



ANNUAL REPORT

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This report is submitted to the Vermont Public Service Board and to the Vermont Department of Public Service, in fulfillment of the regulatory requirement for submitting Efficiency Vermont's annual report for 2012.



ANNUAL REPORT 2012

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1. INTRODUCTION

1. INTRODUCTION

OVERVIEW

In 2012, Efficiency Vermont helped Vermont households, businesses, and communities save money and energy, strengthen the economy, and protect Vermont's environment. Efficiency Vermont's ongoing success in obtaining cost-effective energy savings continued to define efficiency as the least expensive approach to reducing Vermonters' energy costs and to meeting the state's energy needs.

To acquire these savings, Efficiency Vermont delivered comprehensive electric and thermal energy efficiency services designed both for immediate energy savings and for lasting benefits to Vermonters and to the state:

- **Empowering and motivating Vermonters** with 1) technical and financial analysis; 2) information about efficient technologies, building science, energy planning, and their benefits, and 3) resources to bring efficiency within financial reach for Vermonters of all income levels and to enable Vermonters in all regions of the state to make informed decisions about cost-effective efficiency investments to benefit their households, businesses, and communities.
- **Transforming the marketplace** through training and support for the businesses and contractors that Vermonters turn to for efficient products and services.
- **Helping to secure Vermont's energy future** through involvement in state, regional, and national efficiency planning, policy, programming, and research efforts that have a lasting, positive impact on Vermonters.

1.1 QUANTIFIABLE PERFORMANCE INDICATORS¹

Efficiency Vermont continued to operate under a performance-based model. This model ties compensation to specific, aggressive goals in order to encourage high levels of performance, innovation, quality, and operational efficiency. These goals—for specified

¹ Unless otherwise noted, results provided in the narrative section of this report include Customer Credit data and do not include projects in Burlington Electric Department territory, Vermont Gas Systems territory, or funded through the Green Mountain Power Energy Efficiency Fund.

energy savings acquisitions, administrative performance elements, and other areas—are established with the Vermont Public Service Board as Quantifiable Performance Indicators (QPIs) for a three-year performance period. The results shown in **Table 1** reveal strong progress toward Efficiency Vermont’s QPI targets for the 2012-2014 performance period. These results were achieved within the budget parameters set by the Vermont Public Service Board.

Table 1. Selected QPI results and progress toward 2012–2014 goals²

Key Quantifiable Performance Indicators (QPIs)	Funding Pool	2012 Results	3-year Goal	% of 3-year Goal Achieved
Electric savings (in megawatt-hours)	Electric Efficiency Charge	110,179	274,000	40%
Total Resource Benefits	Electric Efficiency Charge	\$118,358,445	\$315,710,000	37%
Summer peak kilowatt (kW) demand reduction	Electric Efficiency Charge	15,097	41,920	36%
Summer peak kW demand reduction in Geographic Targeting areas—Susie Wilson Road	Electric Efficiency Charge	870	1,570	55%
Summer peak kW demand reduction in Geographic Targeting areas—Saint Albans	Electric Efficiency Charge	584	1,800	32%
Ratio of gross electric benefits to spending	Electric Efficiency Charge	3.3	1.2	n/a
MMBtu Savings (in million British thermal units)	Heating & Process Fuels Revenues	78,361	149,000	53% ³

² The QPI goals and results in Table 1 are directly attributable to their respective funding sources: either the Energy Efficiency Charge (EEC) or the sources that fund heating and process fuel (HPF) programming. In the remainder of the narrative of this report, electric and MMBtu savings reflect achievements from funding provided through both the EEC and HPF funds. Thus, the total electric and MMBtu in this narrative, if summed, may be different from the amount shown in the QPI results in Table 1.

³ The Three-Year Goal and Percentage of Three-Year Goal for Savings in MMBtu reflect target changes proposed by Efficiency Vermont and approved by the Vermont Public Service Board in 2013.

Efficiency Vermont also engaged in efforts related to an Administrative QPI plan, requiring continual assessment of operations and service delivery. This plan establishes performance indicators under two main categories:

- Management Span of Control, intended to optimize administrative efficiencies while ensuring continued market impact and effectiveness.
- Key Process Improvements, utilizing a methodology for process improvement, providing value to customers by increasing efficiency. In 2012, Efficiency Vermont:
 - completed a pilot program to meet baseline requirements;
 - selected key business processes to evaluate for efficiency;
 - completed training on Lean processes and Value Stream Mapping for 20% of Efficiency Vermont staff;
 - completed Value Stream Mapping workshops for prescriptive and metering project processes.

Full results of QPI activities are provided in Section 3 of this report.

1.2 ELECTRIC AND THERMAL FUNDING SOURCES

In accordance with Vermont Public Service Board specifications, the funding source for Efficiency Vermont’s electric efficiency services was separate and distinct from funding sources for efficiency services related to unregulated heating and process fuels (also referred to as “thermal efficiency” services). Electric services were funded through the Energy Efficiency Charge, whereas heating and process fuel services were funded by Vermont’s Regional Greenhouse Gas Initiative (RGGI) revenues and by revenues earned from meeting electric capacity commitments (demand savings) bid into the regional grid’s Forward Capacity Market (FCM). The Efficiency Vermont administrator, the Vermont Energy Investment Corporation, bids these expected demand savings into the FCM on behalf of the State of Vermont. Efficiency Vermont ensured that, from the customer’s perspective, provision of services was seamless, regardless of the funding source.

1.3 BENEFITS FOR VERMONT

1.3.1 ECONOMIC BENEFITS

Efficiency Vermont continued to provide a good economic value for Vermonters. One measure of this value can be seen in the benefit-to-cost ratio, which remained strong at 2.4 to 1. **Table 2** shows the factors that contributed to this ratio.

Table 2. Net lifetime economic value of electric and thermal energy efficiency investments in 2012

Benefits	\$150,300,000	Total Resource Benefits ⁴
	\$ 23,500,000	Operations and maintenance savings
	\$173,800,000	Total Benefits
Minus Costs	\$ 35,900,000	Efficiency Vermont resource acquisition
	\$ 35,600,000	Participant and third-party costs
	\$ 71,500,000	Total Costs
Equals Net Benefits	<u>\$102,300,000</u>	Net Lifetime Economic Value to Vermont

Total Resource Benefits in 2012 for Efficiency Vermont’s reporting categories were:

Business New Construction	\$38.8 million
Existing Businesses	\$58.7 million
Retail Efficient Products	\$26.6 million
Residential New Construction	\$10.4 million
Existing Homes	\$14.7 million

Efficiency Vermont delivered excellent value compared to the costs of other sources of energy:⁵

- Efficiency Vermont supplied electric efficiency in 2012 at 3.5 cents per kilowatt-hour (kWh). Taking into account participating customers’ additional costs and savings, the levelized net resource cost of saved electric energy in 2012 was less than 0.1 cents per kWh. By contrast, the cost of comparable electric supply in 2012 was 8.6 cents per kWh.

⁴ Total Resource Benefits is the present value of lifetime economic benefits resulting from resource saving measures, including avoided costs of electricity, fossil fuels, and water.

⁵ Numbers in the two ensuing bulleted items do not include Customer Credit. The “levelized net resource cost of saved electric energy” comprises: 1) Efficiency Vermont costs of delivery, plus customer and third-party contributions to measure costs, all adjusted to reflect the comparative risk adjustment of 10% adopted by the Vermont Public Service Board in Docket 5270; and 2) costs or savings associated with fuel, water, and building operation and maintenance.

- Efficiency Vermont's heating and process fuels efforts supplied fossil fuel efficiency in 2012 at \$5 per million British thermal units (MMBtu). Taking into account participating customers' additional costs and savings, the levelized net resource cost of fossil fuel saved through efficiency in 2012 was \$14 per MMBtu, whereas the avoided cost for that fuel was \$29 per MMBtu.⁶

Investments in energy efficiency continued to strengthen local businesses and to secure jobs. For example, Vermont's 74 Home Performance with ENERGY STAR® and Building Performance contractors completed approximately 1,300 projects with a value of \$6.7 million in 2012. (This figure includes work completed with support from the Green Mountain Power Energy Efficiency Fund.) Efficiency Vermont also helped retailers statewide to promote and sell efficient products that strengthen their bottom line. In 2012, retail sales of energy-efficient appliances, lighting, and consumer electronics promoted by Efficiency Vermont totaled approximately \$10.4 million.

1.3.2 ELECTRIC EFFICIENCY SAVINGS⁷

Energy savings resulting from electric efficiency measures installed in 2012 provided an estimated 1.93% of Vermont's overall electric energy requirements for the year. This percentage represents approximately \$14 million in retail value, annually, based on a rate of 13 cents per kWh. **Figure 1** and **Figure 2** show Vermont's history of energy savings from electric efficiency measures.

⁶ The levelized net resource cost of fossil fuel savings were off by a factor of 1, 000 in the original filing. These values were updated on May 27, 2015.

⁷ All data in Section 1.3.2 include savings from efficiency measures installed through Burlington Electric Department and the Green Mountain Power Energy Efficiency Fund, with the exception of Figure 1, which includes only Efficiency Vermont results.

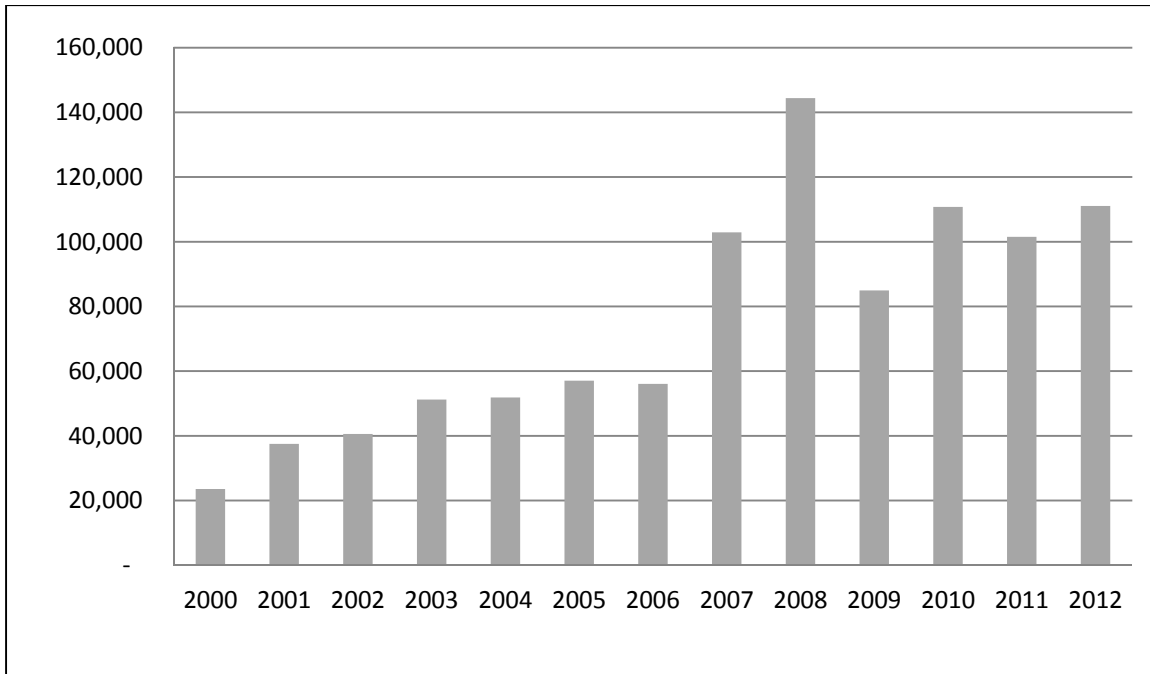


Figure 1. Efficiency Vermont annualized megawatt-hour savings

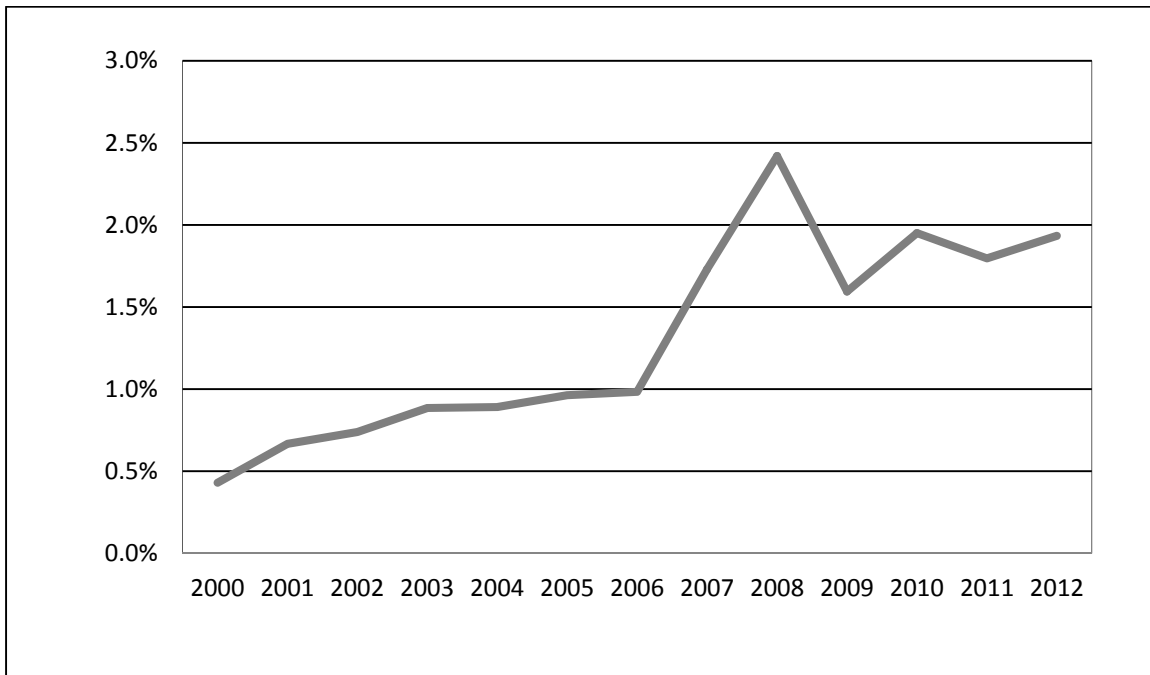


Figure 2. Savings from efficiency as a percentage of statewide electric resource requirements

Cumulatively, efficiency measures installed since 2000 provided 12.3% of the state’s electric energy requirements in 2012. This represents a retail value of more than \$100 million, based on a rate of 13 cents per kWh. As the lowest-cost approach to fulfilling these requirements, energy efficiency has significant impact on Vermont’s ability to limit energy cost increases and corresponding consumer rate hikes. This impact becomes greater as the share of energy needs supplied by efficiency increases. **Figure 3** shows the increasing percentage of Vermont’s annual electric needs met by efficiency savings.

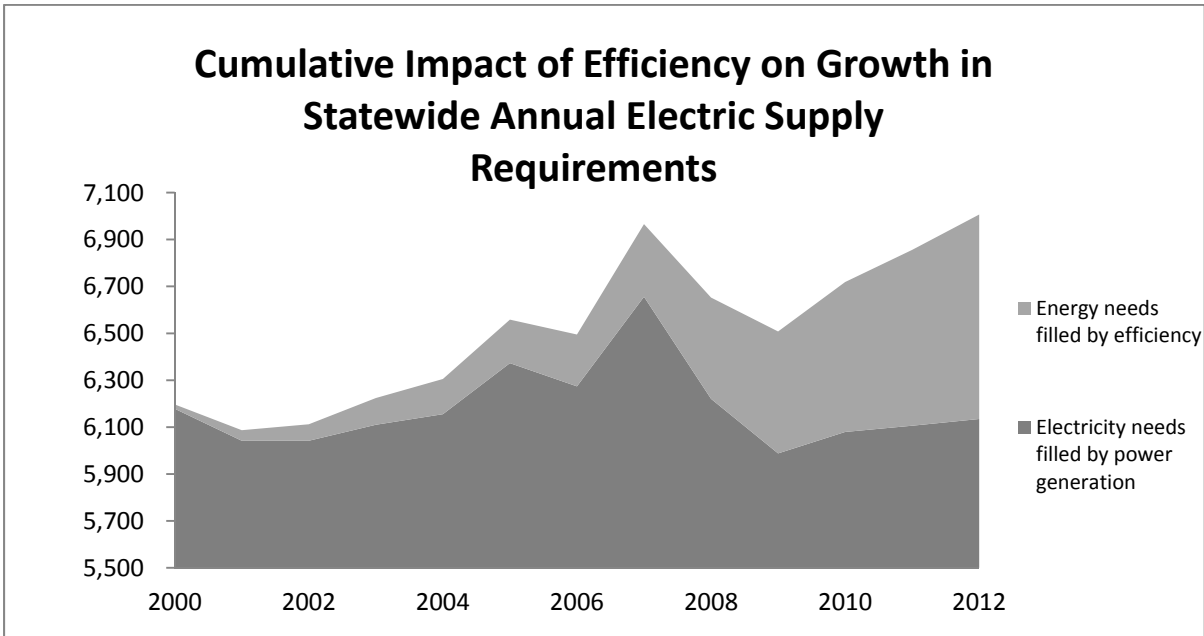


Figure 3. Vermont’s annual electric needs, in gigawatt-hours (GWh)

1.3.3 HEATING AND PROCESS FUEL EFFICIENCY SAVINGS⁸

Efficiency Vermont provided heating and process fuel (HPF) efficiency services in addition to electric efficiency services, helping Vermont homes and businesses to reduce their fossil fuel use and allowing for a comprehensive approach to energy savings. Savings in 2012 from HPF-funded services totaled approximately 78,000 MMBtu, acquired through such services as:

- Home Performance with ENERGY STAR and its business counterpart, Building Performance, supplying whole-building improvements that cut heating fuel use;

⁸ Savings data in this section do not include Customer Credit.

- technical information and financial incentives for high-efficiency residential and commercial heating equipment, including biomass systems, and
- thermal project partnerships with Vermont Gas Systems, the Green Mountain Power Energy Efficiency Fund, NeighborWorks® of Western Vermont, the Vermont Fuel Efficiency Program, and Vermont’s Weatherization Program.

