of the transition, the program lowered the heat pump water heaters rebate from \$500 to \$300 per unit to avoid exhausting the program's budget before the end of the fiscal year.

Table 15 below shows the results of the Appliance Rebate Program. The program rebated 28,037 measures for a total lifetime energy savings of 75.8 million kWh. This resulted in a benefit-to-cost ratio of 1.61. As seen above, heat pump water heaters accounted for only 7.3% of the appliances rebated in FY14. Despite this relatively low number of units, heat pump water heaters generate more savings per appliance making them an excellent source of savings.

Table 15: Appliance Rebate Program (kWh) Results

Total Participants	25,847
Total Appliances	28,037
Annual kWh Savings	7,154,510
Lifetime kWh Savings	75,780,932
Efficiency Maine Costs	\$3,264,224
Participant Costs	\$(24,486)
Lifetime Energy Benefit	\$5,261,867
Benefit to Cost Ratio	1.61

FY15 Plans: In FY15, while continuing to find ways to drive demand for efficient water heaters, the Trust also plans to add back additional appliance measures to the program. Adding in more appliance measures will provide a greater range of energy saving options for Maine's residential consumers and enhance the Trust's progress toward harvesting all cost effective, achievable electric efficiency potential in this sector. The Trust will take extra care to leverage learnings from the independent program evaluation (discussed below) to increase cost effectiveness and mitigate freeridership. Modifications of the program design will focus on the marketing, education and processing of rebates so that customers

are more aware of the Trust's offerings. Additionally, the program will seek to ensure better demonstration that the rebates are a significant factor in the customer's decision to select the higher-efficiency models.

Residential Appliance Program – Program Evaluation

The Trust contracted with NMR Group and Nexant to conduct a comprehensive impact and process evaluation of the Appliance Rebate Program that was run in FY13. The evaluation reviewed all aspects of the FY13 program, including a review of program assumptions such as savings assumptions, savings algorithms and the program's use of the effRT database; an in-depth telephone survey of 382 participants; 11 interviews with store managers in order to collect data and feedback from their stores; 70 onsite visits with participants; verification of the energy and demand savings; and finally an assessment of program results through the calculation of annual savings, lifetime savings and cost effectiveness.

A key finding of the evaluation was the freeridership rate for each appliance. The evaluation team calculated that except for heat pump water heaters, the other appliances being promoted in FY13 experienced a freeridership rate of between 56% and 68%. The heat pump water heaters experienced a freeridership rate of just 21%. The freeridership rate calculated by the evaluation was largely driven by the fact that 39% of surveyed participants reported they were not aware of the rebate at the time they purchased their appliance. This was an unfortunate and unforeseen consequence of the Trust's attempt to make the purchase of high-efficiency appliances more user-friendly. In FY13, the Trust experimented with eliminating certain requirements – e.g., that

customers fill out and sign a coupon – out of concerns that the hassle might discourage customers from purchasing a high-efficiency appliance. The Trust relied on sales staff at retail stores to explain the value of energy efficient models and the availability of Efficiency Maine rebates. In the event, while sales staff did promote the energy efficient models, they frequently neglected to mention the source of the rebates, and regularly filled out the coupon information on behalf of the customer. While this expedited the sales process, it resulted in many customers being unaware of the rebate or the fact that Efficiency Maine was providing it. The Trust plans to focus on addressing this issue in FY15. For example, as the program adds appliances in FY15, the delivery team will take steps to educate store managers and sales staff about the rebate and work to ensure that the rebate information reaches the end customer.

For measures that were the subject of this evaluation, the resulting freeridership levels will be incorporated into the Trust's Technical Reference Manual (TRM) on a forward going basis to discount calculations of savings and cost effectiveness.

Another key finding from the evaluation related to cost effectiveness. The evaluation found that the program from FY13 had an actual cost effectiveness of 1.73 using the total resource cost test (TRC) test, slightly better than what the Trust had originally reported in its FY13 Annual Report. The cost effectiveness of each appliance measure will factor into which appliances the Trust plans to reintroduce into the program in FY15.

The full evaluation report is available at the Trust's website.

Home Energy Savings Program

The Home Energy Savings Program (HESP) serves as the framework for market based weatherization and heating demand reduction achieved through a combination of rebates, financing, customer education and online resources. HESP is designed to raise awareness about the benefits of home weatherization and encourage Maine homeowners to make energy efficiency upgrades. Prior to the renewed availability of rebates under HESP in September 2013, the Trust supported retail weatherization activities in the state through a combination of the Residential Direct Install Pilot in 2012 and 2013 and the ongoing Home Energy Loan Program. Launched in 2012 and supported by U.S. DOE Better Buildings grant funds, the Residential Direct Install pilot provided \$600 to homeowners toward an energy assessment and completion of a minimum of six hours of professionally provided basic air sealing work. In addition to immediate reductions in draftiness, homeowners also received advice from trained professionals on best next steps for lowering energy costs. Any additional measures, including insulation treatments and heating system upgrades, were eligible to be financed through one of the loan products provided by the Trust.

After the end of the Residential Direct Install Pilot, the Home Energy Savings Program was re-launched, offering rebates that started in early September 2013. This phase of the program received most of its funding from RGGI revenues, with contributions from the DOE Better Buildings grant and the Natural Gas Conservation Fund. HESP continues to offer a variety of financing products and incentives to Maine homeowners for best-in-class improvements to the efficiency performance of their homes and heating systems.

FY14 Activities: The Residential Direct Install Pilot ended in September 2013 after a successful 18 months. The pilot ended with the full investment of funds available from the federal Better Buildings grant for promotion of weatherization activities and financing through the Revolving Loan Fund. The pilot connected more than 8,000 Maine homeowners with the services of BPI-certified energy auditors across the state in an effort to encourage more extensive retrofits supported by the loan program.

With lessons learned from the Residential Direct Install Program, and new funding made available for “all-fuels” rebates under the 2013 Omnibus Energy Bill, the Trust conducted a series of stakeholder meetings to develop a



The Trust loaned more than \$3.6 million for home energy saving projects in FY14. Veronica and her family used their low-interest loan for insulation and a high-efficiency heating system; they also received a \$1,000 incentive through the Home Energy Savings Program. They are saving more than 50% in heating costs compared to last year, and the energy savings are covering the cost of the monthly payments on the low-interest loan.

new rebate program design to broaden the list of home energy savings measures that are eligible for incentives and financing through this program.

After gauging initial rebate activity, the program initiated a marketing campaign to generate interest in the program and demand for energy services statewide. The program rolled out two major radio campaigns and published advertisements in the home improvement section of Maine newspapers along with classified ads in regional weeklies for homeowners seeking contractors. The program also began a robust, highly cost-effective web campaign, advertising with online media channels including Hulu, YouTube, Pandora Radio and Google ads. Almost immediately, the Trust experienced a jump in web and call center traffic from the prior year, which continued to build into FYF15.

The HESP delivery team routinely visits communities and attends public events throughout the state. The team also gives media interviews on the benefits of the program and of energy efficiency in general. The delivery team engages the home performance contractor community directly through phone and email communications as well as through the use of monthly webinars. Over the past year, input received has helped identify program design improvements.

Part of the ongoing promotion of the program employs documentation of testimonial case studies. These case

studies showcase participants of completed projects and use a variety of media formats from print and photo to video and audio recordings. Extra effort also was taken in FY14 to upgrade the website pages and navigation to help homeowners find clear concise information that they seek, and are able to research detailed information about particular technologies. As homeowners gain a better understanding of their options around heating systems and envelope improvements, they are able to take next steps by searching for local contractors by ZIP code with the website's locator tool or filling out a loan application directly on the website. Each of the website components has been upgraded through the fiscal year based on feedback received to reflect changes made to the program design. For example, since the vendor locator tool was launched in 2010, the Trust has continued to improve it with more options and more information about the vendors. Today Mainers can see contractor biographies, contact information and what services the contractor provides. The services provided by a contractor are listed with the use of easy to understand icons making it easier for homeowners to find professionals that best suit their needs.

In addition to direct rebate incentives, the Home Energy Savings Program maintains a variety of loan product offerings. These loan products include PACE, PowerSaver, and unsecured energy loans. Each financing product is different and not all Maine homeowners qualify for each loan. For example, the PACE loan was only available in 156 communities at the beginning of FY14. During the year, the PACE loan option was extended to an additional 20 communities. The most popular energy loan currently offered by the Trust is the smaller, unsecured energy loan which requires less paperwork and can be processed more quickly than the other loan products. While the term for the unsecured loan product is shorter at 10 years (compared to a term of 15 years available on PACE loans), unsecured energy loans continue to increase in popularity. By the end of FY14, unsecured loans accounted for 80% of the loans administered by the Trust. The average amount financed was approximately \$8,200. To date, of the more than 950 projects financed, none of the loans of any type offered under HESP have defaulted.

FY14 Results: The tables below quantify the results of the Home Energy Savings Program. In FY14, the program completed 3,184 direct install air sealing promotion projects for a lifetime energy savings of 450,948 MMBtu. This resulted in a benefit-to-cost ratio of 3.92. The program also completed 6,440 home energy savings projects under the re-launched rebate program for a life-

time energy savings of 1,298,009 MMBtu. This resulted in a benefit-to-cost ratio of 1.79. Together, the two programs will save Mainers 1,748,958 MMBtu (equivalent to nearly 12.6 million gallons of heating oil) over the lifetime of the measures. These savings will significantly lower current and future energy costs throughout Maine.