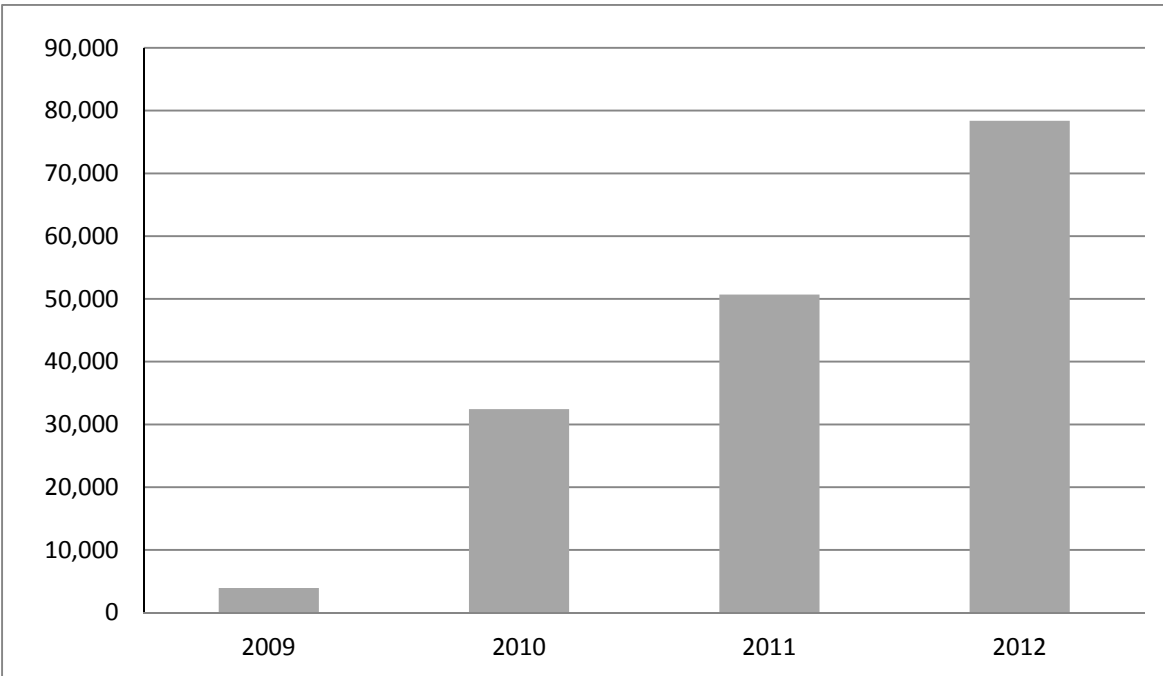


Figure 4. Efficiency Vermont’s annual heating and process fuel savings, in MMBtu

The 2012 increase in energy savings illustrated in **Figure 4**, above, occurred in a year of growth in the number of projects completed through Efficiency Vermont’s Home Performance with ENERGY STAR program, which provides comprehensive, whole-house energy efficiency retrofit services. A total of 1,035 projects were completed in 2012, compared to 800 in 2011, saving 14,000 MMBtu.

HPF services were aligned with Efficiency Vermont’s HPF requirements, as specified by the Vermont Public Service Board, and also supported Vermont State energy policy goals as outlined in Section 581 of Act 92 (the Vermont Energy Efficiency and Affordability Act, enacted in 2008) and the 2011 Vermont Comprehensive Energy Plan. A key provision of Act 92 is improving the energy fitness of 80,000 homes by 2020. Although HPF funding levels have not been sufficient on their own to achieve this goal, Efficiency Vermont has continued to design HPF services to be scalable to levels consistent with these public policy goals.

In 2012, Efficiency Vermont was an active participant in the Thermal Efficiency Task Force, which was convened by the Vermont Department of Public Service (DPS) to develop a plan for Vermont to meet its above-mentioned goal to improve the energy efficiency of 80,000 homes and to reduce fossil fuel use in residential and commercial buildings by 7.5% by 2020. Efficiency Vermont staff contributed their expertise in such areas as program design, industry partnership models, program costs, evaluation, and financing options. The task force contained seven subcommittees chartered to develop recommendations for legislative action. Efficiency Vermont staff members chaired three of these subcommittees and participated in all seven.

1.3.4 ENVIRONMENTAL BENEFITS

In addition to energy savings and economic benefits, Efficiency Vermont's performance in 2012 provided benefits for Vermont's environment. These benefits resulted from avoided emissions associated with the use of fossil fuels for electricity generation, heating, and industrial processing equipment. Efficiency's role in pollution prevention is of particular note in times of peak electricity demand, when additional fossil-fuel-fired power plants are brought on line. In these times, efficiency measures—such as the use of efficient air conditioners instead of inefficient models during a heat wave—provide their optimal environmental benefit. Avoided pollutants included:

Carbon dioxide	800,000 tons
Nitrogen oxides	86 tons
Sulfur oxides	31 tons

Avoidance of these pollutants resulted in a combined environmental benefit equal to that of taking 152,800 gasoline-powered cars off the road for a year.

2. MAJOR STRATEGIES REVIEW

2. MAJOR STRATEGIES REVIEW

Efficiency Vermont implemented its services through five major strategies. These strategies had the common aims of delivering value and providing opportunities for all Vermonters to overcome barriers to improving the efficiency of their homes, places of business, and communities. These strategies, discussed in Sections 2.1 through 2.5 of this report, were:

1. Customer Engagement through Comprehensive Approaches
2. Collaboration with Partners throughout Vermont
3. Bringing Efficiency Within Reach
4. Planning for Vermont's Energy Future
5. Pursuing Excellence in Service Delivery

In 2012, Efficiency Vermont categorized its activities as either resource acquisition (RA) or non-resource acquisition (NRA). RA activities are defined as those that directly achieve energy savings. NRA activities provide services vital to the operation and administration of Efficiency Vermont. The separation of the two categories enhances transparency regarding Efficiency Vermont's expenditures. NRA categories are: Education, research and development, planning and reporting, evaluation, policy and public affairs, information technology, and administration. Due to the essential role that all Efficiency Vermont activities played in the successful implementation of its 2012 strategies, this Report describes both RA and NRA activities within the strategy descriptions that follow.

2.1 CUSTOMER ENGAGEMENT THROUGH COMPREHENSIVE APPROACHES

Efficiency Vermont designed and delivered customer-focused services to make it as simple as possible for all Vermonters to obtain the benefits of comprehensive energy efficiency. Central to these services were Efficiency Vermont's objective guidance and technical expertise.

In addition to engaging in direct customer interaction, Efficiency Vermont worked with more than 75 professional and trade member organizations representing a wide range of constituents. By sharing information about best practices in association newsletters, websites, and technical materials, as well as through event sponsorship, speaking engagements, conference and trade show participation, training workshops, and promotional and educational campaigns, Efficiency Vermont was able to inform business customers through trusted channels and with targeted messaging resonating with markets' particular priorities.

Active partnerships:

- American Institute of Architects–Vermont Chapter
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers
- Building Performance Professionals Association of Vermont
- Building Safety Association of Vermont
- Construction Specifications Institute
- Green Mountain Water Environment Association
- Home Builders and Remodelers Association of Vermont
- Northeast Organic Farming Association of Vermont
- Vermont Alliance of Independent Country Stores;
- Vermont Apartment Owners Association
- Vermont Association of Hospitals and Health Systems
- Vermont Convention Bureau
- Vermont Fuel Dealers Association
- Vermont Green Building Network
- Vermont Green Home Alliance
- Vermont Grocers' Association
- Vermont Hospitality Council
- Vermont Inn and Bed & Breakfast Association
- Vermont Maple Sugar Makers Association
- Vermont Rental Property Owners Association
- Vermont Retail Association
- Vermont Rural Water Association
- Vermont Ski Areas Association
- Vermont Superintendents Association

2.1.1 SERVICES FOR EXISTING BUSINESSES, INSTITUTIONS, AND MUNICIPALITIES

Savings acquired by Vermont businesses, institutions, and municipalities working with Efficiency Vermont in 2012 totaled approximately 67,000 megawatt-hours (MWh) and 92,000 MMBtu from 3,800 projects delivering Total Resource Benefits of \$97.5 million to 2,600 customers. The average anticipated return on investment for commercial efficiency improvements in 2012 was 45%.

Efficiency Vermont's activities undertaken in support of the construction of new high-performance commercial buildings are discussed in Section 2.2.2 of this report. Highlights of 2012 activities in service to existing commercial facilities are below.

Vermont's Largest Energy Users

Efficiency Vermont maintained its customized approach to serving the state's largest energy users, which are defined by their use of more than 500 MWh of electricity per year. Efforts included:

Account Management

Designated Efficiency Vermont staff, with specialized knowledge of working with large energy users, continued to establish and maintain long-term, proactive professional relationships with individual businesses. Through this approach, Efficiency Vermont gained an understanding of companies' particular priorities and was able to design and deliver customized services. These services included help in creating comprehensive portfolios of savings opportunities, technical and financial analyses, guidance in developing energy-saving plans, and assistance in assessing and utilizing energy usage data. Such approaches aimed to best position businesses to: 1) deepen savings; 2) successfully complete multiple projects over time; 3) utilize best practices in energy use management, and 4) engage in continuous energy improvement, which helps customers look holistically at their energy use to obtain sustainable and verifiable energy savings. In 2012, 260 businesses were served through Account Management, garnering a combined savings of \$5 million in annual energy costs from measures completed in 2012.

Energy Leadership Challenge

Efficiency Vermont led an initiative designed to encourage Vermont's largest energy users to reduce their electricity consumption by 7.5% over the course of two years. By the close of 2012, 69 companies were participating in the Energy Leadership Challenge (ELC). Twelve of those companies had already met the 7.5% savings goal. Together, participating businesses had achieved savings of more than \$3.3 million in annual energy costs from the 2011 ELC launch through the end of 2012.

Best Practices Exchange

Efficiency Vermont hosted Best Practices Exchange events in northern and southern Vermont to enable large commercial and industrial businesses with common energy challenges and opportunities to share ideas and strategies toward implementing and sustaining energy-efficient approaches.

Customer Advisory Group

Efficiency Vermont hosted the second annual gathering of leaders of large businesses and institutions with complex energy savings opportunities and barriers to participation. To best

tailor approaches to meet customer needs, Efficiency Vermont gathered feedback about customer priorities in regard to energy efficiency services.

Vermont's Small Businesses

Efficiency Vermont continued to design and implement services targeting the particular needs of this vital sector of Vermont's economy, providing businesses using up to 100 MWh per year with:

- technical guidance and education about efficiency opportunities, technologies, and financial solutions through direct customer interaction and strategic outreach via numerous avenues, including business media placements, chambers of commerce, business associations, and utility partners, and
- thermal efficiency services through Building Performance. This service, modeled after Home Performance with ENERGY STAR, provides incentives to qualifying small businesses and rental property owners who complete efficiency improvements with certified Building Performance contractors. In 2012, these efforts resulted in combined annualized energy savings of \$107,000.

In 2012, Efficiency Vermont completed preparation for a 2013 first-quarter launch targeted services to this market through Efficiency Vermont's Customer Support Department. Activities included:

- completion of a small business survey, which indicated that customers would like Efficiency Vermont to provide energy efficiency recommendations with supporting economic analyses and to offer a financing option;
- design of services, based on survey findings, including calculation tools for staff to provide cost and savings information for lighting and HVAC retrofits, as well as a business energy profile form for customers to use in providing equipment information to Efficiency Vermont for analysis of savings opportunities, and
- development of a marketing approach for use in support of the 2013 launch.

Targeted Markets

For large and small commercial customers alike, Efficiency Vermont continued to implement targeted initiatives, each with its particular approaches, energy-saving measures, and incentives, to address the priorities, challenges, and motivations of specific markets. These markets were: Agriculture, colleges & universities, commercial real estate, convenience stores, grocery stores, hospitals, K-12 schools, lodging facilities, restaurants,

retail stores, ski areas, State buildings, and water & wastewater facilities. Highlights of activities in selected targeted markets follow.

Agriculture

Due to its successful, ongoing efforts to maintain strong communications with agricultural equipment vendors, Efficiency Vermont was able to utilize these partners' feedback as part of its continuing efforts to improve administrative efficiency and the customer experience. Specifically, Efficiency Vermont updated and streamlined its agriculture loan program and modified project practices to offer standard rebate levels, enhancing the ease of use for customers and decreasing project processing time. For example, Efficiency Vermont offered standard rebates for specified efficient maple syrup production equipment and commonly used efficient dairy equipment.

During 2012, the Agricultural Loan program had record participation, with 15 loans to farmers through a partnership with Opportunities Credit Union. In a time of low milk prices, these low-interest loans enabled more farmers to make such investments as new barn lighting, milking equipment upgrades, and energy-efficient maple equipment.

Efficiency Vermont also met with several entities, including the U.S. Department of Agriculture (Rural Development as well as Natural Resources Conservation Service), the Saint Albans Cooperative Creamery, the Northeast Organic Farming Association of Vermont, the Vermont Senate Agriculture Committee, and the Vermont Agency of Agriculture, Food, and Markets to explain the benefits of Efficiency Vermont's farm services and to identify partnership opportunities.

Colleges & Universities

For the second year, Efficiency Vermont provided statewide education and outreach to Vermont colleges and universities on the benefits and mechanics of creating green revolving funds (GRFs) to finance energy efficiency projects on their campuses. Efficiency Vermont worked with the support of the High Meadows Fund and in partnership with the Sustainable Endowments Institute and the Vermont Campus Sustainability Network. In 2012, three campuses committed to establishing such funds and to working with Efficiency Vermont and Burlington Electric Department. This brought the total number of participating Vermont campuses to 12—the most of any state in the country—and the combined pledge of funds by schools to \$16 million. By the end of 2012, Vermont led the nation regarding GRFs in three respects: 1) the highest number of participating schools; 2) the single largest GRF (University of Vermont), and 3) the first state college system utilizing a GRF. As noted in

Section 2.3.3 of this report, Efficiency Vermont's GRF efforts are among those that leverage a modest amount of energy efficiency utility resources to draw higher amounts of new project funding without additional ratepayer investment.

Efficiency Vermont also partnered with a college in a pilot promotion to install 600 advanced power strips in dormitory rooms. This pilot was undertaken because of the electric demand of devices—such as computers, cell phones, and entertainment systems—that are popular among college students. This first installation provided data, collected over a four-week period, measuring energy use with standard power strips in comparison to use with advanced power strips. Results from the metering trial will provide information on potential savings from promoting this technology at colleges across the state.

Hospitality Industry

In addition to targeted communications with businesses, a strong method of deepening connections in this market and motivating participation in energy-saving projects was Efficiency Vermont's partnering activities with industry associations. Key partnerships in 2012 included those with the Vermont Chamber of Commerce, Vermont Inn and Bed & Breakfast Association, and Vermont Convention Bureau (in service to the state's large-meeting and event facilities). Efficiency Vermont extended its reach to hospitality businesses through informational presentations at association meetings, webinars delivered to memberships, and participation in the Vermont Travel Industry Conference, the Vermont Chamber Hospitality Gala, and the Reinhart Foodservice Show.

K–12 Schools

Efficiency Vermont conducted the Whole School Energy Challenge in partnership with the Vermont Energy Education Program and the Vermont Superintendents Association's School Energy Management Program. Initiated in 2011, the challenge engaged teams of students, administrators, teachers, and facility staff in implementing an energy-saving action plan. By the close of 2012, 10 Vermont schools were actively engaged in the challenge, reducing their electricity use by a combined total of approximately 750 MWh and, together, saving about \$78,000 in electric costs.

To provide schools with a model for energy use management, Efficiency Vermont engaged in an assessment of high-performance schools, identifying common contributors to their successes. Shared elements included engaged facility management, an awareness of energy efficiency, and a culture of student engagement. Efficiency Vermont used this information to help schools develop action plans to reach specific, recommended efficiency goals.

Ski Areas

In 2012, Efficiency Vermont identified and pursued two endeavors designed to increase energy-saving actions by deepening efficiency knowledge among the state's ski industry decision makers. These were: 1) coordinate with industry partners to arrange snow gun testing through which Efficiency Vermont could gather data with little to no variability in weather conditions, and 2) disseminate testing results to have optimal impact on equipment purchasing decisions. By year-end, Efficiency Vermont, in partnership with the National Ski Areas Association (NSAA) and the Vermont Ski Areas Association, scheduled a testing event at the NSAA conference to be held in Vermont in early 2013. This would enable Efficiency Vermont to test and verify data to be presented the following day at the conference and made available to NSAA for publication.

State Buildings

Efficiency Vermont continued its efforts to obtain savings in State-operated buildings in collaboration with the Environmental Office of the Vermont Department of Buildings and General Services (BGS). These efforts were in alignment with the goals of the 2010 State Agency Energy Plan.

Efficiency Vermont continued its Whole Buildings Energy Investment pilot, begun in 2011, designed to address comprehensive optimization of facility operations by: 1) establishing a benchmark of energy use in BGS-owned properties, and 2) providing this data to enable facility managers to identify and prioritize efficiency investments and to take advantage of the existing State Resource Management Revolving Fund. In 2012, 10 buildings owned and operated by the State of Vermont were given energy audits. Efficiency Vermont, in partnership with BGS, utilized audit findings to identify low-cost energy savings opportunities.

Also of note in 2012: Efficiency Vermont continued its provision of technical assistance in support of the State's relocation and rebuilding efforts necessitated by facility damage incurred as a result of Tropical Storm Irene.

Water & Wastewater Facilities

Efficiency Vermont collaborated with the U.S. Environmental Protection Agency (EPA) in an effort to benchmark all the wastewater treatment facilities in Vermont using EPA's Portfolio Manager database. Recent revisions to Portfolio Manager enabled Efficiency Vermont to compare the overall energy use at a given treatment facility to that of other facilities across the country and to assign a relative score. Facilities receiving a score of 75 or greater will now be eligible for EPA recognition by receiving an ENERGY STAR label. Efficiency Vermont

will use data from this initiative to target poorly performing facilities for efficiency upgrade projects. In addition, the best-performing facilities will be highlighted and targeted as a resource for energy-efficient technology and best operating practices to be promoted and applied across the entire market.

In service to multiple industrial markets, Efficiency Vermont launched the Facilities Experience Exchange, providing facility managers and physical plant managers of hospitals, colleges, universities, and K–12 schools with opportunities to share best practices through in-person roundtable discussions. The Exchange also provides Efficiency Vermont with valuable insights into customer priorities. In 2012, Efficiency Vermont organized Exchange events in Northfield and Middlebury, each drawing more than 30 people.

Key Technologies

Efficiency Vermont continued its efforts to increase the adoption of efficiency technologies with the potential to provide significant benefits in a wide range of commercial applications. In addition to energy savings, these benefits include greater building occupant comfort and safety, increased sales and customer loyalty, improved working and learning environments, better indoor air quality and lighting quality, less tenant turnover, greater building durability, lower maintenance costs, and higher resale value. Highlights of activities in 2012:

Commercial Lighting

Efficient lighting technologies and design continued to offer significant savings opportunities due to their broad applicability across commercial markets. Efficiency Vermont engaged in ongoing monitoring and evaluation of emerging lighting technologies (for possible inclusion in services) and provided technical guidance and promotions regarding a range of approaches, including:

- efficient technologies in place of T12 and standard T8 lighting systems;
- efficient exterior lighting;
- lighting controls;
- LEDs in appropriate applications, and
- partnerships with lighting design professionals to maximize savings.

Highlights for 2012:

- Prescriptive lighting savings more than doubled from 2011 savings.
- Efficiency Vermont's prescriptive efforts continued to include the SMARTLIGHT program, which made select discounted efficient lighting available through

incentives that Efficiency Vermont provided directly to electrical distributors. New in 2012 was Efficiency Vermont's addition of LED screw-based lighting to its discounted product offerings. Due to exceptional participation levels and some decline in LED prices, Efficiency Vermont reduced SMARTLIGHT LED incentives as of June 1. Prior to program changes, Efficiency Vermont worked with distributors and suppliers to understand the potential impact of the change and to provide these partners with advance notice, giving the marketplace time to adjust to lower incentive levels. Savings through SMARTLIGHT in 2012 were more than five times as great as 2011.

- Efficiency Vermont updated and released the "Improving Efficiency in Municipal Street and Public Space Lighting" guide. The guide provides municipalities with a step-by-step path to reduce the cost of outdoor lighting through energy efficiency while enhancing their nighttime environment, public safety, security, and aesthetics. The audience for the new guide includes select boards, city councils, town managers, public works department managers, town energy committees, town planners, regional planners, and conservation commissions.
- Multiple planned fourth-quarter municipal street lighting installations were deferred by Green Mountain Power Corporation due to the lowered availability of crews that were providing aid to southern New England utilities continuing work related to Hurricane Sandy. As a result, a work-in-progress status was given to more than 4,000 LED fixtures to be installed by the end of the third quarter of 2013.
- Efficiency Vermont conducted research, in partnership with the Vermont Department of Education, to determine how lighting optimally supports classroom activities. Efficiency Vermont measured classroom lighting levels in 15 Vermont schools and engaged more than 100 teachers to assess current lighting quality and to learn teachers' priorities in regard to lighting. Results revealed that the top priority was flexibility, enabling educators to control lighting for different classroom uses. This information will be used to develop recommendations to schools in 2013.

Commercial Building Systems Equipment

Commercial and industrial customers exceeded the year's expected participation rates for heating, ventilation, air conditioning, and refrigeration equipment measures by 94%. Also in 2012, as part of its ongoing commitment to quality service delivery, Efficiency Vermont met with three manufacturers of heating, ventilation, and air conditioning equipment to gather direct feedback about program efforts.

2.1.2 SERVICES FOR EXISTING HOMES

Efficiency Vermont's electric savings for existing households totaled approximately 4,300 MWh in 2012. Savings from thermal efficiency totaled 26,400 MMBtu. These figures are in addition to the substantial savings that homeowners and renters acquired through the use of energy-efficient products purchased from Efficiency Vermont's retail partners. Discussion of efficient product activities can be found in Section 2.1.3 of this report.

Information about Efficiency Vermont's efforts in support of the construction of new efficient homes can be found in Section 2.2.2 of this report. Selected activities serving existing households in 2012 follow:

Through partnerships with agencies of Vermont's Weatherization Program, Efficiency Vermont served 1,884 low-income households, including 1,100 households that participated in the Major Appliance Replacement Service. This service provided no-cost replacement of inefficient older appliances with ENERGY STAR qualified appliances; primarily refrigerators and clothes washers. For a more detailed view of Efficiency Vermont's activities in service to low-income households, see Section 2.2.4 of this report.

Efficiency Vermont continued to help homeowners make comprehensive efficient home improvements through its Home Performance with ENERGY STAR program. Efficiency Vermont provided support for contractor training through the Building Performance Institute (BPI), offered financial incentives to homeowners who completed projects with BPI-certified contractors, and engaged in program promotions. Highlights in 2012:⁹

- A total of 1,035 projects were completed in 2012, surpassing 1,000 projects in a single year for the first time in the history of the Vermont program.
- In September, the program passed a milestone with the completion of its 3,000th project since the program began in 2005.
- Efficiency Vermont launched a new partnership with the Vermont Fuel Dealers Association and the newly formed Building Performance Professionals Association of Vermont. The aim of this partnership is to provide fuel dealers with the opportunity to diversify and become whole-home energy providers through collaboration with Home Performance with ENERGY STAR contractors.

⁹ Includes projects funded through the Green Mountain Power Energy Efficiency Fund.

2.1.3 SERVICES FOR RETAIL BUYERS OF EFFICIENT PRODUCTS

In 2012, electricity savings from Vermonters' installation of efficient products purchased at retail stores amounted to 36,800 MWh. Efficiency Vermont provided support for a range of consumer products that met or exceeded efficiency standards set by the U.S. Department of Energy's ENERGY STAR program, including lighting, appliances, air conditioners, dehumidifiers, pool pumps, and electronics. Services were designed to motivate product purchases, by increasing efficiency knowledge and reducing purchase costs for Vermonters making retail purchases for their homes and businesses. Support took the form of rebates, cost buy-downs at the distribution level, point-of-purchase display materials, advertising, and other promotional and public information activities. Efficiency Vermont also continued to provide services to retailers and upstream players in the product supply chain to ensure the availability of high-quality efficient products in Vermont stores.

Efficient lighting sales continued to be strong. In 2012, Vermonters bought 803,600 efficient lighting products (including compact fluorescent lightbulbs, light-emitting diodes, and fixtures). Additionally, more than 217,000 efficient lighting products were distributed to Vermonters in need through Efficiency Vermont's partnership with the Vermont Foodbank. In total, the number of new efficient retail lighting products in Vermont homes and businesses passed the 1 million mark for the first year.

Efficiency Vermont continued its successful efforts to expand the market presence of quality light-emitting diode (LED) lighting. Sales of ENERGY STAR qualified LED lighting products increased to 17,400 units, including a wide variety of bulb types: downlight, general illumination, decorative, and reflector.

The U.S. Department of Energy (DOE) recognized Efficiency Vermont as one of seven LED Lighting Facts Partners of the Year in the nation. LED Lighting Facts® is a DOE program promoting efficient LED products. This award was granted to Efficiency Vermont in recognition of its ongoing commitment to the program, to product evaluation, and to integrating LED Lighting Facts into everyday business practices.

Efficiency Vermont launched a retail and web-based educational campaign, titled "Love Your Light," that walks customers through a three-step process of buying the right lighting for their needs. The steps show customers how to determine their desired light level, light temperature, and savings relative to the cost of products (CFLs or LEDs).

Efficiency Vermont met with the Vermont Department of Environmental Conservation (DEC) to provide information regarding implementation of fluorescent lighting recycling efforts. The DEC requested the meeting as part of its preparation for a statewide fluorescent recycling program to be managed by the National Electrical Manufacturers Association.

Efficiency Vermont provided advice and insights from its years of partnership with retailers offering recycling services to consumers for linear fluorescents and CFLs on a voluntary basis. Efficiency Vermont also helped the DEC craft Vermont state law that formed the basis of this new system.

2.1.4 SERVICES FOR GEOGRAPHICALLY TARGETED AREAS

In December 2011, the Vermont System Planning Committee (VSPC) filed a recommendation to the Vermont Public Service Board that Efficiency Vermont continue providing services targeting two geographic areas of the state with transmission and distribution capacity constraints. All Vermont ratepayers benefit from these geographically targeted services, focused on reducing system peak capacity demands, because such efforts can help postpone or avoid the need for system infrastructure upgrades, and can be among the most cost-effective energy efficiency services to acquire. In February 2012, Vermont Public Service Board Order EEU 2010-06 approved the VSPC recommendation for Efficiency Vermont to continue geographically targeted services in Saint Albans and the Susie Wilson Road area of Essex in the 2012–2014 performance period. Both of these areas are subsets of areas that have been receiving geographically targeted services since 2007.

During 2012, Efficiency Vermont began implementing its Geographic Targeting strategy to focus initially on 70 customers with the largest summer peak demand load. This was done through individualized customer account management, data analysis of power trends, and identification of demand reduction opportunities to customize peak demand reduction projects for both existing business facilities and business new construction. These efforts also increased customer understanding of Geographic Targeting and of customers' contributions to system loads. To help bring projects within financial reach for customers, Efficiency Vermont provided enhanced assistance with the costs of peak demand studies, retro-commissioning efforts, and other load reduction strategies.

Summer peak reductions were approximately 870 kW in the Susie Wilson Road area and 584 kW in Saint Albans. In December 2012, Efficiency Vermont issued a request for proposals for lighting upgrade installation services that will be implemented in 2013 for business customers in geographically targeted areas.

2.1.5 EDUCATION AND INFORMATION SERVICES

Customer Support

Vermonters continued to have easy access to expert energy efficiency information and guidance through Efficiency Vermont's toll-free call center, which provided:

- education on comprehensive efficiency topics, including energy use patterns, building envelope, equipment modification, and new technologies;
- information about Efficiency Vermont's services and referrals to other resources such as Vermont's Weatherization Program, the Renewable Energy Resource Center, and the Energy Code Assistance Center, and
- collaboration with distribution utilities on customer education, use of new technologies, and data-driven efficiency solutions.

Efficiency Vermont Blog

In October, Efficiency Vermont launched a blog, *Energy Forward*, to provide a forum where Vermonters could engage with Efficiency Vermont about energy topics that expanded beyond discussions of specific programs. The blog (www.encyvermont.com/blog) enables in-depth exploration of efficient approaches while expanding discourse to provide broader energy information that customers seek from Efficiency Vermont; it delves into such areas as transportation, renewables, electricity fundamentals, energy usage data, energy policy, and more. The blog format allows for timely discussion of efficiency activities under way throughout the state and provides an opportunity to present Efficiency Vermont research that has not yet led to program offerings but that is of value to Vermonters who want to deepen their involvement in their energy use.

Energy Literacy Project

In 2012, Efficiency Vermont selected the Vermont Energy Education Program to implement the Energy Literacy Project (ELP). This is a multiyear effort with Vermont teachers, schools, and K–12 associations to increase students' knowledge of energy and efficiency, as well as to increase energy-saving actions in homes, schools, and communities. In 2012, the ELP reached more than 2,700 students statewide, delivered 105 classroom presentations, offered eight trainings in seven locations to 85 teachers, and served 75 Vermont schools.

General Public Education and Consumer Engagement

To motivate the general public to take energy-saving actions, Efficiency Vermont continued its ongoing communications activities designed to increase public awareness of: 1) energy

efficiency and its benefits; 2) actions that lower energy use, and 3) Efficiency Vermont as a resource for comprehensive energy efficiency solutions. Highlights of 2012 activities:

- An update to www.encyvermont.com, to make it easier for visitors to access information
- Extensive coverage in print, broadcast, web-based, and social media of Efficiency Vermont's programs, events, and customer successes
- Media appearances by Efficiency Vermont staff providing expert input on a range of efficiency and energy topics
- Efficiency Vermont's presence at numerous public venues, such as home shows, expos, fairs, community events, and retail events throughout the state
- Publication of Efficiency Vermont's "Ask the Home Team" and "Energy Solutions" energy efficiency advice columns for residential and business customers, respectively, in multiple print outlets throughout the state as well as Efficiency Vermont's *Watts New* e-mail newsletter

2.2 COLLABORATION WITH PARTNERS THROUGHOUT VERMONT

Key to Efficiency Vermont's achievement of its market transformation and energy savings goals were its ongoing partnerships with Vermont's efficiency service and product providers. These partnerships, although not always evident to the general public, have a profound impact on Vermonters' ability to lower energy use in their homes and places of business. The commitment and skill of these partners continued to be fundamental to the success of Efficiency Vermont's aims. Efforts with these providers included coordinated planning, program creation, information exchange, training, financial incentives, and cooperative advertising. These partnerships continued to enable Vermont homes and businesses to have access to a valuable network of knowledgeable providers while strengthening these providers' bottom line. Highlights of Efficiency Vermont's collaborative efforts in 2012 follow.

2.2.1 BUILDING RETROFIT CONTRACTORS

Efficiency Vermont continued to support the Building Performance Institute (BPI) in training Vermont contractors to identify and address a range of thermal and electrical efficiency issues in buildings. With this training, contractors become certified to deliver comprehensive retrofit efficiency services to residences, through Efficiency Vermont's Home Performance with ENERGY STAR program, and/or to small businesses and rental

properties, through Efficiency Vermont's Building Performance program. Efficiency Vermont provides certified contractors with ongoing support through extensive program promotion, self-marketing training, listings on www.encyvermont.com, and consumer financial incentives for projects completed by BPI certified contractors. Contractors also receive education through Efficiency Vermont's annual Better Buildings by Design conference, which is discussed in Section 2.2.2 of this report. Efficiency Vermont recognizes and publicizes exceptional achievement by BPI contractors through its annual Best of the Best awards for efficient retrofit projects. Four contractors received these awards in 2012.

Four new contractors—from Brattleboro, Fairlee, Montgomery, and Williston—enrolled in Efficiency Vermont's BPI programs in 2012, bringing the total number of participating contractors in Vermont to 64.

Highlights of 2012 activities and results in Efficiency Vermont's individual BPI programs are provided in this report as follows:

- Building Performance: Section 2.1.1; Services for Existing Businesses, Institutions, and Municipalities: Vermont's Small Businesses
- Home Performance with ENERGY STAR: Section 2.1.2; Services for Existing Homes

2.2.2 DESIGNERS AND BUILDERS OF NEW BUILDINGS

In 2012, Efficiency Vermont's ongoing support for the creation of efficient new buildings continued to focus primarily on the professionals engaged in architectural design and construction. These included architects, engineers, specialty design service providers, and practitioners of construction trades. Efficiency Vermont also engaged in efforts targeting equipment suppliers, installation contractors, commissioning agents, appraisers, lenders, and real estate agents, as well as certain building owners as key members of project teams, particularly in regard to construction undertaken by institutions, by government agencies, and by large businesses with multiple buildings.

Support for New Commercial Buildings

Efficiency Vermont maintained its delivery of customized and streamlined services to encourage a comprehensive approach to designing efficient buildings; integrating energy efficiency decisions into the process and including energy goals as part of the overall building goals from the earliest stages of a project. Services included:

- technical assistance through the design, construction, and post-construction phases;
- analytical tool development and application to evaluate efficiency options;

- prescriptive and customized financial incentives for efficient approaches, equipment, and building operation systems;
- leveraging of customer interest in green building, energy performance and green rating systems such as Leadership in Energy and Environmental Design (LEED), and
- continued partnerships with national, regional, and international organizations, such as the American Council for an Energy-Efficient Economy, the Consortium for Energy Efficiency, the Construction Specifications Institute, the Institute for Market Transformation, the International Code Council, and the New Buildings Institute.

In 2012, Efficiency Vermont released the 2012 Commercial New Construction Checklist, outlining recommended criteria for comprehensive high-performance design, construction, and operations. The Checklist updates and expands the requirements and guidance in the *Core Performance Guide*, providing a clear, prescriptive path for by which architects, engineers, owners, and other project participants can achieve a high-performance building.

Efficiency Vermont completed the initial phase of a study of the performance of newly constructed commercial buildings. As part of this effort, Efficiency Vermont contacted individuals associated with 45 recently built structures and analyzed data from 20 buildings with at least one year of energy usage. By developing a broader database of energy usage information, this effort enabled Efficiency Vermont to update existing analysis tools and savings assumptions to: 1) help building owners understand and respond to building performance information collected post-construction, and 2) better advise new project participants about achieving high performance in different categories of buildings.

Support for New Homes

To assist builders and owner-builders in meeting and exceeding Vermont Residential Building Energy Standards, Efficiency Vermont provided technical guidance, energy rating services, and financial assistance to support the construction of new homes meeting one of two levels of energy performance:

1. Vermont ENERGY STAR Homes; those homes achieving elevated criteria for thermal and electrical efficiency and water management based on new federal ENERGY STAR Homes criteria
2. Energy Code Plus; homes exceeding Vermont code requirements for energy-efficient lighting, appliances, air sealing, and insulation

Efficiency Vermont also engaged in a multifaceted effort designed to increase participation in its residential new construction services, including:

- partnerships with towns, town energy committees, and regional planning commissions to assess local needs and to determine effective approaches, such as the provision of resources to promote program enrollment at the time of permitting and planning;
- a survey of participating homeowners to inform program planning through better understanding of enrollment motivations and barriers, and
- continued provision of information and education to homebuilders, appraisers, lenders, and real estate agents through engagement with Vermont's homebuilders and remodelers associations, the Vermont Green Home Alliance, and media placements.

Also in 2012:

- The U.S. Department of Energy named Efficiency Vermont, along with Vermont Gas Systems, ENERGY STAR Partner of the Year for Residential New Construction services.
- Efficiency Vermont continued working with the real estate community to get more Home Energy Rating System (HERS) scores and ENERGY STAR certifications identified in Multiple Listing Service (MLS) databases. Due to Efficiency Vermont's work with the Northern New England Real Estate Network, the regional MLS for Vermont and New Hampshire, and the Vermont Green Home Alliance, realtors began to provide information on ENERGY STAR certifications and HERS scores in their listings.
- Efficiency Vermont continued a research effort for homes approaching net-zero¹⁰ energy use, scheduled to be completed in 2013, to monitor the energy performance of low-load homes relative to homes built to meet State energy code requirements. Whole-house monitoring equipment was installed in partnership with architects, builders, consultants, and homeowners affiliated with high-performance home projects. Data from this undertaking was used to provide guidance on criteria for Efficiency Vermont's 2013 launch of a pilot high-performance tier for new construction, designed to transform the market toward net-zero-ready homes. Members of the Vermont chapter of the Passive House Alliance reviewed and informed development of the new tier.

¹⁰ A net-zero property generates as much energy as it uses. When a building achieves net-zero energy use, all its consumption needs are met through energy efficiency and renewable energy systems.

New Construction Information and Education

Efficiency Vermont continued staffing the Energy Code Assistance Center, providing assistance to homeowners, building professionals, and towns seeking information on technical and compliance aspects of the State's Residential Building Energy Standards and Commercial Building Energy Standards. Through a DPS energy code training grant, Efficiency Vermont was able to deliver Residential Building Energy Standards training to building professionals and energy code training to real estate professionals.

Efficiency Vermont supported the rollout of the State's 2011 Commercial Building Energy Standards document through the Energy Code Assistance Center, as well as through delivery at project meetings to design and construction teams, and distribution at the Commercial Building Energy Standards training held at the Vermont Division of Fire Safety's Barre office in May.

More than 1,000 architects, builders, contractors, and students attended Efficiency Vermont's Better Buildings by Design Conference 2012 in February. This two-day event focused on the latest techniques and technologies for building durability, superior performance, energy efficiency, and value for both residential and commercial new construction and retrofit projects. In addition to workshops and hands-on demonstrations led by industry leaders, the conference hosted a trade show featuring the latest efficient technologies. Fourteen architects and contractors received Efficiency Vermont's "Best of the Best" awards for their achievements in the use of efficient and sustainable practices in new and renovated Vermont buildings.