Table 16: Residential Direct Install Program (MMBtu) Results

Total Participants	3,184
Total Installs	3,184
Annual MMBtu Savings	30,063
Lifetime MMBtu Savings	450,948
Efficiency Maine Costs	\$2,260,066
Participant Costs	\$716,400
Lifetime Energy Benefit	\$11,674,447
Benefit to Cost Ratio	3.92

Table 17: Home Energy Savings/Loan Program (MMBtu) Results

Total Participants	6,440
Total Projects	6,440
Annual MMBtu Savings	61,698
Lifetime MMBtu Savings	1,298,009
Efficiency Maine Costs	\$5,183,417
Participant Costs	\$21,363,650
Lifetime Energy Benefit	\$47,445,694
Benefit to Cost Ratio	1.79

FY15 Plans: The Home Energy Savings Program plans to continue its successful outreach and marketing efforts in FY15. In July 2014 the program held a stakeholder meeting in Augusta as a check in on the past years results and to receive input on any changes recommended to further improve the program. Feedback from the stakeholders is being analyzed and a number of recommendations are under consideration for incorporation into the program in FY15. The program will continue to monitor the rate of measure uptake and budget use, and will consider whether changes to incentives or measure eligibility are warranted. Such changes may be made from time to time if they advance the objectives of maintaining cost effectiveness, sustaining the program's limited budget throughout the fiscal year, assisting more Maine homeowners to pursue energy upgrades, and providing stability in the marketplace so that vendors and service providers are encouraged to continue investing in their businesses.

Low Income Heating Upgrades Programs

For FY14, The Trust's Low Income Heating Upgrades Programs can be broken into two categories: the Efficient Central Heating Improvement Program (E-CHIP) and the Low Income Heat Pump Initiative. These initiatives are aimed at Maine's low-income population and are managed directly by the Trust.

E-CHIP: Developed with input from a diverse set of stakeholders, the Trust's E-CHIP initiative was an effort to leverage MaineHousing's health and safety program called CHIP (Central Heating Improvement Program). CHIP is a program implemented by the Community Action Agencies (CAAs, also known as Community Action Programs or CAPs) to repair or replace failing central heating systems that present health and safety issues. A typical example is a furnace with a corroding heat exchanger that could allow for flue gases to enter the home's ductwork. CHIP funds the lowest cost replacement units, which are rarely the most efficient. The E-CHIP program offered to pay 100% of the incremental cost of ensuring that new CHIP heating systems met ENERGY STAR® efficiency standards. It was a funding adder to an existing MaineHousing program.

In FY14, the Trust hosted multiple RGGI stakeholder forums to solicit input on ways to best invest RGGI funds. When the E-CHIP concept was offered, the Trust hosted multiple brainstorming sessions with MaineHousing and the CAPs to develop and launch E-CHIP. Field representative visited the CAPs and worked with CAP field personnel to implement the initiative.

During the course of the year, it became clear that the volume of MaineHousing CHIP replacement central heating systems would not fully invest all available funds. In the event, the Trust worked directly with the CAPs to develop, launch and deliver an additional initiative: the Low Income Heat Pump Initiative.

Low Income Heat Pump Initiative: This initiative employed a standard direct-install program design whereby CAPs identified eligible homeowners based on income level and high fuel usage. For eligible homes, the CAPs drafted a statement of work for a heat pump installation and competitively bid the work out to Efficiency Maine Registered Vendors. CAPs inspected 100% of completed installations to ensure quality workmanship.

FY14 Results: E-CHIP was launched on November 25,

2013, and in the following seven months, 44 heating systems in MaineHousing's CHIP program were upgraded to efficient models at an average incremental cost of \$1,713. Total Trust contributions toward the projects was \$75,363. This investment is expected to save the Maine residents \$106,760 over the 20-year life of the improved central heating systems.

For the Low Income Heat Pump Initiative in FY14, the CAPs installed 123 high-efficiency, ductless mini-split heat pumps in LIHEAP-eligible homes at an average cost of \$3,068 per unit. This installed cost is well below the average cost observed for typical heat pump purchases in the market. The CAPs bidding process, plus economies of scale from treating multiple units at once, drove the per unit price 16% below retail.

Table 18 below shows the combined results for the two initiatives in the Trust's Low Income Heating Upgrades Programs.

Table 18: Low Income E-CHIP and Heat Pump Program (MMBtu) Results

Total Participants	167
Total Projects	167
Annual MMBtu Savings	8,002
Lifetime MMBtu Savings	145,580
Efficiency Maine Costs	\$546,717
Participant Costs	\$819,746
Lifetime Energy Benefit	\$4,541,291
Benefit to Cost Ratio	3.32

FY15 Plans: Because of the small volume of replacements under the E-CHIP initiative, the Trust plans to discontinue E-CHIP in FY15. However, the Trust will continue working directly with the CAPs to offer Low Income Heat Pump Initiative in FY15 as a means to move more efficient heating equipment into low-income residences.

Low Income Weatherization Assistance Program by MaineHousing

The Maine State Housing Authority (MaineHousing) is the designated administrator of the Weatherization Assistance Program (WAP) that provides grants to low-income homeowners and renters to reduce energy costs. Weatherization improvements may include insulation, weather-stripping, caulking, and some incidental and/or safety-related repairs. MaineHousing offers this program to consumers through the CAPs. In contrast to

the Trust's past initiatives to weatherize the homes of low-income customers, the WAP program has focused principally on single family homes. The CAPs screen people for eligibility as part of the LIHEAP application process. Up to 15% of MaineHousing's LIHEAP budget may also be spent on weatherization (including heating system repairs or replacements). The Trust's authorizing statute requires the Trust to report on activities of the WAP in the Annual Report. The summary results from that most recent year of MaineHousing's WAP are provided in the Table below. ■

Table 19: Weatherization Assistance Program Results

	Grant Year	Period	Production Budget	Production Expenses	Units	Comments
LIHEAP Weatherization						
Weatherization efforts to maximize energy savings and reduce fuel burden; minimal health/safety per unit of \$800 and minimal incidental repairs (15% of weatherization costs) to make installation of weatherization materials effective; funds allocated to CAAs, then paid directly to contractor for services; per unit average max of \$6,769.	2013	10-01-12/ 09-30-13	\$2,382,477	\$1,729,410	268	Production Complete
	2014	10-01-13/ 11-30-14	\$3,251,591	\$3,251,591	499 Budgeted	Production in Process—Contract extended to 11/30/2014.
	2015	10-01-14/ 09-30-15	TBD	\$-	-	No expenses as of 11/07/2014 because 2015 LIHEAP Program funded by DHHS on 10/15/2014. In process of determining budget for LIHEAP Wx 2015.
DOE/WX						
Weatherization efforts to maximize energy savings and reduce fuel burden; minimal health/safety per unit of \$800 and minimal incidental repairs (15% of weatherization costs) to make installation of weatherization materials effective; funds allocated to CAAs and then paid directly to contractor for services; per unit average max \$6,769.	2012	04-01-12/ 06-30-13	\$1,998,648	\$1,901,076	283	Grant period extended to continue production through 06/30/2013. Production complete.
	2013	04-01-13/ 03-31-15	\$524,329	\$524,329	84 Budgeted	Production in Process—Contract extended to 03/31/2015.
	2014	04-01-14/ 03-31-15	\$1,430,743	\$1,430,743	203 Budgeted	No expenses as of 11/07/2014 because 2014 DOE Program funding has not received final DOE approval.
Weatherization Supplemental						
Weatherization efforts to maximize energy savings and reduce fuel burden; minimal health/safety per unit of \$800 and minimal incidental repairs (15% of weatherization costs) to make installation of weatherization materials effective; funds allocated to CAAs and then paid directly to contractor for services; per unit average max \$6,769.	2013	01-01-13/ 12-31-13	\$909,117	\$870,875	172	Production Completed. Funded by MaineHousing.
	2014	01-01-14/ 12-31-14	\$1,045,624	\$1,045,624	147 Budgeted	Production in Process. Funded by MaineHousing.

ALTERNATIVE ENERGY PROGRAMS

Through its Alternative Energy Programs, the Trust administers a variety of offerings for residential and non-residential energy customers. This section of the Annual Report describes the Alternative Energy Programs delivered in FY14.

Solar/Wind Rebate Program

December 2010 was the effective date of repeal for the law that authorized the Solar/Wind Rebate funding through a system benefit charge. This particular funding mechanism has been the subject of legislative debate, but it has not been reestablished. Between January 2010 and December 2013 (through the first half of FY14), the program used a combination of funds from the American Recovery and Reinvestment Act of 2009 (ARRA), Renewable Resource Funds, and residual Solar/Wind Rebate Program revenues to continue offering rebates on solar installations for Maine homes and businesses. In the three years after the sunset of system benefit charge funding authorization, the Trust provided rebates for more than 1,150 alternative energy projects including solar photovoltaic arrays (PV), Solar Thermal systems, and a limited number of small wind installations. The remaining program funding was exhausted in December 2013.



The Lincolnville Community Library received a Community Demonstration Grant for a solar photovoltaic array through the Trust's Renewable Resource Fund. Combined with a highly-efficient building envelope and new ductless heat pump system, the library will operate at net-zero energy for much of the year.

Rebates were available for projects meeting the cost-effectiveness test set out in the Trust's Renewable Resources Fund rule, Chapter 103. The amount of the rebate was based on an estimated 20-year lifetime energy production at a rate of \$0.025 per kWh up the maximum allowed rebate of \$2,000 for residential projects and \$4,000 for commercial projects.

FY14 Activities: The Trust continued to administer the program until funding was exhausted in December 2013. In FY14, the program assisted Maine home and business install 178 renewable energy systems in FY14.

FY14 Results: Table 20 below shows the results for the Solar/Wind Rebate Program. In FY14, the program rebated 178 projects for a lifetime energy savings of 2,836,000 kWh. This produced a benefit-to-cost ratio (using the Total Resource Cost or TRC) test of 0.57.