Efficiency Vermont also partnered with the Vermont Green Building Network and the American Society of Heating, Refrigerating, and Air-conditioning Engineers—Champlain Valley Chapter to host an energy modeling training for the eQuest software program for 15 architects and engineers.

2.2.3 EQUIPMENT MANUFACTURERS, DISTRIBUTORS, SUPPLIERS, RETAILERS, AND INSTALLERS

Every stage of the product supply process holds an opportunity to obtain energy savings for Vermont homes and businesses. The ability of Vermonters to take energy-saving actions is dependent on the commitment and knowledge of the companies that manufacture, distribute, sell, install, and service efficient equipment. In 2012, Efficiency Vermont continued to develop and maintain relationships with manufacturers, distributors, suppliers, independent and chain retailers, installers, and service technicians to ensure that high-quality, efficient technologies are produced, are available for Vermont markets, and

can be installed and serviced by knowledgeable contractors. Efforts included: 1) information sharing with manufacturers of emerging technologies; 2) engagement with manufacturers and suppliers to ensure the ready availability of products; 3) Account Management of Vermont stores in retail chains, targeting store owners, managers, and staff to ensure implementation of promotions agreed to at the corporate level; 4) assistance to independent and chain retailers, including merchandising support, optimization of sales floor displays, and product education, and 5) installer training and support, to encourage the adoption of efficient technologies and approaches.

In 2012, in addition to regular interactions with these partners, Efficiency Vermont engaged in trainings and meetings designed to provide continuing learning opportunities for providers and to enable Efficiency Vermont to maintain an ongoing awareness of the marketplace. These interactions included numerous speaking appearances and workshop presentations at partners' conferences and meetings as well as those organized by Efficiency Vermont. Highlights included:

- workshops for agricultural equipment vendors around the state about program details and changes;
- a training session on updated efficient home building criteria, for heating, ventilation, and air conditioning (HVAC) professionals in collaboration with an HVAC equipment distributor;
- training sessions for pool contractors and retailers, emphasizing Efficiency Vermont's services and the benefits of two-speed and variable speed pool pumps;
- a workshop for Vermont Retail Association members about energy savings opportunities in stores;
- personal outreach to the first engineering firm targeted through the Engineering Firm Outreach initiative, launched in December; this initiative is designed to encourage and support firms to incorporate energy-efficient equipment and building design in their work;
- an HVAC Partner Roundtable meeting, held to gain insights for future program updates and to ensure that programs are in alignment with partner priorities;
- training on plastic foam insulation for members of the International Code Council Building Safety Association of Vermont, and
- the first meeting of Efficiency Vermont's Trade Ally Advisory Group, bringing together electrical and mechanical contractors from large and small firms throughout the state. This group is intended to optimize service to Vermont businesses by enabling Efficiency Vermont to gain insights into contractors' businesses, needs, and interests, their relationship with Efficiency Vermont, and their experiences with energy efficiency projects.

2.2.4 LOW-INCOME SERVICE PROVIDERS

Efficiency Vermont's efforts in service to low-income households were undertaken in close collaboration with long-standing partners, including: 1) low-income housing and service providers, including the Vermont Foodbank; 2) agencies of Vermont's Weatherization Program; 3) affordable housing funders, including the Vermont Housing and Conservation Board (VHCB) and the Vermont Housing Finance Agency (VHFA), and 4) multifamily housing developers, including Housing Vermont. In 2012, Efficiency Vermont:

- collaborated with VHCB and VHFA to develop new energy funding standards for affordable multifamily buildings that incorporate Efficiency Vermont's program requirements;
- provided training to housing partners, architects, and engineers on updated criteria for multifamily new construction and major renovations, which support the Roadmap for Housing Energy Affordability project undertaken by VHCB;
- presented Thermal Efficiency Task Force recommendations to Vermont's five Weatherization Program agency directors, and
- held a training for energy auditors from agencies of Vermont's Weatherization Program, with an emphasis on comprehensiveness.

As discussed earlier in this report, Efficiency Vermont:

- distributed more than 217,000 efficient lighting products to Vermonters in need through a partnership with the Vermont Foodbank, and
- through agencies of Vermont's Weatherization Program, served 1,884 low-income households, including 1,100 households that participated in the Major Appliance Replacement Service. This service provided no-cost replacement of inefficient older appliances with ENERGY STAR qualified appliances; primarily refrigerators and clothes washers.

2.2.5 OWNERS OF MARKET-RATE MULTIFAMILY HOUSING

To educate, motivate, and assist decision makers connected to market-rate multifamily housing, Efficiency Vermont provided services targeting these properties' owners. Services included: 1) prescriptive rebates for efficient equipment, and 2) technical and financial support for energy audits and comprehensive building envelope upgrades delivered by contractors trained through Efficiency Vermont's Building Performance program, as described in the discussion of Vermont's small businesses in Section 2.1.1 of this report. To motivate action on the part of property owners, Efficiency Vermont disseminated

information through the Vermont Apartment Owners Association and the Vermont Rental Property Owners Association about efficient technologies and available services.

2.2.6 COMMUNITY LEADERS

Throughout the state, Efficiency Vermont engaged with Vermonters interested in leading or joining efforts to reduce energy use in their towns, institutions, and local households. Efficiency Vermont strategically partnered with town officials, town energy committees, local organizations, and businesses to increase the impact of existing efforts or to support interest in creating new groups devoted to efficiency efforts. Offered services included planning guidance, promotions, educational materials, volunteer training, and the contribution of efficient products.

For example, in 2012, Efficiency Vermont partnered with the Vermont Energy and Climate Action Network (a network of town energy coordinators and committees) to recruit towns to participate in the statewide 2013 Vermont Home Energy Challenge. Through the Challenge, communities will compete with other towns in their region to weatherize 3% of local homes in a one-year period. By year-end, 15 towns had signed up for the Challenge, scheduled to begin January 1, 2013.

Efficiency Vermont also worked in partnership with businesses to motivate their employees to save energy at home through the Employee Energy Efficiency Challenge. In 2012, Efficiency Vermont secured the participation of three businesses to initiate the Challenge in 2013. Also in 2012, Efficiency Vermont surveyed condominium owners from multiple communities to determine the unique challenges for those in this market sector trying to improve home efficiency.

2.3 BRINGING EFFICIENCY WITHIN REACH

In its ongoing commitment to help Vermonters overcome financial barriers to investing in cost-effective efficiency for their buildings and equipment, Efficiency Vermont engaged in the following efforts in 2012.

2.3.1 PRODUCT AND SERVICE PRICE REDUCTIONS

To motivate Vermonters to make energy-efficient choices in the marketplace, Efficiency Vermont targeted specific products and services for purchase price reductions. Primary mechanisms were: 1) negotiated cooperative promotions that provide incentives to

manufacturers and retailers—both independent and chain stores—to lower the retail price of products, and 2) rebates and financial incentives for:

- lighting, HVAC equipment, refrigeration, compressed air systems, and cost effective, custom efficiency services and equipment projects;
- process equipment for such businesses as farms, ski areas, manufacturers, and industrial facilities;
- the incorporation of advanced, cost-effective techniques and approaches that enable the design and construction of high-performance residential and commercial buildings;
- completion of thermal building upgrades in small commercial and multifamily properties through Building Performance contractors, and
- completion of comprehensive home improvement projects through Home Performance with ENERGY STAR contractors.

2.3.2 FINANCING FOR ENERGY EFFICIENCY PROJECTS

Efficiency Vermont continued to work with lenders to ensure the availability of cost-effective financing for energy efficiency projects. By including energy savings in the repayment formula, lenders may be able to provide funding for individuals and businesses not otherwise qualifying for financing. In many instances, such financing creates a positive cash flow for borrowers due to monthly energy savings that are larger than loan payments.

To enable Vermonters to be aware of, understand, and make decisions regarding financing options, Efficiency Vermont provided easy access to information by phone, through its website, in printed materials, and in media placements. Efficiency Vermont continued to provide financial analysis for custom projects to help customers understand the financial aspects of efficiency investments.

In 2012, to increase financing opportunities for Vermonters engaged in energy efficiency projects, Efficiency Vermont:

- worked with the Vermont State treasurer, Vermont Department of Public Service officials, Vermont Economic Development Authority staff, and legislators regarding options for new financing models for energy efficiency;
- expanded an energy loan program through Opportunities Credit Union, increasing the outstanding loan portfolio to small businesses and dairy farms to more than \$135,000, and

- continued its efforts to make Property Assessed Clean Energy (PACE) financing available to Vermont homeowners. PACE offers a method of financing home energy improvements that enables homeowners to make financing repayments with their property tax bills. By the close of 2012:
 - thirty-four towns had voted to become PACE districts, and 26 of those towns had executed agreements to implement PACE programs;
 - Efficiency Vermont received \$430,000 in American Recovery and Reinvestment Act of 2009 funds, through the DPS, for use in reducing borrowing costs for income-qualified PACE applicants;
 - with financial institutions and the Vermont Bankers Association, Efficiency Vermont continued exploration of the use of funds from Vermont banks, and
 - Efficiency Vermont launched several web-based tools designed to help potential PACE customers determine their eligibility and to calculate whether or not PACE would be a good financial opportunity for them.

2.3.3 FUND LEVERAGING

Efficiency Vermont continued to engage in activities designed to acquire public and private funding for Vermonters engaged in efficiency projects in their homes and businesses. This approach multiplies the impact of ratepayer dollars by using a modest amount of funds to draw higher amounts of new funding without additional ratepayer investment. Highlights of fund leveraging efforts follow.

Loan Loss Reserve for Businesses

Efficiency Vermont obtained funding through a U.S. Department of Energy grant to the State Energy Program, providing \$500,000 to establish a loan loss reserve for business energy efficiency project financing in 2013. Efficiency Vermont obtained this funding in partnership with the DPS. The Vermont Economic Development Authority will provide a guarantee of 75% of loans, which will be made through banks and credit unions.

Green Revolving Fund for Colleges & Universities

Efficiency Vermont's Green Revolving Fund (GRF) initiative also continued to leverage ratepayer funds through the deployment of private capital as a financing mechanism for efficiency projects on Vermont higher education campuses. By the close of 2012, Vermont schools had pledged a combined \$16 million for GRF use. Highlights of GRF activities in 2012 can be found in the Colleges and Universities discussion in Section 2.1.1 of this report.

2.4 PLANNING FOR VERMONT'S ENERGY FUTURE

Efficiency Vermont continued to lend its expertise to efforts that shape energy and efficiency policies and programs that have a lasting impact on Vermont households, businesses, and communities.

2.4.1 INFORMATION IN SERVICE TO THE STATE OF VERMONT

Efficiency Vermont provided energy, financial, and economic information and analysis to policy makers, State agencies, utilities, and other key stakeholders. These efforts were undertaken in ongoing support of the State's 2011 Comprehensive Energy Plan goals and long-term energy planning. In 2012, Efficiency Vermont:

- helped lead a presentation of the findings of the Building Energy Disclosure Working Group to several Vermont legislative committees;
- presented information on K–12 schools and agriculture initiatives to the Senate committees on Education and Agriculture;
- participated in a presentation to the Vermont Affordable Housing Coalition regarding the potential consumer benefits of the smart grid;
- collaborated with the commerce secretary and DPS and other Agency of Commerce and Community Development staff on discussions of the economic development benefits of energy efficiency investments;
- provided a briefing to the Senate Committee on Agriculture on Efficiency Vermont's programs and services for the agricultural sector, in particular the dairy farm sector;
- provided briefings to a number of state legislators as part of a broader, ongoing effort to ensure that policy makers have up-to-date and accurate information regarding Efficiency Vermont programs, performance, and initiatives, and
- was an active participant in the Thermal Efficiency Task Force, convened by the DPS to develop a plan for Vermont to improve the energy efficiency of 80,000 homes and to reduce fossil fuel use in residential and commercial buildings by 7.5% by 2020. Efficiency Vermont staff contributed their expertise in such areas as program design, industry partnership models, program costs, evaluation, and financing options. The task force contained seven subcommittees chartered to develop recommendations for legislative action. Efficiency Vermont staff members chaired three subcommittees and participated in all seven.

2.4.2 COORDINATION WITH DISTRIBUTION UTILITIES

Efficiency Vermont continued its coordination with Vermont Gas Systems and Burlington Electric Department to ensure consistency in the implementation of efficiency services and of specific initiatives, such as those connected to the advanced metering infrastructure. Efficiency Vermont also maintained its coordination with Green Mountain Power Corporation (GMP) in the fifth year of implementation of services through the GMP Energy Efficiency Fund. This effort offers GMP customers unique services as well as shared services, through which GMP invests in existing Efficiency Vermont programs. In the latter half of 2012, Efficiency Vermont also collaborated with GMP to establish efficiency services through the Community Energy and Efficiency Development (CEED) fund. This fund was created when GMP and Central Vermont Public Service merged. Efficiency Vermont participated in the CEED stakeholder workshop process and submitted several efficiency program designs for GMP to consider for 2013 implementation.

2.4.3 DEMAND RESOURCE PLAN (DRP)

In 2012, Efficiency Vermont: 1) participated in the Vermont Public Service Board's process to determine the 2012–2031 Demand Resource Plan (DRP); and 2) submitted DRP filings to the Vermont Public Service Board, including heating and process fuel updates, and Quantifiable Performance Indicator targets for 2012–2014. In addition, Vermont Energy Investment Corporation, as the administrator of Efficiency Vermont, initiated planning discussions with the DPS regarding the development of a more efficient process for the next DRP.

2.4.4 VERMONT SYSTEM PLANNING COMMITTEE (VSPC)

Efficiency Vermont continued its active participation in the VSPC, a collaborative body bringing together Vermont's utilities, Vermont Electric Power Company (VELCO), the DPS, and individuals representing the interests of ratepayers to address approaches to electric transmission system reliability. In 2012, Efficiency Vermont presented, to the Non-Transmission Alternatives Study Group, the results of an analysis undertaken to determine additional energy efficiency resources, by Vermont load zone, for 2012–2031. Efficiency Vermont also participated in VSPC subcommittees addressing process improvement, Geographic Targeting funding, and public participation.

2.4.5 ISO-NE FORWARD CAPACITY MARKET PARTICIPATION

Efficiency Vermont continued its participation in the Independent System Operator New England (ISO-NE) Forward Capacity Market (FCM), in which energy efficiency savings are bid as a resource for the regional grid. Vermont Energy Investment Corporation met its commitments to deliver savings from Efficiency Vermont activity in the FCM in 2012. Savings were approximately 66.305 MW of peak capacity in the summer of 2012. This led to \$3.6 million in revenues in 2012 that provided funds for investment in thermal efficiency services. Efficiency Vermont also continued its related metering, measurement, and evaluation activities, including:

- on-time completion of annual FCM certification for 2010 projects;
- summer and autumn meter deployment and data collection of sites selected in the 2011 sample, through coordination with the DPS and West Hill Energy;
- the launch of Value Stream Mapping to improve the effectiveness of the metering process, and
- planning for metering of projects that will be part of the 2012 portfolio sample.

2.4.6 STATE, REGIONAL, AND NATIONAL PARTNERSHIPS

In service to Vermonters and in support of the State's energy goals, Efficiency Vermont continued to leverage the expertise and resource of entities engaged in a range of energy and efficiency endeavors, both in Vermont and outside the state. Efficiency Vermont also shared its own expertise at regional and national gatherings, enabling Vermont to be both recognized for its innovations and informed by best practices in other states. In Vermont, such partners included the High Meadows Fund and the Regulatory Assistance Project. On a regional and national level, Efficiency Vermont maintained ongoing partnerships with such energy efficiency program sponsors as the Northeast Energy Efficiency Partnerships (NEEP), the New Buildings Institute, the Consortium for Energy Efficiency, ENERGY STAR, Top Ten USA, and the American Council for an Energy-Efficient Economy, working to share information on best practices and to establish uniform product eligibility criteria and program designs.

For example, in 2012, Efficiency Vermont engaged in the following efforts with NEEP:

- Research of emerging technologies that have yet to be fully evaluated
- Building codes savings and attribution project; increasing knowledge of capturing and accounting for energy efficiency benefits to advance building energy codes and compliance and to encourage quality and consistency in evaluation, measurement, and verification approaches

- Variable frequency drive load shape research; comparing two methodologies in use for a technology with high value peak period savings
- Incremental cost study; an opportunity to increase focus on costs (a more common research focus is savings) for targeted gas and electric measures with implications for testing cost-effectiveness, informing incentive levels, and updating cost assumptions

2.4.7 APPLIED RESEARCH AND DEVELOPMENT

Efficiency Vermont undertook several research and development projects to gather information on areas with potential for inclusion in future programming. The projects spanned a wide variety of technology applications and customer segments. Highlights of projects, which were selected in a competitive process, included applied research into optimizing “free-cooling” of data centers, advancing efficiency of classroom lighting, using “smart” thermostats to predict the thermal efficiency of homes, improving energy recovery ventilation for low-income housing, exploring the design and construction of “low load” residential buildings, and increasing the efficiency of electric vehicle charging stations. These projects were expected to conclude in 2013.

Smart Grid and Advanced Metering Infrastructure

Efficiency Vermont prepared and delivered a strategic framework document to the DPS and key stakeholders, including Green Mountain Power, Vermont Electric Cooperative, Washington Electric Cooperative, Stowe Electric Department, and Burlington Electric Department. This document, *Efficiency Vermont Smart Grid Proposal: Recommendations for Developing Consumer-facing Services to Ratepayers*, outlines Efficiency Vermont’s efforts to bring the benefits of the smart grid to customers and includes strategies for data transfer and storage, data analytics, and consumer data presentation.

Efficiency Vermont announced its intention to participate in the federal Green Button initiative, a recently developed industry-standard interface for energy service providers that enables customers to access their own energy use data online.

Smart Grid Investment Grant Participation

Efficiency Vermont continued its participation in the American Recovery and Reinvestment Act grant, participating in the Smart Grid Investment Grant’s Steering Committee and Working Group.

Consumer Behavior Studies

Efficiency Vermont utilized smart grid carryover funds from 2011 to match federal funding for two consumer behavior studies: Vermont Electric Cooperative's Smart Grid Investment Grant (SGIG) study and the Weatherization Innovation Pilot Program (WIPP) study. The objective of both studies was to reduce energy demand through customers' utilization of in-home displays and personalized web pages showing hourly electricity usage and costs.

The majority of the carryover funds spending was on in-home metering and display technology, classified as a customer incentive. Efficiency Vermont deployed 120 displays in support of the WIPP study and approximately 220 in support of the SGIG study. Efficiency Vermont communicated with study participants, by phone, to recommend tailored behavioral strategies for achieving participant-defined energy savings goals. By the close of the year, the Central Vermont Office of Economic Opportunity completed the WIPP study's home visits, and participants in both studies were able to access personal web portals to view their hourly electricity consumption.

Efficiency Vermont also engaged in successful efforts to acquire an extension from the U.S. Department of Energy (DOE) to the SGIG study through September 2014 and the WIPP study through September 2013.

2.5 PURSUING EXCELLENCE IN SERVICE DELIVERY

Efficiency Vermont engaged in its ongoing effort to maintain excellence, efficiency, and accuracy in all aspects of its work, whether in direct service or in the development, assessment, continual improvement, and implementation of systems and protocols necessary to the delivery of effective services.

2.5.1 INFORMATION TECHNOLOGY

In 2012, in addition to its regular support for critical data and document management, as well as ongoing attention to improving and updating existing applications and processes, Efficiency Vermont:

- released the Home Energy Rating Online system (HERO), as well as a major new version of Efficiency Vermont's Knowledge-based Information Technology Tool (KITT) tracking system that improved tracking of customer participation in a variety of initiatives.

- worked on a new software application that enables technical staff to create, edit, access, and distribute measure characterizations that support Efficiency Vermont activities. This new application, to be released in the summer of 2013, is designed to replace the more cumbersome Word documents currently used to store and share these characterizations.
- planned and began development of an online system for processing rebate applications, scheduled to launch in 2013.
- evaluated strategic use of technology and underwent an assessment to instruct future buy/build decisions.

2.5.2 PLANNING AND REPORTING

Efficiency Vermont prepared and submitted required documents to the Vermont Public Service Board, DPS, and required stakeholders. These documents included an annual plan, an annual savings claim, an annual highlights brochure, and monthly and quarterly reports. These activities were undertaken in fulfillment of requirements specified under agreements with State agencies, to maintain accountability and to provide accurate tracking of progress for optimizing service delivery, for public benefit, and for the benefit of entities outside Vermont seeking replication.

2.5.3 EVALUATION

Efficiency Vermont continued to follow rigorous, ongoing quality management protocols in alignment with the Quantifiable Performance Indicators Plan (discussed in Section 1.1) and with the Service Quality and Reliability Plan (see Section 3.6), which defines customer service performance standards in these key categories: General customer satisfaction, project customer satisfaction, incoming call responsiveness, and complaint rate and resolution.

In 2012, Efficiency Vermont also engaged in evaluation of:

- Vermont small business demographics, motivations, and barriers in regard to efficiency investments, and degree of energy efficiency knowledge;
- homeowner energy efficiency behaviors, awareness of Home Performance with ENERGY STAR, and awareness of Efficiency Vermont and its services;
- the potential challenges and opportunities of efforts to motivate businesses to invest in energy efficiency retrofits through financing, and

- the impact of Efficiency Vermont’s CFL advertising campaign and CFL pricing.

As an essential part of its reporting efforts, Efficiency Vermont undertook activities designed to maintain the accuracy of reported savings claims, including:

- maintaining and updating the Technical Reference Manual, which characterizes energy-saving measures on the basis of several parameters: Annual electric savings, annual coincident peak savings, annual fossil fuel energy savings, incremental costs and measure lives, and other applicable resource savings such as water savings and operational and maintenance cost savings;
- working with the DPS as it conducts its annual savings verification to review the initial savings claim, and
- participating in the Technical Advisory Group with the DPS, Burlington Electric Department, and other stakeholders to resolve any issues arising from the annual savings verification process and to provide a proactive mechanism for developing energy characterization and savings calculations.

3. RESOURCE AND NON-RESOURCE ACQUISITION RESULTS

The tables presented in this section contain information on results from both Resource Acquisition and Non-Resource Acquisition activity, as well as a summary of Service Quality and Reliability. Reporting these results in this manner is new for 2012. These additions are the outcome of discussions between Efficiency Vermont staff and the Vermont Department of Public Service.

3.1 Resource Acquisition Summary

	Total Efficiency Vermont Resource Acquisition	Heating and Process Fuels Resource Acquisition	Electric Resource Acquisition	Customer Credit Resource Acquisition
Efficiency Vermont Costs				
Year to Date Costs	\$35,939,316	\$3,744,116	\$31,999,600	\$195,600
* Annual Budget Estimate	\$36,972,900	\$3,934,800	\$32,285,400	\$752,700
Unspent Annual Budget Estimate	\$1,033,584	\$190,684	\$285,800	\$557,100
% Annual Budget Estimate Unspent	3%	5%	1%	74%
Other Costs and Commitments				
Participant Costs Year to Date	\$32,385,760	\$11,072,734	\$21,231,064	\$81,963
Third Party Costs Year to Date	\$3,207,648	\$1,048,636	\$2,159,012	\$0
Savings Results				
MWh Year to Date	111,054	-171	110,179	1,046
MWh Cumulative starting 1/1/12	111,054	-171	110,179	1,046
Winter Peak Coincident kW Savings Results				
Winter Coincident Peak kW Year to Date	22,184	97	21,970	117
Winter Coincident Peak kW Cumulative Starting 1/1/12	22,184	97	21,970	117
Summer Peak Coincident kW Savings Results				
Summer Coincident Peak kW Year to Date	15,147	-68	15,097	117
Summer Coincident Peak kW Cumulative Starting 1/1/12	15,147	-68	15,097	117
TRB Savings Results				
TRB Year to Date	\$150,326,627	\$30,830,035	\$118,358,445	\$1,138,147
TRB Cumulative Starting 1/1/12	\$150,326,627	\$30,830,035	\$118,358,445	\$1,138,147
MMBtu Savings Results				
MMBtu Year to Date	128,846	78,361	50,485	0
MMBtu Cumulative Starting 1/1/12	128,846	78,361	50,485	0
Participation				
Partic.w/ installs Year to Date	46,084	2,397	43,686	1
Partic.w/ installs Cumulative starting 1/1/12	46,084	2,397	43,686	1

* Annual projections are estimates only and provided for informational purposes.3

3.2 Budget Summary¹

	<u>Budget</u> <u>Current Year</u> <u>2012</u>	<u>Actual</u> <u>Current Year</u> <u>2012</u>	%	<u>Budget</u> <u>2012-2014</u>	<u>Actual</u> <u>2012-2014</u>	%
RESOURCE ACQUISITION						
<i><u>Electric Efficiency Funds Activities</u></i>						
Business Sector	\$ 18,644,500	\$ 17,809,246	96%	\$ 69,539,760	\$ 17,809,246	26%
Customer Credit	\$ 740,000	\$ 192,307	26%	\$ 3,038,500	\$ 192,307	6%
Residential Sector	<u>\$ 13,098,100</u>	<u>\$ 13,652,397</u>	<u>104%</u>	<u>\$ 31,996,780</u>	<u>\$ 13,652,397</u>	<u>43%</u>
Total Electric Efficiency Funds Activities	<u>\$ 32,482,600</u>	<u>\$ 31,653,950</u>	<u>97%</u>	<u>\$ 104,575,040</u>	<u>\$ 31,653,950</u>	<u>30%</u>
<i><u>Heating and Process Fuels Funds Activities</u>²</i>						
Business Sector	\$ 967,200	\$ 543,447	56%	\$ 3,300,580	\$ 543,447	16%
Residential Sector	<u>\$ 2,901,500</u>	<u>\$ 3,137,721</u>	<u>108%</u>	<u>\$ 9,901,640</u>	<u>\$ 3,137,721</u>	<u>32%</u>
Total Heating and Process Fuels Funds Activities	<u>\$ 3,868,700</u>	<u>\$ 3,681,168</u>	<u>95%</u>	<u>\$ 13,202,220</u>	<u>\$ 3,681,168</u>	<u>28%</u>
TOTAL RESOURCE ACQUISITION	<u>\$ 36,351,300</u>	<u>\$ 35,335,118</u>	<u>97%</u>	<u>\$ 117,777,260</u>	<u>\$ 35,335,118</u>	<u>30%</u>
NON-RESOURCE ACQUISITION						
Education and Training	\$ 813,600	\$ 834,357	103%	\$ 2,462,118	\$ 834,357	34%
Applied Research and Development	\$ 490,000	\$ 268,937	55%	\$ 1,311,542	\$ 268,937	21%
Planning and Reporting	\$ 291,400	\$ 383,165	131%	\$ 1,333,197	\$ 383,165	29%
Evaluation	\$ 839,600	\$ 631,535	75%	\$ 2,461,407	\$ 631,535	26%
Policy and Public Affairs	\$ 346,800	\$ 555,740	160%	\$ 1,047,847	\$ 555,740	53%
Information Technology	\$ 835,000	\$ 703,044	84%	\$ 2,522,665	\$ 703,044	28%
General Administration	<u>\$ 249,800</u>	<u>\$ 256,314</u>	<u>103%</u>	<u>\$ 755,406</u>	<u>\$ 256,314</u>	<u>34%</u>
TOTAL NON-RESOURCE ACQUISITION	<u>\$ 3,866,200</u>	<u>\$ 3,633,092</u>	<u>94%</u>	<u>\$ 11,894,183</u>	<u>\$ 3,633,092</u>	<u>31%</u>
Smart Grid (2011 Carryover)	<u>\$ 473,200</u>	<u>\$ 81,664</u>	<u>17%</u>	<u>\$ 473,200</u>	<u>\$ 81,664</u>	<u>17%</u>
Operations Fee	<u>\$699,600</u>	<u>\$668,398</u>	<u>96%</u>	<u>\$2,229,200</u>	<u>\$668,398</u>	<u>30%</u>
SUB-TOTAL COSTS (prior to Performance-Based Fee)	<u>\$ 41,390,300</u>	<u>\$ 39,718,272</u>	<u>96%</u>	<u>\$ 132,373,842</u>	<u>\$ 39,718,272</u>	<u>30%</u>
Performance-Based Fee	\$ -	\$ -	0%	\$ 3,272,900	\$ -	0%
TOTAL COSTS (including Performance-Based Fee)	<u>\$ 41,390,300</u>	<u>\$ 39,718,272</u>	<u>96%</u>	<u>\$ 135,646,742</u>	<u>\$ 39,718,272</u>	<u>29%</u>

¹ Annual budgets are provided for information purposes only. Efficiency Vermont operates under three-year Board approved budgets.

² Heating and Process Fuels Budgets have been adjusted to include projected revenue increase as filed November 1st 2012

3.3 Electric Performance Indicators & Minimum Requirements

QPI#	Title	Performance Indicator / Milestone	Target	Actual	%
1	Electricity Savings	Annual incremental net MWh savings	274,000	110,179	40%
2	Total Resource Benefits	Present worth of lifetime electric, fossil, and water benefits	\$315,710,000	\$118,358,445	37%
3	Statewide Summer Peak Demand Savings	Cumulative net summer peak demand (kW) savings	41,920	15,097	36%
4.a.	Summer Peak Demand Savings in Geographic Areas	Cumulative net summer net peak demand savings in the St Albans area	1,800	584	32%
4.b.		Cumulative net summer net peak demand savings in the Susie Wilson area	1,570	870	55%
5	Business Comprehensiveness	Custom, business retrofit or equipment replacement projects with multiple end-uses	378	59	16%
6	Market Transformation Residential	Vermont 1-4 unit residential new construction program participation in 2014 as % of total 1-4 unit building permits in 2013	40%	0%	0%
7	Market Transformation Business	Instances where an energy efficiency measure supply chain partner is attached to completed business project	7,360	2,634	36%

MPR#	Title	Minimum Requirement	Minimum	Actual	%
8	Minimum Electric Benefits	Total electric benefits divided by total costs	1.2	2.7	225%
9	Threshold (or minimum acceptable) Level of Participation by Residential Customers	Total residential sector spending	\$22,000,000	\$13,885,853	63%
10	Threshold (or minimum acceptable) Level of Participation by Low-Income Households	Total low-income single and multifamily services spending	\$7,500,000	\$4,467,259	60%
11	Threshold (or minimum acceptable) Level of Participation by Small Business Customers	Number of total non-residential premises with annual electric use of 40,000 kWh/yr or less that acquire kwh savings	1,950	1,892	97%
12	Geographic Equity	TRB for each geographic area is greater than values shown on Geo-Equity Table	14	3	21%
13	Administrative Efficiency - Management Span of Control	Staff-to-Supervisor FTE ratio > 8.5:1	8.5	9.8	115%
14	Administrative Efficiency - Key Process Improvements	Meet all pre-determined milestones on schedule	5	2	40%
15	Service Quality	Achieve 92 or more metric points	92	28	30%

3.4 Electric Minimum TRB per Geographic Area (QPI #12)

Geographic Area (Counties)	Minimum TRB	Actual TRB	% of Goal
Addison	\$8,473,457	\$6,402,443	76%
Bennington	\$8,542,688	\$6,092,116	71%
Caledonia	\$7,185,374	\$12,176,817	169%
Chittenden	\$29,546,914	\$30,308,881	103%
Essex / Orleans	\$7,717,769	\$6,553,853	85%
Franklin	\$16,148,322	\$8,130,924	50%
Grand Isle	\$1,604,009	\$655,896	41%
Lamoille	\$5,632,070	\$6,254,302	111%
Orange	\$6,658,830	\$2,938,457	44%
Rutland ¹	\$14,184,50	\$10,344,88	73%
Washington	\$13,699,893	\$10,489,698	77%
Windham	\$10,243,229	\$9,304,418	91%
Windsor	\$13,040,738	\$8,705,756	67%
Total	\$142,677,800	\$118,358,445	83%

¹ Actual values exclude Customer Credit

**3.5 Heating and Process Fuels Funds
Performance Indicators & Minimum Requirements**

QPI#	Title	Performance Indicator / Milestone	Target	Actual	%
1	Thermal & Mechanical Energy Efficiency Savings	Annual incremental net MMBtu savings	149,000	78,361	53%
2	Residential Single Family Comprehensiveness	a. Average air leakage reduction per project	34%	32%	94%
		b. Percent of projects with square feet of insulation added equivalent to at least 50% of the home's finished square feet of floor area	44%	87%	197%
		c. Percent of projects with both shell measures and heating system measures installed	16%	14%	88%

MPR#	Title	Minimum Requirement	Minimum	Actual	%
3	Threshold (or minimum acceptable) Level of Participation by Residential Customers	Residential sector spending as % of total spending	62.5%	85.2%	136%
4	Threshold (or minimum acceptable) Level of Participation by Low-Income Households	Low-income single- and multi-family spending as % of total spending	17.0%	43.6%	257%

3.6 Service Quality and Reliability Summary Report

Metric #	Metric Description	Reporting Frequency	Actual Performance this Period	Points Earned this Period	Cumulative 2012-14 Points Earned	Total Possible 2012-14 Points	%
1A	Residential Customer Service Satisfaction: Percentage of service categories with average respondent rating better than benchmark shall be $\geq 50\%$	performance period	NA	NA	0	6	0%
1B	Residential Customer Service Satisfaction: Percentage of service categories with average respondent rating worse than benchmark shall be $\leq 20\%$	performance period	NA	NA	0	6	0%
2A	Business Customer Service Satisfaction: Percentage of service categories with average respondent rating better than benchmark shall be $\geq 50\%$	performance period	NA	NA	0	6	0%
2B	Business Customer Services Satisfaction: Percentage of service categories with average respondent rating worse than benchmark shall be $\leq 20\%$	performance period	NA	NA	0	6	0%
3	Customer Satisfaction upon Project Completion: Per each market segment, annual percentage of survey respondents with average service ratings of 3 (or better) shall be $\geq 90\%$	annually	98%	4	4	12	33%
4	Average answer time shall be ≤ 15 seconds per call	quarterly	7	1	4	12	33%
5	Average percentage of calls answered shall be $\geq 92\%$	quarterly	96%	1	4	12	33%
6	Average percentage of abandoned calls shall be $\leq 3\%$	quarterly	1%	1	4	12	33%
7	Percentage of complaint follow-up call attempted by end of next business day shall be $\geq 95\%$	quarterly	100%	1	4	12	33%
8	Percentage of complaints closed within 12 business days of initial complaint call shall be $\geq 95\%$	quarterly	100%	1	4	12	33%
9	For each reporting year, the ratio of total complaints received per total number of Efficiency Vermont participants shall be $\leq 0.5\%$ (one-half of one percent)	annually	0.1%	4	4	12	33%
Totals				13	28	108	26%

3.7 Electric Resource Acquisition Summary

Services	Totals				Business Energy Services		Residential Energy Services			Other
	All Resource Acquisition (including CC)	Efficiency Vermont Resource Acquisition	Subtotal Business Energy Services	Subtotal Residential Energy Services	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes	Customer Credit Program
Electric Resource Acquisition Costs										
Year to Date Costs	\$32,195,232	\$31,999,637	\$18,113,784	\$13,885,853	\$3,383,808	\$14,729,976	\$2,467,505	\$6,547,533	\$4,870,814	\$195,595
Annual Budget Estimate ¹	\$33,038,100	\$32,285,400	\$18,963,300	\$13,322,100	\$2,759,800	\$16,203,500	\$2,524,600	\$7,104,900	\$3,692,600	\$752,700
Unspent Annual Budget Estimate	\$842,868	\$285,763	\$849,516	(\$563,753)	(\$624,008)	\$1,473,524	\$57,095	\$557,367	(\$1,178,214)	\$557,105
% Annual Budget Estimate Unspent	3%	1%	4%	-4%	-23%	9%	2%	8%	-32%	0%
Savings Results										
MWh Year to Date	111,225	110,179	67,687	42,492	15,310	52,377	1,580	36,802	4,110	1,046
MWh Cumulative starting 1/1/12	111,225	110,179	67,687	42,492	15,310	52,377	1,580	36,802	4,110	1,046
3-Year MWh Goal	nap	274,000	193,200	80,800	26,400	166,800	4,000	65,800	11,000	nap
% of 3-Year MWh Goal	nap	40%	35%	53%	58%	31%	40%	56%	37%	nap
Winter Coincident Peak kW Year to Date	22,086	21,970	9,731	12,238	1,875	7,856	358	11,117	764	117
Winter Coincident Peak kW Cumulative starting 1/1/12	22,086	21,970	9,731	12,238	1,875	7,856	358	11,117	764	117
Summer Coincident Peak kW Year to Date	15,214	15,097	9,112	5,985	2,171	6,941	210	5,435	340	117
Summer Coincident Peak kW Cumulative starting 1/1/12	15,214	15,097	9,112	5,985	2,171	6,941	210	5,435	340	117
3-Year Summer Coincident Peak kW Goal	nap	41,920	29,220	12,700	5,100	24,120	800	10,600	1,300	nap
% of 3-Year Summer Coincident Peak kW Goal	nap	36%	31%	47%	43%	29%	26%	51%	26%	nap
TRB Year to Date	\$119,496,592	\$118,358,445	\$76,866,292	\$41,492,153	\$28,390,079	\$48,476,213	\$10,335,545	\$26,602,699	\$4,553,909	\$1,138,147
TRB Cumulative starting 1/1/12	\$119,496,592	\$118,358,445	\$76,866,292	\$41,492,153	\$28,390,079	\$48,476,213	\$10,335,545	\$26,602,699	\$4,553,909	\$1,138,147
3-Year TRB Goal	nap	\$315,710,000	\$211,737,900	\$103,972,100	\$30,527,000	\$181,210,900	\$27,816,500	\$55,433,600	\$20,722,000	nap
% of 3-Year TRB Goal	nap	37%	36%	40%	93%	27%	37%	48%	22%	nap
Associated Benefits										
MMBtu Year to Date	50,485	50,485	39,842	10,643	33,368	6,474	15,993	(5,477)	127	0
MMBtu Cumulative starting 1/1/12	50,485	50,485	39,842	10,643	33,368	6,474	15,993	(5,477)	127	0
Participation										
Partic.w/ installs Year to Date	43,687	43,686	3,412	40,274	229	3,183	1,043	34,376	4,855	1
Partic.w/ installs Cumulative starting 1/1/12	43,687	43,686	3,412	40,274	229	3,183	1,043	34,376	4,855	1

¹ Annual budgets are provided for information purposes only. Efficiency Vermont operates under three-year Board approved budgets.