Table 20: Solar/Wind Rebate Program (MMBTu) Results

Total Participants	178
Total Rebates	178
Annual MMBtu Savings	4,356
Lifetime MMBtu Savings	87,113
Efficiency Maine Costs	\$428,947
Participant Costs	\$3,024,981
Lifetime Energy Benefit	\$1,985,355
Benefit to Cost Ratio	0.57

The table above shows the cost effectiveness for the program using the TRC test which is consistent with the methodology applied to the other programs in this report. However, projects under this program were screened using a Modified Participant Cost Test (MPCT) as laid out in Chapter 103 of the Trust's rules. MPCT reflects the net costs to the end user inclusive of all rebates, tax credits and incentives from any source. The test also includes all saving benefits from avoiding the retail cost of energy delivered to the customer. In the case of renewable energy installations, the 30% Federal Tax Credit significantly reduces project costs for participating customers, and the inclusion of avoided transmission and distribution costs increases the project savings compared to the way other programs in this report are analyzed. This result explains why the individual projects are screened for cost effectiveness yet the program is reported as not being cost effective using the TRC test above. Table 21 at right shows the results of the MPCT for the projects rebated in FY14.

Yet another way to assess cost effectiveness is from the perspective of the program administrator (i.e., the Trust) using the Program Administrator Cost Test (PACT) (also referred to as the Utility Cost Test in some states). As illustrated in Appendix A, Table A-3, when considering only the Trust's costs to promote the solar rebates funded through this program, the benefit-to-cost ratio rises to 4.63. Because the limited contribution from the

Trust leveraged such a significant investment from the participants (customers), the cost effectiveness of this program as measured by the PACT was very positive.

Table 21: Solar/Wind Rebate Program Modified Participant Cost Test Results

Total Participants	178
Annual MMBtu Savings	4,356
Lifetime MMBtu Savings	87,113
Efficiency Maine Rebate	369,490
Federal Tax Credit	\$1,018,341
Net Participant Cost	\$2,006,640
Lifetime Customer Benefit	\$3,242,085
Modified Participant Cost Test	1.62

FY15 Plans: The program budget was exhausted in FY14. Forecasts for revenues from voluntary ratepayer contributions to the Renewable Resource Fund are less than \$100,000 for FY15. This is not sufficient funding to run a wide-scale rebate fund and would not have a useful impact on transforming the marketplace for customer-sited renewables. For this reason, revenues destined for the Renewable Resource Fund will be allocated to the Community Renewable Energy Demonstration Grants in FY15.

Community Renewable Energy Demonstration Grants

The Community Renewable Energy Demonstration Grants program is designed to support Maine’s goal of promoting the research, design and demonstration of emerging clean energy technologies. Community Renewable Energy Demonstration Grants are funded by voluntary contributions from electric utility retail customers through the Renewable Resource fund. A variety of projects have been promoted through the program,

such as using solar energy to power laptops at York Middle School or using solar energy to meet nearly all of the Lincolnville Library’s energy, lighting and heating needs. The types of projects funded under the program in FY14 ranged from solar electric, to solar hot air wall systems, to biomass boilers for district heating. Projects are selected through a competitive bidding process. Grant awards are provided for cost-effective renewable energy technologies that demonstrate best uses for renewable technologies and support community facilities.

FY14 Activities: In May 2014, the Trust awarded six demonstration grants. The grants were awarded to the Lincolnville Community Library, City of Biddeford Public Works, Towns of Mapleton, Castle Hill and Chapman Fire Station, Town of Wells Public Works, Western Maine Community Action / Northern Forest Center and Casco Bay Solar Ice, LLC. For each of the grants the Trust provides oversight, guidance and contract management.

FY14 Results: Table 22 below highlights the six projects awarded and provides a brief description. The Trust does not record any savings associated with the demonstration program. As mentioned above, all projects were screened to establish cost effectiveness using the MPCT described in the prior section.

FY15 Plans: The Trust plans to generate case studies and other information about the demonstration projects for distribution on its website and other channels. Future revenues for the Renewable Resource Fund will be directed through competitive solicitations to community demonstration installations of renewable energy technologies and research and development projects. A Request for Proposals (RFP) will be issued in FY15, as funds allow, or may be postponed until FY16 if more time is needed for sufficient funds to accumulate so that multiple demonstration projects can be awarded from the RFP. ■

Table 22: Demonstration Grants Awarded

Project Recipient	Description	Grant Amount	Status
Lincolnville Library	8 kW PV System on low energy use library	\$15,000	Complete
Biddeford PW	3,200 sq ft Solar Hot Air Panel Array on Public Works Facility	\$62,500	Under Contract
MCC Firestation	Pellet Boiler installation on fire station shared by 3 towns in Aroostook County	\$20,800	Complete
Wells - Public Works	PPA of 36 kW PV on Public Works Building	\$31,620	Under Contract
Northern Forest	Pellet Boiler Incentives and promotion for Light Commercial Pellet Boiler installations	\$80,000	In Process
Casco Bay Solar Ice	PPA 66 kW PV on Community Ice Rink in high electrical use district.	\$50,000	Under Contract

CROSS-CUTTING STRATEGIES

Efficiency Maine programs and energy efficiency investments are complemented by a number of activities not directly related to energy efficiency resource acquisition. These include information and outreach, measurement and verification, administrative functions and innovation projects. These functions are centralized to streamline their implementation and to generate cross-program benefits.

Public Information and Outreach

One of the main missions of the Trust is to increase every Mainer's awareness of the cost-effective options for saving energy. Through numerous communications channels, the Trust urges consumers who are planning to purchase new lighting, appliances, heating systems, electronics and other equipment to consider buying one of the more energy efficient models available. Information is disseminated through the Trust's website, printed flyers and brochures, traditional advertising, social media and other multimedia tools. The Trust also manages targeted training sessions and attends industry events such as forums and symposia. The public information and outreach materials address saving energy and the co-benefits of energy efficient choices. Co-benefits include saving money, time and resources; price suppression for grid supplied energy; increased home comfort; promoting energy independence; reducing harm to the environment and human health; helping the Maine economy through job creation and job retention; and reducing a business's operating and maintenance costs.

FY14 Activities: The Trust engaged in a wide range of public information and outreach related activities in FY14. These activities are discussed below and can be broken into the following categories: Events and Training, Case Studies, Call Center, Website, Social Media and Marketing. A major theme of FY14 was an increased online presence for the Trust; the Trust's new website launched in July 2013. The Trust uploaded more videos than ever before, added even more resources to its website and held several internet ad campaigns. Some of the Trust's most successful ad campaigns in FY14 prominently featured online advertisements. As a result, the Trust's website saw a 59% increase in traffic year-over-year in June 2014. In addition, the visitors to the Efficiency Maine website are staying longer and arriving by searching online specifically for Efficiency Maine. The Trust plans to continue adding value to its website in FY15.

Events and Training: The Trust hosts workshops and

symposia on energy technologies, efficiency programs, and successful case studies several times per year. The audiences range from customers, to contractors and vendors, to policymakers. More frequently, the Trust is invited to speak as a panelist before gatherings of Maine businesses or residents. For example, the Trust staff and delivery team contractors are regularly invited to report on energy efficient technologies and the Trust's programs at events including regional Chamber of Commerce breakfasts, community college trainings, the Maine Municipal Association Annual Meeting, the leadership of Maine Hospitals, the Industrial Energy Consumers Group, E2Tech and numerous local citizen "energy committees." In FY14, the Trust held its fourth annual energy symposium and awards ceremony for contractors and customers.

In addition, the Trust held three training sessions for Qualified Partners and Registered Vendors in FY14. The training sessions were designed to support contractors with sales, marketing and customer service as they grow their businesses.

Case Studies: One avenue for outreach is producing and distributing case studies. For each of the programs offered, the Trust has designed, published and distributed dozens of types of brochures, fact sheets and case studies. In the past year, several professionally produced video case studies and informational videos have been added to the library. The videos highlight the different customer classes helped by the Trust including homeowners, small businesses, large businesses and municipalities. The Trust has also produced informational videos about energy efficiency solutions and technologies including heat pump water heaters and air sealing. The videos are distributed on efficiencymaine.com, the Trust's YouTube channel, and through community-access television. In addition, Staff regularly shows these videos at conferences and other events.

Call Center: An important public information tool at the Trust's disposal is the Call Center. In FY14, the Call Center was staffed by professional operators, located in Waldo County, Maine at the toll free number 866-ES-MAINE. The Call Center is used to handle inbound and outbound calls related to all the Trust's programs. The Call Center is staffed during normal working hours, and operators are trained to provide the basic information on all programs. Where detailed or more technical information is needed, the operators are trained to make live transfers to Trust staff or specified delivery team contractors. The Trust continually oversees the Call Center

to make sure questions are answered appropriately and uses feedback received by Call Center representatives to improve program resources and rebate processing.

Website: Increasingly, printed matter is being complemented and in some case supplanted by posting information online. For that reason, the Trust has invested considerable time and money enhancing the Efficiency Maine website to serve as a “go to” information resource on customer-oriented issues around controlling energy use and energy costs in Maine. The website now supplies basic energy information, online calculator tools, a library of printed and video case studies, tutorials on new energy technologies (like ductless mini-split heat pumps), and searchable databases of home energy contractors and commercial contractors.

Among the most important and useful tools developed by the Trust in FY14 for the benefit of customers and spurring the market for energy efficiency are called the online “locator tools.” These tools help residential customers select a contractor who offers home energy equipment or services and commercial customers to locate a qualified contractor (called a Qualified Partner). Web visitors can see contractor biographies, contact information and which services the contractor provides.

em Efficiency Maine shared a link
Posted by Anne Stephenson (7) April 18, 2014

Want to know how much replacing an incandescent bulb with a CFL or LED can save you? Try our lighting calculator here.
<http://www.energymaine.com/at-home/residential-lighting-program/>

	YOU USED TO BUY		CONSIDER	
	LEAST EFFICIENT		MOST EFFICIENT	
	Incandescent	Halogen	CFL	LED
450 lumens	40W	29W	9W	7W

Residential Lighting Program - Efficiency Maine
www.energymaine.com

Efficiency Maine works with manufacturers and lighting retailers to reduce the prices of energy-efficient lighting products in stores statewide. In most stores, prices are simply marked down. In others, in-store coupons are available for use at the.

Like Comment Share 3 1 Share

442 people reached [Boost Post](#)

The number of Efficiency Maine Facebook followers grew in FY14. Staff routinely posts resources and success stories on social media to reach more energy consumers and increase awareness of energy efficient solutions.

Post These Results

Search and Sort Options
Start by entering your ZIP Code and a search radius.
ZIP Code: 04330 Radius: 90 miles
Sort by: distance

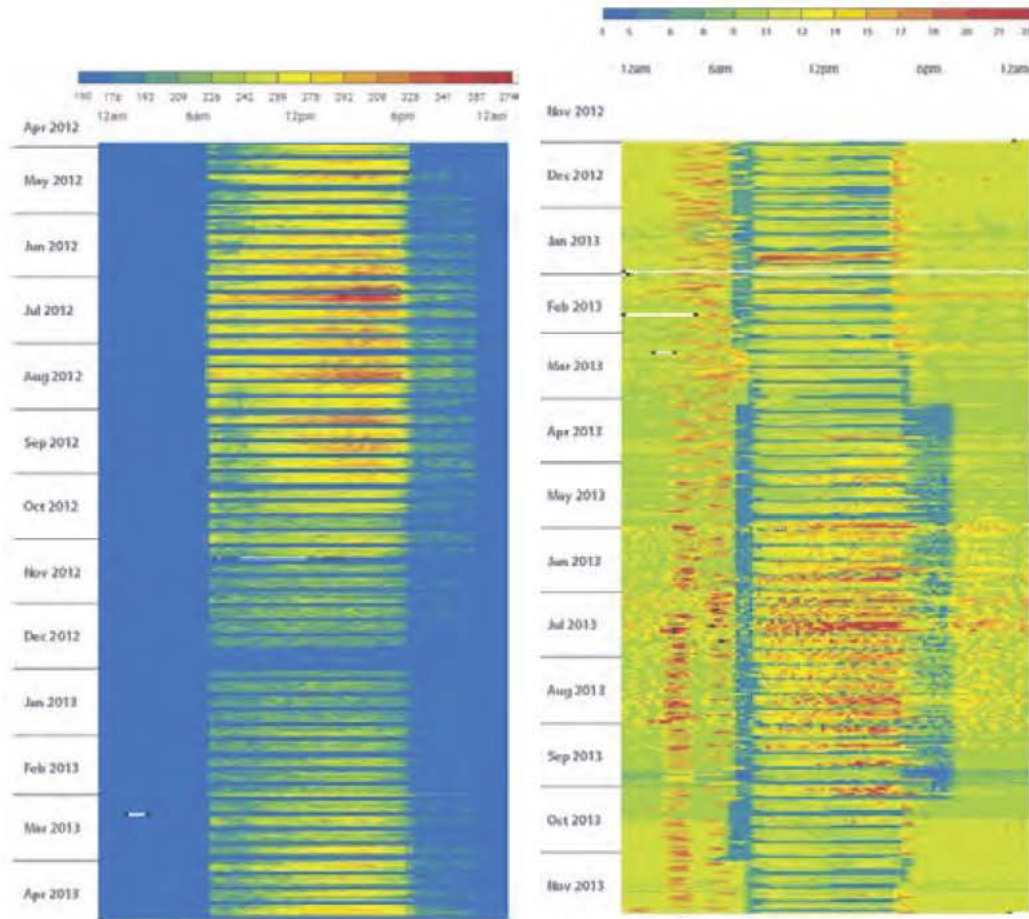
What services do you need?

- All Services
- Supplier
- Architect/Engineering Firm
- ESCO/Auditor/Consultant
- Lighting/Controls
- HVAC
- Heat Pumps
- VFD
- Compressed Air
- Refrigeration
- Natural Gas
- Agriculture

Vendor	Services Provided	Miles	More Info
1 Augusta Fuel Company Augusta, ME - 207-623-3851 www.augustafuel.com	Fuel, Energy Services, Electrical, HVAC, Lighting/Controls	0	More Info
2 R.J. Energy Services Inc. Augusta, ME - 207-622-7720 www.rjenergy.com	Energy Services, Electrical, HVAC, Lighting/Controls	0	More Info
3 Reitze Electric, LLC Augusta, ME - 207-512-8693	Electrical	0	More Info
4 Rockingham Electric - Augusta Augusta, ME - 207-622-7541 www.rockinghamelectric.com	Electrical	0	More Info
5 Sullivan and Merritt Constructors, Inc. - Augusta Augusta, ME - 207-848-5788 ext 215 www.sullivanandmerritt.com	Supplier, Architect/Engineering Firm, ESCO/Auditor/Consultant, HVAC, Heat Pumps, VFD, Compressed Air, Refrigeration, Natural Gas, Agriculture	0	More Info
6 Augusta Natural Gas, LLC Augusta, ME - 207-724-8034 www.augustanaturalgas.com	Natural Gas	5	More Info
7 Toppan Consulting Services Vassalboro, ME - 207-557-9693 www.toppanconsulting.com	Energy Services, Electrical, HVAC, Lighting/Controls	5	More Info
8 DiGiorgio Associates, Inc. Farmington, ME - 207-582-2400 ext. 20 www.digiorgio.com	Energy Services, Electrical, HVAC, Lighting/Controls	9	More Info
9 JNM Electric, LLC Windsor, ME - 207-485-0155	Electrical	9	More Info
10 Knowles Mechanical HVAC, LLC South China, ME - 207-445-4092 www.knowlesmechanical.com	Energy Services, Electrical, HVAC, Lighting/Controls	10	More Info
11 M/S Electric, Inc. Randolph, ME - 207-562-6223 mselectricinc.com	Electrical	10	More Info

The Trust’s website energymaine.com now features updated interactive tools that connect Mainers with energy contractors in their area. The energy services offered by each contractor or vendor are indicated with colorful icons, and business entries expand so that readers can view vendor-supplied information about each business.

Innovation Programs



The Trust tests new program ideas and technologies through its Innovation Pilots. The figures above from a recent pilot show assessments on two different buildings using the interval data from the utilities' "smart meters." A row of color-coded energy usage data runs from left to right for each day of the year. The building represented on the left has well-defined operating hours and it is apparent that the building systems are well-tuned with established start and stop times. Energy consumption significantly drops during unoccupied hours, as signified by the shift from the yellow- and red-coded higher energy consumption levels to the lower consumption levels coded in green or blue. The building on the right has less-defined start and stop times; peak energy consumption coincides with unoccupied hours. The building on the right has opportunity for exterior and interior lighting retrofits as well as lighting controls; building operations can also be fine-tuned for significant low-cost energy savings, including reducing simultaneous heating and cooling.

Social Media: Social demographics are changing, with higher usage of social media such as Facebook and Twitter among Mainers aged 35 and older. Social media now provides an increasingly important way for the Trust to provide information and education to potential customers. It is also a channel for the Trust staff to field questions about programs.

Technological improvements are a cornerstone of energy efficiency, and early investments in technology innovation can pay off over time in terms of future energy savings and economic development. The Trust's Innovation Program provides funding for pilot projects that demonstrate new types of energy efficiency or alternative energy measures. To be eligible for the Innovation Program, technologies must be commercially available, and show significant potential to provide cost-effective energy savings, but remain in need of further demonstration in the Maine marketplace. It is understood that these energy measures may or may not prove to be cost effective or popular, or that their performance may not satisfy customers' needs. One purpose of the Innovation Program is to use smaller pilot projects to make such findings before making larger investments on incentives and program administration.

FY14 Activities: In FY14, the Trust continued to manage the Innovation Pilots begun in

FY13. In that year, the Trust selected three pilot projects that were designed to explore how interval data could be used to find efficiency and conservation opportunities in Maine. Interval data is the term used to describe a customer's electricity usage information as recorded by "smart meters" in 15-minute or 60-minute intervals. Each of the pilot projects selected by the Trust used a different approach to utilizing interval data and represented a breadth of potential uses and ways it could be integrated with the Trust's program delivery, energy assessments, and so-called "smart" devices.

Smart Thermostats Pilot: The pilot installed 100 smart thermostats in a diverse group of the Trust's commercial customers including office buildings, convenience stores, and retail outlets. The smart thermostats can display interval data in addition to traditional temperature control settings. The thermostats and interval data can also be accessed remotely. Using an online interface that the smart thermostats provide, customers can monitor or adjust the temperature as needed, set the thermostats to automatically turn on and off, and monitor changes in electrical consumption. Pilot participants found these units to be an easy way to control energy usage without expensive climate control or building automation systems. The online tools also let customers view their interval data along with the temperature settings. The Trust hopes this level of detail will let customers know how their heating and cooling systems affect their electricity usage and lead to more energy efficient decision making. It should be noted that interval data is only viewed on the smart thermostats if that option is enabled by the utility.

The ecobee™ smart thermostats used by the Trust in the pilot have the added benefit of tracking and controlling humidity. This feature was invaluable to some customers in the pilot who had specific humidity needs, such as a leatherworking business in the Lewiston/Auburn area, and is a function typically played by more advanced building control systems. The pilot is ongoing and the Trust anticipates that 100 more smart thermostats will be installed in FY15.