3.8 Electric Resource Acquisition including Customer Credit

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	43,687	43,687	43,687
<u>Operating Costs</u>				
Administration	NA	\$1,320,315	\$1,320,315	\$1,320,315
Operations and Implementation	NA	\$4,267,788	\$4,267,788	\$4,267,788
Strategy and Planning	NA	\$1,380,366	\$1,380,366	\$1,380,366
Subtotal Operating Costs	NA	\$6,968,468	\$6,968,468	\$6,968,468
<u>Technical Assistance Costs</u>				
Services to Participants	NA	\$4,681,893	\$4,681,893	\$4,681,893
Services to Trade Allies	NA	\$344,238	\$344,238	\$344,238
Subtotal Technical Assistance Costs	NA	\$5,026,131	\$5,026,131	\$5,026,131
<u>Support Services</u>				
Transportation	NA	\$0	\$0	\$0
Targeted Implementation	NA	\$0	\$0	\$0
Consulting	NA	\$105,158	\$105,158	\$105,158
Marketing	NA	\$1,288,107	\$1,288,107	\$1,288,107
EM&V	NA	\$185,885	\$185,885	\$185,885
Policy	NA	\$101,976	\$101,976	\$101,976
Information Technology	NA	\$279	\$279	\$279
Customer Support	NA	\$179,693	\$179,693	\$179,693
Business Development	NA	\$7,142	\$7,142	\$7,142
Subtotal Support Services Costs	NA	\$1,868,241	\$1,868,241	\$1,868,241
<u>Incentive Costs</u>				
Incentives to Participants ¹	NA	\$18,257,763	\$18,257,763	\$18,257,763
Incentives to Trade Allies	NA	\$74,629	\$74,629	\$74,629
Subtotal Incentive Costs	NA	\$18,332,392	\$18,332,392	\$18,332,392
Total Efficiency Vermont Costs	NA	\$32,195,232	\$32,195,232	\$32,195,232
Total Participant Costs	NA	\$21,313,027	\$21,313,027	\$21,313,027
Total Third Party Costs	NA	\$2,159,012	\$2,159,012	\$2,159,012
Total Resource Acquisition Costs	NA	\$55,667,271	\$55,667,271	\$55,667,271

Annualized MWh Savings	NA	111,225	111,225	111,225
Lifetime MWh Savings	NA	1,245,235	1,245,235	1,245,235
TRB Savings (2012 \$)	NA	\$119,496,592	\$119,496,592	\$119,496,592
Winter Coincident Peak kW Savings	NA	22,086	22,086	22,086
Summer Coincident Peak kW Savings	NA	15,214	15,214	15,214
Annualized MWh Savings/Participant	NA	2.546	2.546	2.546
Weighted Lifetime	NA	11	11	11

Annualized MWh Savings (adjusted for measure life)	110,722
Winter Coincident Peak kW Savings (adjusted for measure life)	21,997
Summer Coincident Peak kW Savings (adjusted for measure life)	15,160

¹ Business Existing Facilities (BEF) incentive costs were under stated by \$39,716 (~ 0.4%) in 2012 monthly invoices due to an error in the GMP Energy Efficiency Fund BEF Mutual Fund cost allocation. The adjustment to correct the error will be completed in the March 2013 GMP and EVT invoices. The overall incentive totals are accurately reported in table 2.10.

3.9 Electric Resource Acquisition excluding Customer Credit

	<u>Prior Year</u>	<u>Current Year 2012</u>	<u>Cumulative starting 1/1/12</u>	<u>Cumulative starting 1/1/12</u>
# participants with installations	NA	43,686	43,686	43,686
<u>Operating Costs</u>				
Administration	NA	\$1,312,607	\$1,312,607	\$1,312,607
Operations and Implementation	NA	\$4,263,107	\$4,263,107	\$4,263,107
Strategy and Planning	NA	\$1,380,162	\$1,380,162	\$1,380,162
Subtotal Operating Costs	NA	\$6,955,876	\$6,955,876	\$6,955,876
<u>Technical Assistance Costs</u>				
Services to Participants	NA	\$4,659,786	\$4,659,786	\$4,659,786
Services to Trade Allies	NA	\$338,497	\$338,497	\$338,497
Subtotal Technical Assistance Costs	NA	\$4,998,283	\$4,998,283	\$4,998,283
<u>Support Services</u>				
Transportation	NA	\$0	\$0	\$0
Targeted Implementation	NA	\$0	\$0	\$0
Consulting	NA	\$105,005	\$105,005	\$105,005
Marketing	NA	\$1,284,736	\$1,284,736	\$1,284,736
EM&V	NA	\$184,803	\$184,803	\$184,803
Policy	NA	\$96,525	\$96,525	\$96,525
Information Technology	NA	\$278	\$278	\$278
Customer Support	NA	\$179,268	\$179,268	\$179,268
Business Development	NA	\$7,137	\$7,137	\$7,137
Subtotal Support Services Costs	NA	\$1,857,752	\$1,857,752	\$1,857,752
<u>Incentive Costs</u>				
Incentives to Participants ¹	NA	\$18,113,096	\$18,113,096	\$18,113,096
Incentives to Trade Allies	NA	\$74,629	\$74,629	\$74,629
Subtotal Incentive Costs	NA	\$18,187,725	\$18,187,725	\$18,187,725
Total Efficiency Vermont Costs	NA	\$31,999,637	\$31,999,637	\$31,999,637
Total Participant Costs	NA	\$21,231,064	\$21,231,064	\$21,231,064
Total Third Party Costs	NA	\$2,159,012	\$2,159,012	\$2,159,012
Total Resource Acquisition Costs	NA	\$55,389,712	\$55,389,712	\$55,389,712
<u>Annualized MWh Savings</u>				
Annualized MWh Savings	NA	110,179	110,179	110,179
Lifetime MWh Savings	NA	1,229,541	1,229,541	1,229,541
TRB Savings (2012 \$)	NA	\$118,358,445	\$118,358,445	\$118,358,445
Winter Coincident Peak kW Savings	NA	21,970	21,970	21,970
Summer Coincident Peak kW Savings	NA	15,097	15,097	15,097
Annualized MWh Savings/Participant	NA	2.522	2.522	2.522
Weighted Lifetime	NA	11	11	11
Annualized MWh Savings (adjusted for measure life)				109,675
Winter Coincident Peak kW Savings (adjusted for measure life)				21,880
Summer Coincident Peak kW Savings (adjusted for measure life)				15,043

¹ Business Existing Facilities (BEF) incentive costs were under stated by \$39,716 (~ 0.4%) in 2012 monthly invoices due to an error in the GMP Energy Efficiency Fund BEF Mutual Fund cost allocation. The adjustment to correct the error will be completed in the March 2013 GMP and EVT invoices. The overall incentive totals are accurately reported in table 2.10.

3.10 Electric Resource Acquisition - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1,172	3,434	3,118	63,857	162	435	158	0	\$429,839	\$851,625
Cooking and Laundry	4,869	1,677	1,354	23,388	241	179	1,868	59,765	\$513,422	\$1,674,013
Design Assistance	122	1,032	920	13,070	91	78	2,010	0	\$509,863	\$481,903
Electronics	3,531	2,959	2,939	15,840	319	313	0	0	\$292,811	-\$222,227
Hot Water Efficiency	1,574	558	511	4,313	63	48	2,369	7,949	\$58,467	\$194,044
Hot Water Fuel Switch	138	469	631	14,072	71	43	-1,835	0	\$76,440	\$130,557
Industrial Process Eff.	72	9,237	9,758	105,378	1,523	948	11,726	0	\$823,266	\$3,555,529
Lighting	33,811	74,938	76,575	786,965	17,282	11,402	-27,942	0	\$12,543,493	\$7,403,008
Motors	405	7,751	7,341	97,246	760	854	-1,845	0	\$361,240	\$1,991,619
Other Efficiency	752	1,529	1,321	11,552	606	43	2,294	1,454	\$407,776	\$60,853
Other Fuel Switch	254	197	216	5,241	62	41	-7	0	\$31,470	\$107,242
Other Indirect Activity	61	0	0	0	0	0	0	0	\$42,775	-\$41,823
Refrigeration	4,028	4,065	3,761	48,737	476	411	308	88	\$1,552,184	\$781,000
Space Heat Efficiency	875	981	899	21,109	208	120	52,313	0	\$205,808	\$3,742,439
Space Heat Fuel Switch	44	190	177	5,714	31	0	-695	0	\$41,000	\$257,919
Ventilation	1,266	1,143	1,059	12,972	71	182	9,763	0	\$261,959	\$261,495
Water Conservation	1	18	17	88	2	1	0	0	\$1,000	\$1,868
Totals		110,179	110,596	1,229,541	21,970	15,097	50,485	69,257	\$18,152,813	\$21,231,064

3.11 Electric Resource Acquisition - Utility Breakdown

Utility	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Barton	213	228	220	2,410	51	30	298	215	\$60,703	\$43,197
Burlington	47	228	207	2,146	28	31	-117	0	\$33,283	-\$17,380
CVPS	18,580	45,651	46,009	505,962	8,872	6,409	34,201	30,939	\$7,718,958	\$8,909,249
Enosburg Falls	229	600	608	5,889	153	85	-59	327	\$110,815	\$29,245
Green Mountain	11,525	42,173	42,312	487,143	8,227	5,873	7,813	22,658	\$6,077,134	\$8,097,483
Hardwick	555	650	658	6,344	165	97	106	719	\$179,234	\$56,218
Hyde Park	205	456	479	4,136	120	73	-49	260	\$94,544	\$10,771
Jacksonville	80	130	118	2,594	28	13	26	96	\$27,677	\$41,190
Johnson	222	441	419	4,624	91	52	391	101	\$88,230	\$50,496
Ludlow	205	899	975	8,277	151	111	158	213	\$120,067	\$115,952
Lyndonville	777	1,530	1,569	16,592	369	179	1,379	890	\$388,105	\$281,520
Morrisville	562	1,244	1,265	11,479	305	170	-325	710	\$253,599	\$26,054
Northfield	297	711	743	7,537	132	107	174	438	\$156,661	\$211,332
Orleans	150	122	125	1,067	31	17	-32	94	\$29,290	-\$63
Stowe	459	2,248	2,223	29,683	506	199	450	522	\$516,460	\$778,450
Swanton	438	1,097	1,108	13,507	214	141	8	941	\$229,597	\$262,258
VT Electric Coop	6,721	10,471	10,224	108,134	2,187	1,334	5,648	7,977	\$1,782,713	\$2,230,606
VT Marble	77	17	18	139	4	2	0	25	\$2,588	\$151
Washington Electric	2,344	1,284	1,318	11,881	335	175	415	2,133	\$283,155	\$104,337
Totals	43,686	110,179	110,596	1,229,541	21,970	15,097	50,485	69,257	\$18,152,813	\$21,231,064

3.12 Electric Resource Acquisition - County Breakdown

County	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Addison	2,504	5,786	5,683	69,731	1,161	778	1,288	4,463	\$1,176,966	\$1,259,727
Bennington	2,558	6,185	6,456	65,664	1,224	1,015	568	3,610	\$1,151,201	\$1,376,150
Caledonia	2,404	6,141	6,160	66,351	1,253	863	25,190	2,622	\$1,241,382	\$1,415,697
Chittenden	8,298	31,150	31,285	356,049	6,147	4,291	2,601	18,058	\$4,007,154	\$4,979,534
Essex	471	491	462	4,556	135	59	-63	640	\$125,441	\$16,571
Franklin	3,274	9,058	8,999	96,875	1,641	1,213	-305	5,951	\$1,380,511	\$1,313,431
Grand Isle	679	675	657	6,821	160	86	-14	802	\$139,856	\$96,949
Lamoille	2,268	5,192	5,216	57,444	1,218	601	4,468	3,121	\$1,140,166	\$1,435,081
Orange	2,285	3,044	2,993	31,187	746	443	88	2,992	\$662,399	\$281,593
Orleans	2,807	5,477	5,234	64,999	1,083	695	1,949	2,937	\$1,025,941	\$1,348,835
Rutland	4,757	10,811	11,225	119,521	2,177	1,339	3,667	7,054	\$1,694,527	\$1,922,621
Washington	4,968	10,208	10,403	110,306	1,987	1,536	3,777	6,382	\$1,876,482	\$2,247,208
Windham	2,842	7,919	7,882	86,088	1,482	1,065	6,070	5,232	\$1,188,184	\$2,044,844
Windsor	3,571	8,042	7,943	93,949	1,556	1,112	1,200	5,392	\$1,342,603	\$1,492,823
Totals	43,686	110,179	110,596	1,229,541	21,970	15,097	50,485	69,257	\$18,152,813	\$21,231,064

3.13 Electric Resource Acquisition Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$89,084,706
Fossil Fuel Savings (Costs)	\$1,143,633	\$21,316,183
Water Savings (Costs)	\$518,611	\$7,957,577
Total	\$1,662,244	\$118,358,445

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	110,596	97,719	110,179
Winter on peak	43,105	37,923	43,041
Winter off peak	33,025	29,187	33,265
Summer on peak	19,352	17,219	17,219
Summer off peak	15,114	13,391	14,827
<u>Coincident Demand Savings (kW)</u>			
Winter	23,595	19,972	21,970
Shoulder	0	0	0
Summer	15,648	13,662	15,097

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	63,198	69,257	923,311
Annualized fuel savings (increase) MMBtu Total	49,070	50,485	1,012,375
LP	18,429	18,547	354,985
NG	4,193	5,238	80,202
Oil/Kerosene	21,144	21,524	474,360
Wood	4,913	4,766	102,744
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$3,257,552	\$2,882,973	\$27,543,274

Net Societal Benefits	\$161,402,315
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3.14 Electric Business Energy Services Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	3,412	3,412
<u>Operating Costs</u>			
Administration	NA	\$553,305	\$553,305
Operations and Implementation	NA	\$1,227,510	\$1,227,510
Strategy and Planning	NA	\$1,188,364	\$1,188,364
Subtotal Operating Costs	NA	\$2,969,179	\$2,969,179
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$2,969,752	\$2,969,752
Services to Trade Allies	NA	\$230,888	\$230,888
Subtotal Technical Assistance Costs	NA	\$3,200,640	\$3,200,640
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$26,450	\$26,450
Marketing	NA	\$440,091	\$440,091
EM&V	NA	\$138,188	\$138,188
Policy	NA	\$38,605	\$38,605
Information Technology	NA	\$98	\$98
Customer Support	NA	\$82,868	\$82,868
Business Development	NA	\$6,549	\$6,549
Subtotal Support Services Costs	NA	\$732,849	\$732,849
<u>Incentive Costs</u>			
Incentives to Participants ¹	NA	\$11,142,527	\$11,142,527
Incentives to Trade Allies	NA	\$68,589	\$68,589
Subtotal Incentive Costs	NA	\$11,211,115	\$11,211,115
Total Efficiency Vermont Costs	NA	\$18,113,784	\$18,113,784
Total Participant Costs	NA	\$18,776,040	\$18,776,040
Total Third Party Costs	NA	\$255,045	\$255,045
Total Resource Acquisition Costs	NA	\$37,144,869	\$37,144,869
<u>Annualized MWh Savings</u>			
Annualized MWh Savings	NA	67,687	67,687
Lifetime MWh Savings	NA	879,626	879,626
TRB Savings (2012 \$)	NA	\$76,866,292	\$76,866,292
Winter Coincident Peak kW Savings	NA	9,731	9,731
Summer Coincident Peak kW Savings	NA	9,112	9,112
Annualized MWh Savings/Participant	NA	19.838	19.838
Weighted Lifetime	NA	13	13

¹ Business Existing Facilities (BEF) incentive costs were under stated by \$39,716 (~ 0.4%) in 2012 monthly invoices due to an error in the GMP Energy Efficiency Fund BEF Mutual Fund cost allocation. The adjustment to correct the error will be completed in the March 2013 GMP and EVT invoices. The incentive totals for BEF are accurately reported in table 2.15.

3.15 Electric Business Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	177	3,323	2,994	62,250	161	399	158	0	\$391,792	\$833,318
Cooking and Laundry	13	78	75	1,016	10	6	417	3,472	\$8,785	\$61,016
Design Assistance	122	1,032	920	13,070	91	78	2,010	0	\$509,863	\$481,903
Electronics	3	123	110	786	12	10	0	0	\$4,848	\$21,627
Hot Water Efficiency	16	33	32	260	4	4	957	0	\$11,303	\$137,709
Hot Water Fuel Switch	3	85	95	2,551	12	13	-322	0	\$9,840	\$4,947
Industrial Process Eff.	72	9,237	9,758	105,378	1,523	948	11,726	0	\$823,266	\$3,555,529
Lighting	2,579	40,650	37,917	538,946	6,117	6,301	-21,090	0	\$8,099,145	\$8,469,666
Motors	133	7,643	7,244	95,477	739	825	-1,847	0	\$343,320	\$1,975,048
Other Efficiency	752	1,529	1,321	11,552	606	43	2,294	1,454	\$407,776	\$60,853
Other Fuel Switch	4	83	81	1,826	34	20	367	0	\$18,800	\$85,726
Other Indirect Activity	5	0	0	0	0	0	0	0	\$1,140	\$1,787
Refrigeration	146	2,538	2,333	29,684	332	246	308	88	\$293,185	\$567,702
Space Heat Efficiency	112	366	339	6,652	38	58	35,463	0	\$69,966	\$2,262,495
Space Heat Fuel Switch	1	0	0	0	0	0	-130	0	\$1,000	\$16,790
Ventilation	73	949	880	10,090	49	159	9,530	0	\$187,215	\$238,056
Water Conservation	1	18	17	88	2	1	0	0	\$1,000	\$1,868
Totals		67,687	64,117	879,626	9,731	9,112	39,842	5,014	\$11,182,243	\$18,776,040

3.16 Electric Residential Energy Services Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	40,274	40,274
<u>Operating Costs</u>			
Administration	NA	\$759,302	\$759,302
Operations and Implementation	NA	\$3,035,597	\$3,035,597
<u>Strategy and Planning</u>	NA	\$191,798	\$191,798
Subtotal Operating Costs	NA	\$3,986,697	\$3,986,697
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$1,690,034	\$1,690,034
<u>Services to Trade Allies</u>	NA	\$107,609	\$107,609
Subtotal Technical Assistance Costs	NA	\$1,797,643	\$1,797,643
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$78,554	\$78,554
Marketing	NA	\$844,644	\$844,644
EM&V	NA	\$46,614	\$46,614
Policy	NA	\$57,920	\$57,920
Information Technology	NA	\$180	\$180
Customer Support	NA	\$96,400	\$96,400
<u>Business Development</u>	NA	\$588	\$588
Subtotal Support Services Costs	NA	\$1,124,902	\$1,124,902
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$6,970,570	\$6,970,570
<u>Incentives to Trade Allies</u>	NA	\$6,040	\$6,040
Subtotal Incentive Costs	NA	\$6,976,610	\$6,976,610
<u>Total Efficiency Vermont Costs</u>	NA	\$13,885,853	\$13,885,853
Total Participant Costs	NA	\$2,455,023	\$2,455,023
<u>Total Third Party Costs</u>	NA	\$1,903,968	\$1,903,968
Total Resource Acquisition Costs	NA	\$18,244,844	\$18,244,844
<u>Annualized MWh Savings</u>			
Annualized MWh Savings	NA	42,492	42,492
Lifetime MWh Savings	NA	349,915	349,915
TRB Savings (2012 \$)	NA	\$41,492,153	\$41,492,153
Winter Coincident Peak kW Savings	NA	12,238	12,238
Summer Coincident Peak kW Savings	NA	5,985	5,985
Annualized MWh Savings/Participant	NA	1.055	1.055
Weighted Lifetime	NA	8	8

3.17 Electric Residential Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	995	112	124	1,607	1	35	0	0	\$38,047	\$18,307
Cooking and Laundry	4,856	1,599	1,279	22,373	231	172	1,451	56,294	\$504,637	\$1,612,996
Electronics	3,528	2,836	2,830	15,054	307	303	0	0	\$287,963	-\$243,854
Hot Water Efficiency	1,558	525	479	4,052	59	44	1,413	7,949	\$47,164	\$56,335
Hot Water Fuel Switch	135	384	536	11,521	59	30	-1,514	0	\$66,600	\$125,610
Lighting	31,232	34,288	38,658	248,019	11,165	5,101	-6,853	0	\$4,444,348	-\$1,066,658
Motors	272	109	96	1,769	21	29	2	0	\$17,920	\$16,571
Other Fuel Switch	250	114	134	3,415	28	21	-375	0	\$12,670	\$21,516
Other Indirect Activity	56	0	0	0	0	0	0	0	\$41,635	-\$43,610
Refrigeration	3,882	1,527	1,428	19,053	144	165	0	0	\$1,258,999	\$213,299
Space Heat Efficiency	763	615	560	14,457	170	61	16,850	0	\$135,842	\$1,479,944
Space Heat Fuel Switch	43	190	177	5,714	31	0	-565	0	\$40,000	\$241,129
Ventilation	1,193	193	179	2,882	22	23	233	0	\$74,744	\$23,438
Totals		42,492	46,480	349,915	12,238	5,985	10,643	64,243	\$6,970,570	\$2,455,023

3.18 Heating and Process Fuels Resource Acquisition Summary

Services				Business Energy Services		Residential Energy Services		
	Efficiency Vermont Services and Initiatives	Subtotal Business Energy Services	Subtotal Residential Energy Services	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes
Costs								
Year to Date Costs	\$3,744,116	\$552,740	\$3,191,376	\$128,058	\$424,682	\$6,285	\$0	\$3,185,091
Annual Budget Estimate ¹	\$3,934,800	\$983,700	\$2,951,100	\$72,200	\$911,500	\$5,100	\$0	\$2,946,000
Unspent Annual Budget Estimate	\$190,684	\$430,960	(\$240,276)	(\$55,858)	\$486,818	(\$1,185)	\$0	(\$239,091)
% Annual Budget Estimate Unspent	5%	44%	-8%	-77%	53%	nap	nap	-8%
Savings Results								
MMBtu Year to Date	78,361	51,876	26,485	18,834	33,042	252	nap	26,233
MMBtu Cumulative starting 1/1/12	78,361	51,876	26,485	18,834	33,042	252	nap	26,233
3-Year MMBtu Goal	126,000	29,690	96,310	1,850	27,840	30	nap	96,280
% of 3-Year MMBtu Goal	62%	175%	27%	1018%	119%	839%	nap	27%
Associated Electric Benefits								
MWh Year to Date	(171)	(404)	233	(25)	(379)	(0)	nap	233
MWh Cumulative starting 1/1/12	(171)	(404)	233	(25)	(379)	(0)	nap	233
Winter Coincident Peak kW Year to Date	97	(21)	118	(22)	1	(0)	nap	119
Winter Coincident Peak kW Cumulative starting 1/1/12	97	(21)	118	(22)	1	(0)	nap	119
Summer Coincident Peak kW Year to Date	(68)	(68)	1	10	(78)	(0)	nap	1
Summer Coincident Peak kW Cumulative starting 1/1/12	(68)	(68)	1	10	(78)	(0)	nap	1
Participation								
Partic.w/ installs Year to Date	2,397	188	2,209	41	147	39	nap	2,170
Partic.w/ installs Cumulative starting 1/1/12	2,397	188	2,209	41	147	39	nap	2,170

¹ Annual budgets are provided for information purposes only. Efficiency Vermont operates under three-year Board approved budgets.

3.19 Heating and Process Fuels Resource Acquisition

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	2,397	2,397
<u>Operating Costs</u>			
Administration	NA	\$157,884	\$157,884
Operations and Implementation	NA	\$570,063	\$570,063
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$31,525</u>	<u>\$31,525</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$759,473</u>	<u>\$759,473</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$33,313	\$33,313
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$10</u>	<u>\$10</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$33,323</u>	<u>\$33,323</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$7,106	\$7,106
Marketing	NA	\$70,526	\$70,526
EM&V	NA	\$8,906	\$8,906
Policy	NA	\$5,255	\$5,255
Information Technology	NA	\$38	\$38
Customer Support	NA	\$14,258	\$14,258
<u>Business Development</u>	<u>NA</u>	<u>\$103</u>	<u>\$103</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$106,191</u>	<u>\$106,191</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$2,740,503	\$2,740,503
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$104,626</u>	<u>\$104,626</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$2,845,130</u>	<u>\$2,845,130</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$3,744,116</u>	<u>\$3,744,116</u>
Total Participant Costs	<u>NA</u>	\$11,072,734	\$11,072,734
<u>Total Third Party Costs</u>	<u>NA</u>	<u>\$1,048,636</u>	<u>\$1,048,636</u>
Total Resource Acquisition Costs	<u>NA</u>	<u>\$15,865,486</u>	<u>\$15,865,486</u>
<u>Annualized MMBtu Savings</u>			
Annualized MMBtu Savings	NA	78,361	78,361
Lifetime MMBtu Savings	NA	1,405,054	1,405,054
TRB Savings (2012 \$)	NA	\$30,830,035	\$30,830,035
Annualized MMBtu Savings/Participant	NA	32.691	32.691
Weighted Lifetime	NA	18	18

3.20 Heating and Process Fuels Services & Initiatives - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1	20	18	398	0	7	0	0	\$0	\$91,454
Cooking and Laundry	33	0	0	0	0	0	0	0	\$0	\$3,766
Design Assistance	40	0	0	0	0	0	658	0	\$4,566	\$73,034
Hot Water Efficiency	746	-427	-425	-6,401	1	-81	12,928	2,606	\$165,469	\$731,628
Hot Water Fuel Switch	5	7	8	217	1	1	-9	0	\$0	\$4,086
Industrial Process Eff.	8	0	0	0	0	0	21,595	0	\$77,906	\$1,775,194
Motors	37	0	0	0	0	0	28	0	\$0	\$3,583
Other Indirect Activity	139	0	0	0	0	0	0	0	\$0	\$13,153
Space Heat Efficiency	1,816	212	211	4,069	84	-1	39,065	0	\$2,411,286	\$7,344,805
Space Heat Fuel Switch	91	11	13	389	7	0	1,375	0	\$65,433	\$844,682
Ventilation	163	5	5	47	5	7	2,721	0	\$15,844	\$187,349
Totals		-171	-171	-1,282	97	-68	78,361	2,606	\$2,740,503	\$11,072,734

3.21 Heating and Process Fuels Resource Acquisition Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	(\$143,322)
Fossil Fuel Savings (Costs)	\$2,056,773	\$30,757,613
Water Savings (Costs)	\$19,498	\$215,743
Total	\$2,076,272	\$30,830,035

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	(171)	(152)	(171)
Winter on peak	69	62	70
Winter off peak	105	93	183
Summer on peak	(244)	(217)	(217)
Summer off peak	(101)	(89)	(99)
Coincident Demand Savings (kW)			
Winter	101	88	97
Shoulder	0	0	0
Summer	(70)	(61)	(68)

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	2,896	2,606	23,461
Annualized fuel savings (increase) MMBtu Total	85,749	78,361	1,405,054
LP	28,366	27,624	566,054
NG	450	405	3,753
Oil/Kerosene	69,793	60,009	979,663
Wood	(12,848)	(9,677)	(144,415)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$2,247	\$2,060	\$11,465

Net Societal Benefits	\$33,359,857
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3.22 Heating and Process Fuels Business Energy Services Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	188	188
<u>Operating Costs</u>			
Administration	NA	\$12,737	\$12,737
Operations and Implementation	NA	\$12,022	\$12,022
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$9,242</u>	<u>\$9,242</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$34,002</u>	<u>\$34,002</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$10,291	\$10,291
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$10</u>	<u>\$10</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$10,301</u>	<u>\$10,301</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$1,360	\$1,360
Marketing	NA	\$2,879	\$2,879
EM&V	NA	\$1,039	\$1,039
Policy	NA	\$3,108	\$3,108
Information Technology	NA	\$1	\$1
Customer Support	NA	\$1,814	\$1,814
<u>Business Development</u>	<u>NA</u>	<u>\$4</u>	<u>\$4</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$10,205</u>	<u>\$10,205</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$491,831	\$491,831
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$6,400</u>	<u>\$6,400</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$498,231</u>	<u>\$498,231</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$552,740</u>	<u>\$552,740</u>
Total Participant Costs	NA	\$4,086,155	\$4,086,155
<u>Total Third Party Costs</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Total Resource Acquisition Costs	<u>NA</u>	<u>\$4,638,895</u>	<u>\$4,638,895</u>
<u>Annualized MMBtu Savings</u>			
Annualized MMBtu Savings	NA	51,876	51,876
Lifetime MMBtu Savings	NA	916,629	916,629
TRB Savings (2012 \$)	NA	\$20,630,708	\$20,630,708
Annualized MMBtu Savings/Participant	NA	275.938	275.938
Weighted Lifetime	NA	18	18

3.23 Heating and Process Fuels Business Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1	20	18	398	0	7	0	0	\$0	\$91,454
Design Assistance	1	0	0	0	0	0	658	0	\$3,000	\$73,000
Hot Water Efficiency	14	-432	-430	-6,475	0	-81	11,079	0	\$111,616	\$661,010
Industrial Process Eff.	8	0	0	0	0	0	21,595	0	\$77,906	\$1,775,194
Space Heat Efficiency	149	2	4	299	-26	-1	15,072	0	\$272,033	\$1,135,923
Space Heat Fuel Switch	13	0	0	1	0	0	900	0	\$13,433	\$227,118
Ventilation	18	6	5	54	5	7	2,572	0	\$13,844	\$122,456
Totals		-404	-402	-5,724	-21	-68	51,876	0	\$491,831	\$4,086,155

3.24 Heating and Process Fuels Residential Energy Services Summary

	<u>Prior Year</u>	<u>Current Year</u> 2012	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	2,209	2,209
<u>Operating Costs</u>			
Administration	NA	\$145,147	\$145,147
Operations and Implementation	NA	\$558,041	\$558,041
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$22,283</u>	<u>\$22,283</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$725,470</u>	<u>\$725,470</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$23,021	\$23,021
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$23,021</u>	<u>\$23,021</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$5,747	\$5,747
Marketing	NA	\$67,646	\$67,646
EM&V	NA	\$7,867	\$7,867
Policy	NA	\$2,147	\$2,147
Information Technology	NA	\$37	\$37
Customer Support	NA	\$12,444	\$12,444
<u>Business Development</u>	<u>NA</u>	<u>\$99</u>	<u>\$99</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$95,986</u>	<u>\$95,986</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$2,248,672	\$2,248,672
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$98,226</u>	<u>\$98,226</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$2,346,899</u>	<u>\$2,346,899</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$3,191,376</u>	<u>\$3,191,376</u>
Total Participant Costs	<u>NA</u>	\$6,986,579	\$6,986,579
Total Third Party Costs	<u>NA</u>	\$1,048,636	\$1,048,636
Total Resource Acquisition Costs	<u>NA</u>	<u>\$11,226,591</u>	<u>\$11,226,591</u>
<u>Annualized MMBtu Savings</u>			
Annualized MMBtu Savings	NA	26,485	26,485
Lifetime MMBtu Savings	NA	488,425	488,425
TRB Savings (2012\$)	NA	\$10,199,327	\$10,199,327
Annualized MMBtu Savings/Participant	NA	11.990	11.990
Weighted Lifetime	NA	18	18

3.25 Heating and Process Fuels Residential Energy Services - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	33	0	0	0	0	0	0	0	\$0	\$3,766
Design Assistance	39	0	0	0	0	0	0	0	\$1,566	\$34
Hot Water Efficiency	732	5	5	74	1	0	1,848	2,606	\$53,853	\$70,618
Hot Water Fuel Switch	5	7	8	217	1	1	-9	0	\$0	\$4,086
Motors	37	0	0	0	0	0	28	0	\$0	\$3,583
Other Indirect Activity	139	0	0	0	0	0	0	0	\$0	\$13,153
Space Heat Efficiency	1,667	210	207	3,770	110	0	23,993	0	\$2,139,252	\$6,208,882
Space Heat Fuel Switch	78	11	13	388	7	0	475	0	\$52,000	\$617,564
Ventilation	145	0	0	-7	0	0	149	0	\$2,000	\$64,892
Totals		233	232	4,442	118	1	26,485	2,606	\$2,248,672	\$6,986,579

4. MAJOR MARKET RESOURCE ACQUISITION RESULTS

4.1 Electric Business New Construction Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	229	229
<u>Operating Costs</u>			
Administration	NA	\$129,919	\$129,919
Operations and Implementation	NA	\$181,164	\$181,164
Strategy and Planning	NA	\$461,578	\$461,578
Subtotal Operating Costs	<u>NA</u>	<u>\$772,660</u>	<u>\$772,660</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$906,413	\$906,413
Services to Trade Allies	NA	\$66,406	\$66,406
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$972,819</u>	<u>\$972,819</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$7,197	\$7,197
Marketing	NA	\$133,176	\$133,176
EM&V	NA	\$39,955	\$39,955
Policy	NA	\$11,036	\$11,036
Information Technology	NA	\$29	\$29
Customer Support	NA	\$24,363	\$24,363
Business Development	NA	\$94	\$94
Subtotal Support Services Costs	<u>NA</u>	<u>\$215,850</u>	<u>\$215,850</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$1,405,784	\$1,405,784
Incentives to Trade Allies	NA	\$16,694	\$16,694
Subtotal Incentive Costs	<u>NA</u>	<u>\$1,422,478</u>	<u>\$1,422,478</u>
Total Efficiency Vermont Costs	<u>NA</u>	<u>\$3,383,808</u>	<u>\$3,383,808</u>
Total Participant Costs	<u>NA</u>	<u>\$5,630,452</u>	<u>\$5,630,452</u>
Total Third Party Costs	<u>NA</u>	<u>\$43</u>	<u>\$43</u>
Total Resource Acquisition Costs	<u>NA</u>	<u>\$9,014,304</u>	<u>\$9,014,304</u>
<u>Annualized MWh Savings</u>			
Annualized MWh Savings	NA	15,310	15,310
Lifetime MWh Savings	NA	228,005	228,005
TRB Savings (2012 \$)	NA	\$28,390,079	\$28,390,079
Winter Coincident Peak kW Savings	NA	1,875	1,875
Summer Coincident Peak kW Savings	NA	2,171	2,171
Annualized MWh Savings/Participant	NA	66.857	66.857
Weighted Lifetime	NA	15	15

4.2 Electric Business New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	67	2,055	1,823	40,443	99	251	0	0	\$154,766	\$636,427
Cooking and Laundry	7	22	20	283	4	4	118	2,470	\$3,279	\$6,081
Design Assistance	13	680	603	11,267	87	78	1,336	0	\$162,895	\$251,832
Electronics	1	35	31	346	2	0	0	0	\$2,000	\$8,000
Hot Water Efficiency	4	-19	-17	-317	-1	0	945	0	\$1,834	\$122,795
Industrial Process Eff.	3	491	537	5,147	63	54	0	0	\$91,786	\$138,842
Lighting	212	8,214	7,322	119,085	1,200	1,313	-4,656	0	\$774,344	\$1,819,040
Motors	31	2,158	1,915	31,334	210	215	1,273	0	\$51,965	\$537,600
Other Efficiency	18	182	162	2,002	29	26	517	674	\$4,833	\$138,296
Other Fuel Switch	3	16	14	470	22	7	88	0	\$800	\$1,126
Refrigeration	25	840	746	9,447	120	128	123	28	\$80,872	\$234,484
Space Heat Efficiency	20	214	190	4,002	7	55	28,107	0	\$51,523	\$1,476,427
Ventilation	45	425	378	4,498	34	39	5,518	0	\$24,887	\$259,502
Totals		15,310	13,722	228,005	1,875	2,171	33,368	3,172	\$1,405,784	\$5,630,452

4.3 Electric Business New Construction Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$17,537,329
Fossil Fuel Savings (Costs)	\$776,978	\$10,507,022
Water Savings (Costs)	\$23,726	\$345,729
Total	\$800,704	\$28,390,079

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	13,722	13,581	15,310
Winter on peak	4,746	4,694	5,328
Winter off peak	3,975	3,933	4,413
Summer on peak	2,873	2,847	2,847
Summer off peak	2,128	2,107	2,333
<u>Coincident Demand Savings (kW)</u>			
Winter	1,723	1,704	1,875
Shoulder	0	0	0
Summer	1,989	1,965	2,171