Building Portfolio Pilot: In FY14, the Trust worked with four businesses that held portfolios of 15 to 60 buildings each. The pilot's delivery team reviewed the portfolios and identified buildings with the highest energy saving opportunities and performed a remote audit on those buildings using interval data. The team then followed up a selection of remote audits with on-site audits. The purpose of the pilot was to explore how interval data could enable building portfolio managers to manage energy consumption in a geographically dispersed building portfolio, as well as target energy efficiency measures. The team was also able to examine how closely the results from the remote audits matched the on-site audits. The Trust discovered the remote audits using interval data were an excellent proxy for on-site audits in a majority of buildings. Based on the results of the pilot, the Trust is currently investigating ways to incorporate more remote audits into existing programs.

Building Type Pilot: The Building Type (Schools) Pilot involved reviewing the interval data for 65 school build-

ings. The pilot's delivery team then selected 25 schools for a remote audit. Results of the audits were reviewed with each school's building manager via webinar. The webinars allowed the schools to see in-depth information about their energy usage. This included how the school compared to other schools, what drove the school's energy usage and energy usage patterns. For example, reviewing the interval data allowed some schools to see electricity usage during off-hours and when the building was only in partial use. This data indicated significant energy efficiency opportunity in lighting retrofits, lighting controls and HVAC scheduling.

FY15 Plans: The Trust is currently reviewing the results of these pilots and looking for ways to incorporate parts of the pilot into the Trust's existing programs. The program will also issue an RFP for additional innovation projects.

Research and Evaluation

The purpose of Efficiency Maine's Research and Evaluation strategy is to provide data-driven research and analysis to inform program delivery strategies, verify program results and ensure ongoing program and organizational improvement. The Trust carries out this strategy primarily through contracts with independent third-parties who specialize in the evaluation of energy efficiency programs. Program evaluations conducted by the Trust are designed to: 1) document and verify the program impacts on energy and demand savings and program cost effectiveness relative to goals; 2) understand why effects occurred and identify opportunities for program improvement; 3) assess program effects on the energy marketplace; and, 4) inform adjustments in program strategies and allocation of resources.

With a focus on delivering rigorous and objective results, the third-party contractors rely on industry-standard evaluation methods and practices to evaluate the Trust's programs. Each program evaluation typically includes both qualitative and quantitative data and methods, such as in-depth interviews with program deliver team members and stakeholders; telephone surveys of program participants and non-participants; engineering review and analysis of participant data and project files; and site visits, including on-site inspection and data collection, including spot measurements and equipment metering.

FY14 Activities: In FY14, the Trust finalized the evaluation of the Home Energy Savings Program (discussed in the FY13 Annual Report), and completed evaluations of

the Multifamily Efficiency Program and the Appliance Rebate Program. Each of these evaluations is summarized, above, in the section immediately following the program description that was the subject of the evaluation. Other research and evaluation project activity during FY14 included Forward Capacity Market (FCM) compliance and revisions to the Residential, Commercial and Multifamily Technical Reference Manuals (TRMs).

The Trust's Residential and Commercial TRMs provide documentation for the Trust's calculation of energy and demand savings from energy efficiency measures. Each TRM serves as a central repository and common point of reference for the methods, formulas, assumptions and sources that are used to estimate savings from energy efficiency measures, and provides a common platform for analyzing energy savings across measures and programs. For each measure, the TRM provides a measure overview and documentation of gross energy and demand savings algorithms; efficiency assumptions for the baseline and efficient measure; deemed parameter values or instructions for inputs to savings algorithms; measure life and cost; and impact factors for calculating adjusted gross savings and net savings.

Table 23 below shows all the evaluation projects in FY14. The table also shows the cost for each evaluation and the funding source.

FY15 Plans: During FY15, the Trust will complete evaluations of Retail Lighting Program and Low Income Multifamily Weatherization Program. The Trust will initiate evaluations for Business Incentive Program, and Large Customer Program. Other FY15 research and evaluation project activity will include the Annual FCM M&V Compliance Review, finalization of the Residential, Commercial and Multifamily TRMs for FY15, and development of updated TRMs for FY16 as well as data gathering in support of the next Triennial Plan.

Data Management

FY15 Activities: In FY14, the Trust continued to make upgrades to its energy efficiency program tracking database (called effRT). The database platform manages the data for many Business and Residential Programs and ensures consistent and accurate estimates of energy savings. The effRT database also improves program activity tracking and data integrity. The system also enables contractors (such as Qualified Partners) to expedite the processing of incentives, significantly reducing and in some cases eliminating paperwork.

FY15 Plans: FY15 and long-term plans for the database platform include moving remaining programs into effRT, improving reporting and tracking, using effRT to assist in short and long-term forecasting, and streamlining program processing in the database. ■

Table 23: Research and Evaluation Project Activity

Subject	Type	Prime Contractor	Total Project Budget	FY2014 Expenditures	Funding Source(s)	Project Start Date	Project End Date
TRM Support and FCM M&V Compliance	Technical Services & Evaluation	Cadmus Group	\$169,748	\$169,748	FCM	Jan-13	Jun-15
Multifamily Efficiency Program	Impact & Process Evaluation	Opinion Dynamics	\$179,972	\$179,950	SEP (non-ARRA)	May-13	Mar-14
Residential Appliances Program (2014) & Retail Lighting Program (2015)	Impact & Process Evaluation	NMR Group	\$449,661	\$406,703	SBC	Jul-13	Dec-14

FINANCE AND ADMINISTRATION

Audited Financial Report

The Trust's certified public accountant, Macpage, LLC issued its audit of financial statements as of the year ended June 30, 2014. The report was unanimously accepted by the Board on September 24, 2014.

The report provided the following opinion from the auditor:

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risk of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no

such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities and major fund, and the remaining fund information of Efficiency Maine Trust, as of June 30, 2014, and the respective changes in financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.⁸

The audited revenues, expenditures and balance sheet for FY14 are summarized in the following tables.

⁸ Efficiency Maine Trust (a component unit of the State of Maine) Financial Report, June 30, 2014.

Table 24: FY14 Funding Source

Revenues	Amount (\$)
System Benefit Charges	15,123,310
· Electric	14,132,966
· Natural Gas	990,344
Renewable Resources Fund	99,218
Federal Funds ¹	5,421,084
· ARRA Energy Efficiency Community Block Grant (EECBG)	45,577
· ARRA Better Buildings (PACE Revolving Loan Fund)	2,281,441
· State Energy Program-Annual	15,000
· State Energy Program-MultiFamily	3,049,060
· USDA	30,006
Maine Power Reliability Project (MPRP) Settlement	1,500,000
Forward Capacity Market	3,814,634
Me Yankee Settlement Proceeds	7,186,971
Regional Greenhouse Gas Initiative (RGGI)	10,424,797
Interest on Accounts and Loans and Other Revenues	523,970
Alternative Compliance Mechanism	1,665
Total Revenues-EMT	44,095,649
Regional Greenhouse Gas Initiative /Agency Fund (15% Rate Relief)	1,657,553
Total Revenues-All Sources	45,753,202

¹ ARRA is the American Recovery and Reinvestment Act USDA is the U.S. Department of Agriculture

For fiscal year 2014, the Trust saw the first of three annual disbursements of the Maine Yankee Settlement Phase I funds as passed by the Legislature with LD 1559. The Trust is to receive 55% of any settlement funds for FY14 and FY15 and a flat amount of \$2 million in FY16.

The Trust has benefited from a number of federal grants, most of which are funded through the American Reinvestment and Recovery Act (ARRA). The ARRA funding stream began expiring in FY13 and there are no expectations that these funds will be replaced with other federal funds. One of the ARRA programs, extended to November 2014, has been used to develop a revolving loan program for home energy projects. The Trust expects that as the loans made with these funds are repaid, the repayment stream can be used to make new loans on a funds-available basis or to leverage revenue bond issues used to enhance the loan fund, although there is no timeline or specific plan in place to pursue the path of bonding.

During 2014, the Trust's major program areas were resi-

dential, business and cross-cutting (also called "enabling") strategies. The highlights of the residential programs were the Low Income Heating Upgrades Programs, the Retail Lighting Program, and the Home Energy Savings Program (which used both RGGI revenues and funds from the Natural Gas Conservation Fund).

Customers served by the Trust's Business Programs comprise all non-residential energy customers, including all sizes of commercial and industrial customers, as well as non-profit organizations and all government buildings. The Business Programs include the Business Incentive Program (pursuing both electricity and natural gas savings), the Large Customer Program, the Small Business Direct Install Program, and the Multifamily Efficiency Program.

The cross-cutting strategies include Public Information and Education, Innovation pilot projects, Evaluation, and various research and data analysis initiatives.

Table 25: FY14 Use of Funds

Use of Funds	Amount (\$)
Administration	\$2,184,218
Residential Programs	\$19,569,778
· Low Income	\$3,870,147
· Non-Low Income	\$15,699,631
Business Programs	\$13,786,785
Cross Cutting Strategies	\$2,167,709
· Education and Awareness	\$41,463
· Evaluation	\$1,094,287
· Alternative Energy Program	\$525,264
· Innovation	\$506,695
Interagency Grants	\$260,309
Total Use of Funds-EMT	\$37,968,799
Agency Fund (15% Rate Relief)	\$1,657,553
Total Use of Funds-All Sources	\$39,626,352

Table 26: Balance Sheet - Governmental Fund

Classification	Amount (\$)
Assets	\$56,894,548
· Cash and investments	\$47,184,601
· Loan Receivables	\$8,008,842
· Other Receivables	\$1,585,431
· Other	\$115,674
Liabilities	\$5,825,244
· Payables	\$3,968,594
· Due to Agency Fund	\$1,657,553
· Other	\$199,097
Net Assets	\$51,069,304
· Capital Assets, shown net of depreciation	\$108,890
· Restricted Net Assets (fund balance)	\$50,960,414

During FY14, unexpended restricted fund balances and variances in budget to actual were due to a number of factors. Approximately \$19,764,381 of fund balance reflects the committed amount from the federal Better-Buildings grant that is reserved for the PACE and Power-Saver loan funds. Additionally, the Small Business loan fund has a fund balance of approximately \$1,238,966, ARRA SEP has approximately \$315,200 reserved for revolving loans, and HESP has set aside \$300,000 for a loan loss reserve for the loan residential loan products. The Multifamily federal grant funds have been expended and the fund balance of \$1,209,408 represents the Maine match that was originally required in order to receive the federal grant. The remaining fund balances reflect the fact that the Trust started new or expanded programs half-way through the fiscal year as increased revenues (from the Omnibus Energy Bill and changes in RGGI) took effect. For example, the Maine Yankee funds, which are a new part of the Conservation fund, arrived in December after which contracts were issued but not

fully expended at year's end. Approximately \$3,425,835 of the Large Customer and Large Customer GHG projects were awarded and put under contract during the year. However, because those projects tend to be very large and sometimes complex, it is common for them to take 6-12 months before they are completed. In this case, most of the funds committed to the Large Customer projects during FY14 will be expended in FY15.

Written Policies and Procedures

Since its inception in 2009, the Trust has developed and instituted new written policies and procedures to ensure standardized implementation of various financial and administrative practices associated with administering programs. During FY14, the Trust approved a new policy for Investments and a Disaster Recovery Plan. It also updated its existing Travel policy as well as the Personnel policy. ■

OTHER INITIATIVES

ISO-NE Forward Capacity Market

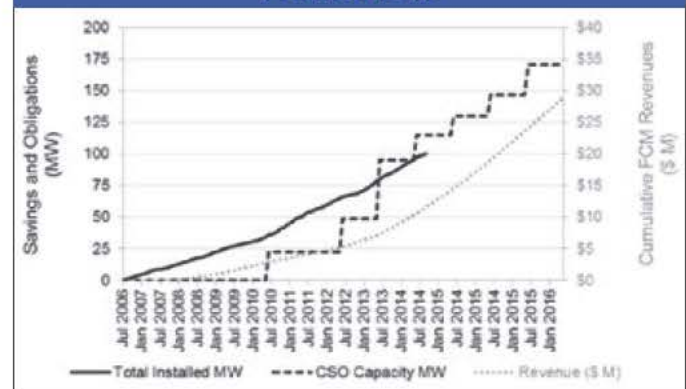
Efficiency Maine has participated in ISO-New England's (ISO-NE) Forward Capacity Market (FCM) since the market was launched in 2006. The FCM ensures sufficient capacity in the ISO-NE region for reliable electric grid system operation. The Trust and other providers of demand resources offset the need for generation during peak periods, thus allowing transmission planners to meet a portion of forecasted capacity needs through energy efficiency instead of traditional generation resources. Each year, ISO-NE forecasts the peak demand three years in the future and then holds an auction to procure the capacity needed to meet the forecasted demand. In the auction, one megawatt of reduced capacity demand is given the same value as one megawatt of capacity supplied by a generator. As a market participant, the Trust is responsible for reporting on its progress in meeting existing capacity obligations from prior auctions and showing ISO-NE that Efficiency Maine's program results meet the ISO-NE measurement and verification protocols.

FY14 Activities: The Trust reported to ISO-NE on the increasing amount of capacity the programs delivered to date every month of FY14. All measures installed with the Trust's incentives are recorded in the effRT database. The database keeps information about how often, and at what time of day, energy efficient equipment is in operation, and aggregates this data for reporting to ISO-NE. To ensure the accuracy of this report, ISO-NE requires an annual independent certification to review the processes behind the Trust's monthly reports. All aspects of the Trust's tracking, verification, and reporting activities are reviewed and certified for their accuracy and compliance with the rigorous requirements of ISO

New England's measurement and verification manual.

FY14 Results: In FY14, the Trust participated in the 8th Forward Capacity Auction (FCA). In the auction, the Trust took on an obligation to supply 24 MW of summer peak demand savings in June 2017 at a price of \$15 per kW per month. The Trust also prepared for the 9th FCA which will be held in February 2015. The Trust finalized its qualifying package for the 9th FCA in June 2014. To date the Trust has delivered or taken obligations for 171 MW of summer peak demand savings, and as a result lowered future energy prices for Mainers. Figure 1 below summarizes the Trust's delivered savings and future obligations.

Figure 1: Summary of the Trust's FCA Actions



Legislative Recommendations

The Trust's authorizing statute provides that the Annual Report should include "Any recommendations for changes to the laws relating to energy conservation." The Trust has no recommendations for legislative changes at this time. ■

APPENDICES

Appendix A

Tables A1 and A2 illustrate the total energy savings⁹ and lifetime avoided energy costs¹⁰ associated with each of the programs administered by the Trust in FY14. Each table also shows the summary of the Trust's costs. These figures include the financial incentives given to customers ("participants") and the participants' cost-share to install energy upgrades. The costs also include the Trust's efforts to manage the programs, provide public information and outreach, hold training sessions and provide technical support, and conduct quality control, measurement and verification, and evaluation of each program. The benefit-to-cost Ratio indicates the ratio of the financial benefits (from the lifetime avoided energy costs) to the combined costs of Efficiency Maine and the participants.

Tables A3 and A4 report benefit-to-cost Ratios based on adjusted gross and net savings for two different cost tests. Adjusted Gross Savings represent verified measure performance. Gross Savings are adjusted based on

evaluated program results, taking installation rates and in-situ realized savings into account. Net Savings estimate the amount of adjusted gross savings that can be directly and indirectly attributed to the program based on program participants' motivation. Participants who, in the determination of the evaluators, would have installed equivalent efficiency measures independent of the program and its incentives are considered "freeriders." To calculate Net Savings, the impacts of savings attributed to freeriders are excluded. By contrast, savings realized by program participants through the installation of *additional* efficiency measures due to program influences, even though no incentive or technical assistance was received ("spillover"), are added. The combined impacts of freeridership and spillover relative to the Adjusted Gross Savings are referred to as the Net-to-Gross ratio. Programs that have not yet been evaluated have a default Net-to-Gross ratio of 1.

9 Savings values reported in the program summary tables and individual program tables are Adjusted Gross Savings unless otherwise indicated. Adjusted Gross Savings is the change in energy consumption and/or demand that results directly from program-related actions taken by participants in an Efficiency Maine program, regardless of why they participated, adjusted by factors developed through program evaluations. Periodically, Efficiency Maine enlists independent third-party contractors to evaluate the savings impacts of major programs. The evaluations develop factors to improve the accuracy of gross savings calculations based on installation rates and in-situ verified savings rates. These factors are used to derive the Adjusted Gross Savings. The evaluations also analyze of program attribution, including identifying program participants who would have installed the same or equivalent efficiency measures on their own even if the program had not been offered ("free-ridership") and the percentage of efficient equipment installed due to program influences even though no incentive or technical assistance was received ("spillover"). Factoring in free-ridership and spillover delivers "Net Savings" which quantifies the savings directly (adjusted gross - free-ridership) and indirectly (spillover) attributable to the program. Efficiency Maine publishes estimated free-ridership and spillover factors in the Technical Reference Manuals.

10 The Retail Lighting Program reflects the quantity and monetary value of electricity savings only. It does not reflect the interactive effects of switching to high-efficiency lights which, because they emit very little waste heat, require homeowners to use slightly more energy from their heating systems during heating season than if they retained the inefficient lights. Studies in other states indicate that customers' savings from using more efficient lights significantly outweigh the impacts of the interactive heating effects.

Table A1: FY14 Program Impacts: Electric Programs

Program	Annual kWh Savings	Lifetime kWh Savings	Efficiency Maine Costs	Participant Cost	Lifetime Energy Benefit	Cost/kWh w(Lifetime)	Benefit to Cost Ratio
Business Incentive Program	38,037,703	502,361,585	\$6,473,179	\$7,207,311	\$39,547,030	\$0.027	2.89
Large Customer Program	11,124,852	136,599,453	\$2,356,143	\$1,990,320	\$10,146,576	\$0.032	2.33
Small Business Direct Install Program	1,096,528	14,254,864	\$295,494	\$208,275	\$1,201,069	\$0.035	2.38
Retail Lighting Program	102,742,906	619,941,161	\$6,398,681	\$529,022	\$49,749,957	\$0.011	7.18
Residential Appliances Program	7,154,510	75,780,932	\$3,264,224	-\$24,486	\$5,261,867	\$0.043	1.61
Low Income Multifamily Weatherization Program	1,414,000	24,493,000	\$2,155,828	\$0	\$5,988,924	\$0.088	2.78
Cross-Cutting Strategies			\$1,028,603				
Total	161,570,500	1,373,430,995	\$21,972,152	\$9,910,441	\$111,895,424	\$0.023	3.51

Table A2: FY14 Program Impacts: All Fuels and Natural Gas Programs

Program	Annual MMBtu Savings	Lifetime MMBtu Savings	Efficiency Maine Costs	Participant Cost	Lifetime Energy Benefit	Cost/MMBtu (Lifetime)	Benefit to Cost Ratio
Maine Advanced Building Program	2,622	52,439	\$272,108	\$451,744	\$977,786	\$13.80	1.35
Multifamily Efficiency Program	24,066	407,946	\$3,719,793	\$2,578,310	\$9,674,780	\$15.44	1.54
Residential Direct Install Program	30,063	450,948	\$2,260,066	\$716,400	\$11,674,447	\$6.60	3.92
Home Energy Savings/PACE Program	61,698	1,298,009	\$5,183,417	\$21,363,650	\$47,445,694	\$20.45	1.79
Solar & Wind Rebate Program	4,356	87,113	\$428,947	\$3,024,981	\$1,985,355	\$39.65	0.57
Business Natural Gas Incentive Program	26,391	527,422	\$185,126	\$300,021	\$3,006,780	\$0.92	6.20
Low Income Heating Improvement Program	8,002	145,580	\$546,717	\$819,746	\$4,541,291	\$9.39	3.32
Low Income Natural Gas Program	4,448	88,952	\$664,780	\$0	\$578,344	\$7.47	0.87
Cross-Cutting Strategies			\$1,202,022				
Total	161,646	3,058,409	\$14,462,977	\$29,254,852	\$79,884,477	\$14.29	1.83

Two different costs tests are used to assess a program's cost effectiveness from the prospective of all utility customers and the prospective of the program administrator. The criteria for the two cost tests are defined below.¹¹

Total resource cost test (TRC) / Perspective of all utility customers (participants and non-participants)

Comparison of program administrator plus customer costs to utility resource savings.

The TRC measures the benefits of the energy efficiency program for the service territory/region as a whole. Costs included in the TRC test are costs to purchase and install the energy efficiency measure, including the costs incurred by program participants and costs of running the energy efficiency program. The benefits in-

¹¹ TRC and PACT defined in accordance with "Understanding Cost-Effectiveness of Energy Efficiency Programs: Best Practices, Technical Methods, and Emerging Issues for Policy-Makers, A Resource of The National Action Plan for Energy Efficiency," NOVEMBER 2008, <http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf>

cluded are the avoided costs of energy.

Program administrator cost test (PACT) / Perspective of utility, government agency, or third party implementing the program

Comparison of program administrator costs to supply-side resource savings.

A positive PACT (greater than 1) indicates that energy efficiency programs are lower-cost approaches to meeting load growth than wholesale energy purchases and new generation resources (including delivery and system costs). The PACT includes only costs incurred by the program administrator and not customer contributions.

Table A3: FY14 Benefit Cost Ratios: Electric Programs

Program	Adjusted Gross Benefit to Cost Ratio		Last Evaluation	Net to Gross Ratio	Net Benefit to Cost Ratio	
	TRC	PACT			TRC	PACT
Business Incentive Program	2.89	6.11	2011	0.68	2.35	4.16
Large Customer Program	2.33	4.31	2011	0.95	2.24	4.09
Small Business Direct Install Program	2.38	4.06	Note 1	1.00	2.38	4.06
Retail Lighting Program	7.18	7.78	2012	0.68	4.90	5.26
Residential Appliances Program	1.61	1.61	Note 2	0.95	1.49	1.53
Low Income Multifamily Weatherization Program	2.78	2.78	Note 3	1.00	2.78	2.78
Total	3.51	5.09		0.73	2.78	3.75

Table A4: FY14 Benefit Cost Ratios: All Fuels and Natural Gas Programs

Program	Adjusted Gross Benefit to Cost Ratio		Last Evaluation	Net to Gross Ratio	Net Benefit to Cost Ratio	
	TRC	PACT			TRC	PACT
Maine Advanced Building Program	1.35	3.59	Note 4	1.00	1.35	3.59
Multifamily Efficiency Program	1.54	2.60	Note 2	1.00	1.54	2.60
Residential Direct Install Program	3.92	5.17	2013	1.00	3.92	5.17
Home Energy Savings/PACE Program	1.79	9.15	2011	1.00	1.79	9.15
Solar & Wind Rebate Program	0.57	4.63	Note 4	1.00	0.57	4.63
Business Natural Gas Incentive Program	6.20	16.24	Note 4	0.66	5.42	10.78
Low Income Heating Improvement Program	3.32	8.31	Note 1	1.00	3.32	8.31
Low Income Natural Gas Program	0.87	0.87	Note 4	1.00	0.87	0.87
Total	1.83	5.52		0.99	1.81	5.45

Note 1 New program, not yet evaluated. Program Evaluation of 2016 FY anticipated with report published in 2017.

Note 2 First program evaluation performed in 2014. Results of the evaluation are presented in this Annual Report and incorporated into Efficiency Maine's 2015 Technical Reference Manuals (TRMs). Benefit-to-Cost Ratios presented in this table reflect the TRM factors effective in 2014.

Note 3 Currently being evaluated. Results are to be published in 2015.

Note 4 Evaluation not scheduled.

Appendix B

Table B1: Program Expenditures

Program	Incentive	Technical Support	Marketing	Administrative	Total
Business Incentive Program	\$4,672,658	\$1,237,269		\$513,831	\$6,473,179
Large Customer Program	\$1,710,526	\$484,785		\$160,832	\$2,356,143
Small Business Direct Install Program	\$242,038	\$30,000		\$23,456	\$295,494
Retail Lighting Program	\$4,875,271	\$1,015,492		\$507,918	\$6,398,681
Residential Appliances Program	\$2,622,700	\$382,415		\$259,109	\$3,264,224
Low Income Multifamily Weatherization Program	\$1,656,071	\$328,631		\$171,126	\$2,155,828
Cross-Cutting Strategies			\$31,918	\$926,918	\$1,028,603
Sub Total	\$15,779,265	\$3,548,359	\$81,339	\$2,563,190	\$21,972,152

Program	Incentive	Technical Support	Marketing	Administrative	Total
Maine Advanced Building Program	\$225,872	\$24,498	\$138	\$21,600	\$272,108
Multifamily Efficiency Program	\$2,539,604	\$721,225	\$163,693	\$295,272	\$3,719,793
Residential Direct Install Program	\$1,910,400	\$170,265	\$0	\$179,401	\$2,260,066
Home Energy Savings/PACE Program	\$3,921,050	\$601,435	\$249,480	\$411,452	\$5,183,417
Solar & Wind Rebate Program	\$369,490	\$25,408	\$0	\$34,049	\$428,947
Business Natural Gas Incentive Program	\$158,544	\$11,887	\$0	\$14,695	\$185,126
Low Income Heating Improvement Program	\$452,701	\$50,619	\$0	\$43,398	\$546,717
Low Income Natural Gas Program	\$575,667	\$36,344	\$0	\$52,769	\$664,780
Cross-Cutting Strategies			\$72,457	\$716,966	\$1,202,022
Sub Total	\$10,153,327	\$2,054,280	\$485,769	\$1,769,601	\$14,462,977

TOTAL ALL PROGRAMS	\$25,932,592	\$5,602,638	\$567,108	\$4,332,791	\$36,435,129
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Appendix C

Table C1: Efficiency Maine Trust FY15 Amended Budget as of 11/19/14

	ADMIN FUND	RGGI	CONSERVATION	MPRP SET.	FCM	NAT GAS	RENEW RES.	LONG TERM CONTRACTS
REVENUES AND FUNDING	1,370,324	21,447,763	31,277,487	4,454,631	6,258,483	1,985,104	481,467	8,000,000
EXPENDITURES								
Administration								
Board Meeting Expenditures	11,800							
Personnel Costs	763,213	77,364	113,911	21,923	11,990			
Staff Support	-		-	-				
Office Rent & Operations	134,700	23,590	37,774	5,909	2,670			
Corp Dues	-				5,000			
Sponsorship & Dues	-		15,000					
Communications	196,953							
Travel	4,450		750					
Meals	1,050		100					
Conference Registration	4,000							
Professional Services	181,858	10,000	15,000					
Technical Consultancy & Support	-		413,932		781,580	118,188		
Software and equip	38,300							
Subtotal Administration	1,336,324	110,954	596,467	27,832	801,240	118,188	-	
Residential Programs								
Program Administration	-	78,987	116,923	10,622				
Low Income - Initiatives	-	706,274	2,640,264	487,151		280,005		
Low Income - Lighting Appliance	-		1,551,533					
HESP	-	5,576,266	400,000	-	2,551,691	501,338		
Lighting, Appliance, & Electronic	-	97,178	9,834,651	382,568	30,430	-		
Loan Loss Reserve	-	300,000						
Evaluation 2016	-	100,000						
Revolving Loan Support	-							
Subtotal Residential Programs	-	6,858,705	14,543,371	880,341	2,582,121	781,343	-	
Business Programs								
Program Administration		86,882	171,866	21,161	10,582			
Business Incentive Program	-	3,274,913	6,138,025	508,413	997,189	1,004,410		
Large Customer Projects	-	996,534	3,054,477	2,983,916	947,000			8,000,000
Large Customer GHG	-	4,846,703	-					
Maine Advanced Building	-	506,159	-					
Maine Green Schools (DEP)	-							
Direct Install	-	-	4,368,384					
State House Energy Project		76,747	76,747					
Maine High Performance Schools			171,142					
MultiFamily Retrofits	-	2,031,977	-					
BOC Training	-		120,000					
Subtotal Business Programs	-	11,819,915	14,100,641	3,513,490	1,954,771	1,004,410	-	8,000,000
Cross-Cutting Strategies								
Program Administration		43,978	97,589	17,968	8,338			
Energy Education		-	71,520		71,520			
Innovation Pilots		27,854	135,000		300,000			
Natural Gas Study		106,863						
Independent Program Evaluation		190,214	490,671		170,000			
Triennial Plan Studies		-	350,000		100,000			
M&V Plan Review		-	100,000		100,000			
Subtotal Cross-Cutting Strategies	-	368,909	1,244,780	17,968	749,858	-	-	-
Alternative Energy								
Renewables-Demonstration Projects	-	-	-	-	-		445,367	
Subtotal Alternative Energy	-	-	-	-	-	-	445,367	-
Other Items								
Payments to/for State Agencies	34,000	369,000	206,128	15,000	35,493	10,000	36,100	-
15% Rate fund		1,445,280						
InterFund Transfers Out		475,000	586,100		135,000	71,163		
Subtotal Other Items	34,000	2,289,280	792,228	15,000	170,493	81,163	36,100	-
TOTAL EXPENDITURES	1,370,324	21,447,763	31,277,487	4,454,631	6,258,483	1,985,104	481,467	8,000,000

Table C1: Efficiency Maine Trust FY15 Amended Budget as of 11/19/14 (continued)

	ARRA BB	SEP GRANT	DEP SCHOOL	MULTIFAMILY FUND	SMALL BUS RLF	SEI RLF	SEP RLF	FY 15 TOTAL BUDGET
REVENUES AND FUNDING	1,767,004	50,000	4,728	1,209,408	4,000	10,000	10,000	78,330,399
EXPENDITURES								
Administration								
Board Meeting Expenditures								11,800
Personnel Costs	23,515	-		-			-	1,011,916
Staff Support		-					-	-
Office Rent & Operations	49,985	-					-	254,628
Corp Dues								5,000
Sponsorship & Dues		-					-	15,000
Communications	25,758	-					-	222,711
Travel		-			100		-	5,300
Meals		-					-	1,150
Conference Registration		-					-	4,000
Professional Services	10,000	-					-	216,858
Technical Consultancy& Support								1,313,700
Software and equip		-			3,900		-	42,200
Subtotal Administration	109,258	-	-	-	4,000		-	3,104,263
Residential Programs								-
Program Administration	59,408	-					-	265,940
Low Income - Initiatives								4,113,694
Low Income - Lighting Appliance HESP	1,260,308	-					-	1,551,533
Lighting, Appliance, & Electronic		-					-	10,344,827
Loan Loss Reserve								300,000
Evaluation 2016								100,000
Revolving Loan Support	338,030	-				10,000	10,000	358,030
Subtotal Residential Programs	1,657,746	-	-	-	-	10,000	10,000	27,323,627
Business Programs								
Program Administration		-					-	290,491
Business Incentive Program		-					-	11,922,950
Large Customer Projects		-					-	15,981,927
Large Customer GHG								4,846,703
Maine Advanced Building		-					-	506,159
Maine Green Schools (DEP)			4,728					4,728
Direct Install		-					-	4,368,384
State House Energy Project								153,494
Maine High Performance Schools								171,142
MultiFamily Retrofits		-					-	2,031,977
BOC Training		-					-	120,000
Subtotal Business Programs	-	-	4,728	-	-	-	-	40,397,955
Cross-Cutting Strategies								
Program Administration	-	-					-	167,873
Energy Education		50,000					-	193,040
Innovation Pilots		-					-	462,854
Natural Gas Study								106,863
Independent Program Evaluation		-					-	850,885
Triennial Plan Studies		-					-	450,000
M&V Plan Review		-					-	200,000
Subtotal Cross-Cutting Strategies	-	50,000	-	-	-	-	-	2,431,515
Alternative Energy								
Renewables-Demonstration Projects								445,367
Subtotal Alternative Energy								445,367
Other Items								
Payments to/for State Agencies								705,721
15% Rate fund								1,445,280
InterFund Transfers Out				1,209,408				2,476,671
Subtotal Other Items	-	-		1,209,408				4,627,672
TOTAL EXPENDITURES	1,767,004	50,000	4,728	1,209,408	4,000	10,000	10,000	78,330,399

Appendix D

Table D1: Revenues from system benefit charges and Alternative Compliance Mechanism

PUC Assessments and Revenue Collections - FY 2014					
System Benefit Charge (SBC)					
Assessment Quarter:	Apr-Jun 2013	July-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	
Billing Date:	7/23/2013	10/3/2013	1/15/2014	4/10/2014	
Name					Total - FY14
Bangor Hydro-Electric Co	\$454,570.0	\$515,604.0	\$496,623.0	\$700,739.0	\$2,167,536.00
Central Maine Power Co	\$2,566,484.0	\$2,933,396.0	\$2,606,025.0	\$2,992,413.0	\$11,098,318.00
Eastern Maine Electric Coop	\$31,508.0	\$33,928.0	\$32,597.0	\$38,398.0	\$136,431.00
Fox Island Electric Coop	\$3,187.0	\$4,109.0	\$3,466.0	\$3,440.0	\$14,202.00
Houlton Water Co	\$22,397.0	\$22,846.0	\$23,611.0	\$28,536.0	\$97,390.00
Kennebunk Light & Power	\$34,594.6	\$40,964.0	\$35,602.7	\$43,350.1	\$154,511.32
Madison Electric Works	\$8,903.0	\$9,866.0	\$10,434.0	\$11,595.0	\$40,798.00
Maine Public Service Co	\$127,890.0	\$130,696.0	\$141,537.0	\$0.0	\$400,123.00
Swan's Island Electric	\$687.0	\$615.0	\$762.0	\$743.0	\$2,807.00
Van Buren Light & Power Co	\$4,648.9	\$4,491.6	\$5,280.0	\$6,428.9	\$20,849.29
Totals	\$3,254,869.4	\$3,696,515.6	\$3,355,937.6	\$3,825,643.0	\$14,132,965.61

State Budget Projections	FY2014	FY2015
Bangor Hydro-Electric Co	\$1,993,786	N/A
Emera (Bangor Hydro & MPS)	N/A	\$3,551,820
Central Maine Power Co	\$10,669,903	\$15,352,205
Eastern Maine Electric Coop	\$135,533	\$188,724
Fox Island Electric Coop	\$13,812	\$19,646
Houlton Water Co	\$98,251	\$134,719
Kennebunk Light & Power	\$151,018	\$213,734
Madison Electric Works	\$39,906	\$56,436
Maine Public Service Co	\$474,101	N/A
Swan's Island Electric	\$3,104	\$3,883
Van Buren Light & Power Co	\$19,486	\$28,841

Natural Gas					
Assessment Quarter:	Apr-Jun 2013	July-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	
Billing Date:	7/23/2013	10/3/2013	1/15/2014	4/10/2014	
Name					Total - FY14
Northern Utilities - Unutil	\$194,323.25	\$303,400.32	\$254,315.07	\$238,285.32	\$990,323.96
Totals	\$194,323.25	\$303,400.32	\$254,315.07	\$238,285.32	\$990,323.96
FY14 Projection					\$523,889.00
FY15 Projection					\$1,913,941.00

Alternative Compliance Mechanism (ACM)					
Assessment Quarter:	Apr-Jun 2013	July-Sep 2013	Oct-Dec 2013	Jan-Mar 2014	
Billing Date:	7/23/2013	10/3/2013	1/15/2014	4/10/2014	
Name					Total - FY14
Mint Energy, LLC	\$1,664.78	\$0.00	\$0.00	\$0.00	\$1,664.78
Totals	\$1,664.78	\$0.00	\$0.00	\$0.00	\$1,664.78

Notes

FY 14 By the Numbers

HOUSEHOLDS

2,543,428



High-efficiency
light bulbs
sold

3,158

Ductless heat pumps installed



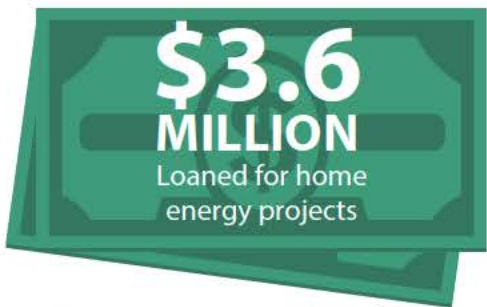
2,158

Apartments
retrofitted in 241
multifamily
buildings



**\$3.6
MILLION**

Loaned for home
energy projects



4,532

Home energy assessments
with air sealing conducted



2,035

Heat pump water
heaters installed



... Mainers saved enough
in FY 2014 to power

25,371
homes



**OVER THEIR FULL LIFETIME, THE
PROJECTS INSTALLED WITH
HELP FROM EFFICIENCY MAINE
IN FY14 WILL SAVE...**



Average levelized cost of electricity
saved vs. delivered/supplied



BUSINESS PROGRAMS

(serving factories, offices, businesses, schools, hospitals and towns)

2,887

energy saving projects installed including high-efficiency lights, ventilation systems and motors



107,674,273

Combined lifetime kWh saved through projects with 7 large businesses



EXPANDING THE EFFICIENCY ECONOMY

\$75 MILLION

TOTAL EFFICIENCY INVESTMENTS IN FY14



1,180

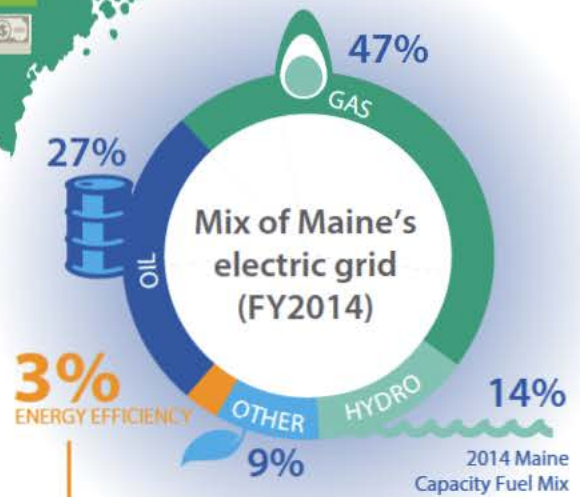
Businesses in our network of contractors, wholesalers, architects, engineers, and other energy professionals

Since the launch of the trust ...



... more than **\$964.7 MILLION**

in lifetime energy savings were noted in fiscal years 2011-2014



Efficiency projects in Maine deliver the equivalent of a **96 MW power plant** operating on the hottest day of the summer, accounting for **3% of Maine's generating capacity** during summer peak.