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	3,209	3,172	40,878
Annualized fuel savings (increase) MMBtu Total	33,344	33,368	518,495
LP	6,910	6,911	115,823
NG	745	740	3,554
Oil/Kerosene	25,405	25,431	390,628
Wood	282	282	8,464
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$61,013	\$60,860	\$784,334

Net Societal Benefits	\$33,038,979
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4.4 Electric Business Existing Facilities Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	3,183	3,183
<u>Operating Costs</u>			
Administration	NA	\$423,386	\$423,386
Operations and Implementation	NA	\$1,046,346	\$1,046,346
Strategy and Planning	NA	\$726,786	\$726,786
Subtotal Operating Costs	NA	<u>\$2,196,519</u>	<u>\$2,196,519</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$2,063,339	\$2,063,339
Services to Trade Allies	NA	\$164,482	\$164,482
Subtotal Technical Assistance Costs	NA	<u>\$2,227,821</u>	<u>\$2,227,821</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$19,253	\$19,253
Marketing	NA	\$306,915	\$306,915
EM&V	NA	\$98,233	\$98,233
Policy	NA	\$27,569	\$27,569
Information Technology	NA	\$69	\$69
Customer Support	NA	\$58,505	\$58,505
Business Development	NA	\$6,456	\$6,456
Subtotal Support Services Costs	NA	<u>\$516,999</u>	<u>\$516,999</u>
<u>Incentive Costs</u>			
Incentives to Participants ¹	NA	\$9,736,743	\$9,736,743
Incentives to Trade Allies	NA	\$51,895	\$51,895
Subtotal Incentive Costs	NA	<u>\$9,788,637</u>	<u>\$9,788,637</u>
Total Efficiency Vermont Costs	NA	<u>\$14,729,976</u>	<u>\$14,729,976</u>
Total Participant Costs	NA	\$13,145,588	\$13,145,588
Total Third Party Costs	NA	<u>\$255,002</u>	<u>\$255,002</u>
Total Resource Acquisition Costs	NA	<u>\$28,130,565</u>	<u>\$28,130,565</u>
<u>Annualized MWh Savings</u>			
Annualized MWh Savings	NA	52,377	52,377
Lifetime MWh Savings	NA	651,621	651,621
TRB Savings (2012 \$)	NA	\$48,476,213	\$48,476,213
Winter Coincident Peak kW Savings	NA	7,856	7,856
Summer Coincident Peak kW Savings	NA	6,941	6,941
Annualized MWh Savings/Participant	NA	16.455	16.455
Weighted Lifetime	NA	12	12

¹ Business Existing Facilities (BEF) incentive costs were under stated by \$39,716 (~ 0.4%) in 2012 monthly invoices due to an error in the GMP Energy Efficiency Fund BEF Mutual Fund cost allocation. The adjustment to correct the error will be completed in the March 2013 GMP and EVT invoices. The incentive totals for BEF are accurately reported in table 3.5.

4.5 Electric Business Existing Facilities - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	110	1,268	1,172	21,807	62	148	158	0	\$237,026	\$196,892
Cooking and Laundry	6	56	55	733	7	2	300	1,001	\$5,506	\$54,935
Design Assistance	109	352	317	1,802	4	0	674	0	\$346,967	\$230,071
Electronics	2	88	79	441	10	10	0	0	\$2,848	\$13,627
Hot Water Efficiency	12	53	50	578	5	4	12	0	\$9,469	\$14,914
Hot Water Fuel Switch	3	85	95	2,551	12	13	-322	0	\$9,840	\$4,947
Industrial Process Eff.	69	8,747	9,221	100,230	1,460	894	11,726	0	\$731,480	\$3,416,686
Lighting	2,367	32,436	30,594	419,861	4,917	4,988	-16,433	0	\$7,324,801	\$6,650,626
Motors	102	5,484	5,329	64,143	529	609	-3,120	0	\$291,354	\$1,437,449
Other Efficiency	734	1,347	1,160	9,550	577	17	1,778	780	\$402,943	-\$77,443
Other Fuel Switch	1	68	67	1,357	12	13	279	0	\$18,000	\$84,600
Other Indirect Activity	5	0	0	0	0	0	0	0	\$1,140	\$1,787
Refrigeration	121	1,698	1,588	20,237	212	119	185	60	\$212,313	\$333,218
Space Heat Efficiency	92	153	149	2,651	31	3	7,356	0	\$18,443	\$786,068
Space Heat Fuel Switch	1	0	0	0	0	0	-130	0	\$1,000	\$16,790
Ventilation	28	524	502	5,593	16	120	4,011	0	\$162,328	-\$21,445
Water Conservation	1	18	17	88	2	1	0	0	\$1,000	\$1,868
Totals		52,377	50,395	651,621	7,856	6,941	6,474	1,842	\$9,776,459	\$13,145,588

4.6 Electric Business Existing Facilities Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$45,263,361
Fossil Fuel Savings (Costs)	\$100,576	\$3,027,798
Water Savings (Costs)	\$13,778	\$185,055
Total	\$114,355	\$48,476,214

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	50,395	46,442	52,377
Winter on peak	19,957	18,282	20,750
Winter off peak	14,703	13,656	15,834
Summer on peak	9,081	8,335	8,335
Summer off peak	6,653	6,170	6,830
<u>Coincident Demand Savings (kW)</u>			
Winter	7,711	7,142	7,856
Shoulder	0	0	0
Summer	6,915	6,282	6,941

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	1,934	1,842	21,893
Annualized fuel savings (increase) MMBtu Total	7,928	6,474	138,713
LP	2,807	2,753	35,393
NG	531	474	(5,324)
Oil/Kerosene	1,394	222	49,168
Wood	3,178	3,027	59,480
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$1,409,977	\$1,358,707	\$16,176,237

Net Societal Benefits	\$67,900,112
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4.7 Electric Residential New Construction Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	1,043	1,043
<u>Operating Costs</u>			
Administration	NA	\$231,727	\$231,727
Operations and Implementation	NA	\$665,010	\$665,010
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$27,166</u>	<u>\$27,166</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$923,903</u>	<u>\$923,903</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$948,638	\$948,638
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$17,804</u>	<u>\$17,804</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$966,442</u>	<u>\$966,442</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$16,387	\$16,387
Marketing	NA	\$184,835	\$184,835
EM&V	NA	\$16,007	\$16,007
Policy	NA	\$20,284	\$20,284
Information Technology	NA	\$64	\$64
Customer Support	NA	\$22,904	\$22,904
<u>Business Development</u>	<u>NA</u>	<u>\$209</u>	<u>\$209</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$260,690</u>	<u>\$260,690</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$316,459	\$316,459
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$11</u>	<u>\$11</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$316,470</u>	<u>\$316,470</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$2,467,505</u>	<u>\$2,467,505</u>
Total Participant Costs	<u>NA</u>	\$1,362,473	\$1,362,473
<u>Total Third Party Costs</u>	<u>NA</u>	<u>\$56,804</u>	<u>\$56,804</u>
<u>Total Resource Acquisition Costs</u>	<u>NA</u>	<u>\$3,886,783</u>	<u>\$3,886,783</u>
Annualized MWh Savings	NA	1,580	1,580
Lifetime MWh Savings	NA	27,643	27,643
TRB Savings (2012 \$)	NA	\$10,335,545	\$10,335,545
Winter Coincident Peak kW Savings	NA	358	358
Summer Coincident Peak kW Savings	NA	210	210
Annualized MWh Savings/Participant	NA	1.515	1.515
Weighted Lifetime	NA	17	17

4.8 Electric Residential New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	161	48	43	863	0	18	0	0	\$16,407	\$17,547
Cooking and Laundry	444	32	26	439	14	9	137	4,196	\$2,672	\$96,039
Hot Water Efficiency	324	2	2	59	0	0	1,129	2,582	\$11,258	-\$6,012
Lighting	1,008	793	732	9,709	207	81	-88	0	\$120,366	\$85,878
Motors	28	54	48	1,082	12	10	0	0	\$8,867	-\$507
Other Fuel Switch	181	87	110	2,600	21	16	-283	0	\$6,566	\$20,296
Other Indirect Activity	55	0	0	0	0	0	0	0	\$41,635	-\$43,735
Refrigeration	570	73	67	1,249	8	9	0	0	\$7,671	\$41,425
Space Heat Efficiency	453	424	376	10,442	86	58	14,865	0	\$86,451	\$1,151,087
Ventilation	542	67	60	1,199	8	8	233	0	\$14,566	\$456
Totals		1,580	1,464	27,643	358	210	15,993	6,778	\$316,459	\$1,362,473

4.9 Electric Residential New Construction Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$2,131,200
Fossil Fuel Savings (Costs)	\$369,138	\$7,484,697
Water Savings (Costs)	\$50,695	\$719,651
Total	\$419,834	\$10,335,548

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	1,464	1,403	1,580
Winter on peak	520	497	564
Winter off peak	560	540	606
Summer on peak	186	177	177
Summer off peak	198	189	209
<u>Coincident Demand Savings (kW)</u>			
Winter	341	325	358
Shoulder	0	0	0
Summer	199	190	210

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	6,527	6,778	81,759
Annualized fuel savings (increase) MMBtu Total	15,827	15,993	385,212
LP	7,828	7,865	192,438
NG	5,877	6,000	141,866
Oil/Kerosene	739	738	17,065
Wood	1,383	1,385	33,854
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$19,775	\$18,963	\$215,301

Net Societal Benefits	\$10,231,474
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4.10 Electric Efficient Products Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	34,376	34,376
<u>Operating Costs</u>			
Administration	NA	\$278,530	\$278,530
Operations and Implementation	NA	\$876,300	\$876,300
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$8,116</u>	<u>\$8,116</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$1,162,946</u>	<u>\$1,162,946</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$246,572	\$246,572
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$73,796</u>	<u>\$73,796</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$320,368</u>	<u>\$320,368</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$44,425	\$44,425
Marketing	NA	\$389,752	\$389,752
EM&V	NA	\$14,065	\$14,065
Policy	NA	\$17,964	\$17,964
Information Technology	NA	\$57	\$57
Customer Support	NA	\$36,011	\$36,011
<u>Business Development</u>	<u>NA</u>	<u>\$186</u>	<u>\$186</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$502,460</u>	<u>\$502,460</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$4,561,686	\$4,561,686
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$74</u>	<u>\$74</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$4,561,760</u>	<u>\$4,561,760</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$6,547,533</u>	<u>\$6,547,533</u>
Total Participant Costs	<u>NA</u>	\$212,751	\$212,751
Total Third Party Costs	<u>NA</u>	<u>\$1,610,752</u>	<u>\$1,610,752</u>
Total Resource Acquisition Costs	<u>NA</u>	<u>\$8,371,036</u>	<u>\$8,371,036</u>
<u>Annualized MWh Savings</u>			
Annualized MWh Savings	NA	36,802	36,802
Lifetime MWh Savings	NA	263,973	263,973
TRB Savings (2012 \$)	NA	\$26,602,699	\$26,602,699
Winter Coincident Peak kW Savings	NA	11,117	11,117
Summer Coincident Peak kW Savings	NA	5,435	5,435
Annualized MWh Savings/Participant	NA	1.071	1.071
Weighted Lifetime	NA	7	7

4.11 Electric Efficient Products - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	742	54	72	594	0	12	0	0	\$18,700	\$0
Cooking and Laundry	3,745	1,178	908	16,491	165	124	1,234	47,517	\$191,500	\$1,494,580
Electronics	2,564	2,743	2,747	14,682	297	291	0	0	\$239,940	-\$243,977
Lighting	26,512	32,396	36,925	227,013	10,591	4,912	-6,710	0	\$4,019,001	-\$1,190,777
Motors	19	28	25	278	0	16	0	0	\$4,350	\$4,650
Refrigeration	1,172	403	425	4,915	63	79	0	0	\$88,195	\$148,275
Totals		36,802	41,102	263,973	11,117	5,435	-5,477	47,517	\$4,561,686	\$212,751

4.12 Electric Efficient Products Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$20,944,513
Fossil Fuel Savings (Costs)	(\$126,435)	(\$56,452)
Water Savings (Costs)	\$355,993	\$5,714,650
Total	\$229,558	\$26,602,711

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	41,102	32,644	36,802
Winter on peak	16,471	13,145	14,918
Winter off peak	12,384	9,746	10,936
Summer on peak	6,675	5,358	5,358
Summer off peak	5,572	4,395	4,868
<u>Coincident Demand Savings (kW)</u>			
Winter	13,073	10,106	11,117
Shoulder	0	0	0
Summer	6,217	4,918	5,435

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	41,386	47,517	666,385
Annualized fuel savings (increase) MMBtu Total	(7,256)	(5,477)	(13,062)
LP	651	766	10,346
NG	0	0	0
Oil/Kerosene	(8,278)	(6,644)	(23,477)
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$1,737,863	\$1,414,087	\$10,100,727

Net Societal Benefits	\$47,596,007
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4.13 Electric Existing Homes Summary

	<u>Prior Year</u>	<u>Current Year</u> 2012	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	4,855	4,855
<u>Operating Costs</u>			
Administration	NA	\$249,045	\$249,045
Operations and Implementation	NA	\$1,494,287	\$1,494,287
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$156,516</u>	<u>\$156,516</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$1,899,848</u>	<u>\$1,899,848</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$494,824	\$494,824
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$16,009</u>	<u>\$16,009</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$510,833</u>	<u>\$510,833</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$17,743	\$17,743
Marketing	NA	\$270,058	\$270,058
EM&V	NA	\$16,542	\$16,542
Policy	NA	\$19,672	\$19,672
Information Technology	NA	\$59	\$59
Customer Support	NA	\$37,485	\$37,485
<u>Business Development</u>	<u>NA</u>	<u>\$193</u>	<u>\$193</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$361,753</u>	<u>\$361,753</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$2,092,425	\$2,092,425
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$5,955</u>	<u>\$5,955</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$2,098,381</u>	<u>\$2,098,381</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$4,870,814</u>	<u>\$4,870,814</u>
Total Participant Costs	<u>NA</u>	\$879,799	\$879,799
Total Third Party Costs	<u>NA</u>	\$236,411	\$236,411
<u>Total Resource Acquisition Costs</u>	<u>NA</u>	<u>\$5,987,025</u>	<u>\$5,987,025</u>
Annualized MWh Savings	NA	4,110	4,110
Lifetime MWh Savings	NA	58,300	58,300
TRB Savings (2012 \$)	NA	\$4,553,909	\$4,553,909
Winter Coincident Peak kW Savings	NA	764	764
Summer Coincident Peak kW Savings	NA	340	340
Annualized MWh Savings/Participant	NA	0.846	0.846
Weighted Lifetime	NA	14	14

4.14 Electric Existing Homes - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	92	10	9	150	1	5	0	0	\$2,940	\$760
Cooking and Laundry	667	389	345	5,443	51	39	81	4,581	\$310,465	\$22,378
Electronics	964	93	83	372	10	12	0	0	\$48,023	\$123
Hot Water Efficiency	1,234	523	476	3,993	59	44	283	5,367	\$35,906	\$62,347
Hot Water Fuel Switch	135	384	536	11,521	59	30	-1,514	0	\$66,600	\$125,610
Lighting	3,712	1,100	1,001	11,297	366	108	-54	0	\$304,982	\$38,241
Motors	225	27	24	409	8	2	2	0	\$4,703	\$12,428
Other Fuel Switch	69	27	24	815	7	5	-91	0	\$6,104	\$1,220
Other Indirect Activity	1	0	0	0	0	0	0	0	\$0	\$125
Refrigeration	2,140	1,050	936	12,889	73	77	0	0	\$1,163,133	\$23,599
Space Heat Efficiency	310	191	184	4,015	85	3	1,985	0	\$49,391	\$328,857
Space Heat Fuel Switch	43	190	177	5,714	31	0	-565	0	\$40,000	\$241,129
Ventilation	651	126	119	1,683	14	14	0	0	\$60,178	\$22,983
Totals		4,110	3,913	58,300	764	340	127	9,948	\$2,092,425	\$879,799

4.15 Electric Existing Homes Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$3,208,304
Fossil Fuel Savings (Costs)	\$23,375	\$353,118
Water Savings (Costs)	\$74,418	\$992,492
Total	\$97,793	\$4,553,914

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	3,913	3,648	4,110
Winter on peak	1,410	1,305	1,481
Winter off peak	1,403	1,312	1,477
Summer on peak	538	502	502
Summer off peak	562	530	587
<u>Coincident Demand Savings (kW)</u>			
Winter	747	694	764
Shoulder	0	0	0
Summer	328	308	340

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	10,142	9,948	112,397
Annualized fuel savings (increase) MMBtu Total	(774)	127	(16,983)
LP	232	251	985
NG	(2,960)	(1,975)	(59,894)
Oil/Kerosene	1,883	1,777	40,976
Wood	70	73	946
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$28,925	\$30,355	\$266,676

Net Societal Benefits	\$2,635,743
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4.16 Heating and Process Fuels Business New Construction Summary

	<u>Prior Year</u>	<u>Current Year 2012</u>	<u>Cumulative starting 1/1/12</u>
# participants with installations	NA	41	41
<u>Operating Costs</u>			
Administration	NA	\$2,689	\$2,689
Operations and Implementation	NA	\$947	\$947
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$635</u>	<u>\$635</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$4,271</u>	<u>\$4,271</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$3,693	\$3,693
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$2</u>	<u>\$2</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$3,695</u>	<u>\$3,695</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$212	\$212
Marketing	NA	\$449	\$449
EM&V	NA	\$104	\$104
Policy	NA	\$109	\$109
Information Technology	NA	\$0	\$0
Customer Support	NA	\$283	\$283
<u>Business Development</u>	<u>NA</u>	<u>\$1</u>	<u>\$1</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$1,158</u>	<u>\$1,158</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$118,934	\$118,934
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$118,934</u>	<u>\$118,934</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$128,058</u>	<u>\$128,058</u>
Total Participant Costs	NA	\$1,629,163	\$1,629,163
<u>Total Third Party Costs</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
<u>Total Resource Acquisition Costs</u>	<u>NA</u>	<u>\$1,757,221</u>	<u>\$1,757,221</u>
Annualized MMBtu Savings	NA	18,834	18,834
Lifetime MMBtu Savings	NA	388,736	388,736
TRB Savings (2012 \$)	NA	\$10,422,492	\$10,422,492
Annualized MMBtu Savings/Participant	NA	459.371	459.371
Weighted Lifetime	NA	21	21

4.17 Heating and Process Fuels Business New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1	20	18	398	0	7	0	0	\$0	\$91,454
Hot Water Efficiency	2	0	0	0	0	0	1,616	0	\$31,375	\$222,125
Industrial Process Eff.	2	0	0	0	0	0	5,844	0	\$26,703	\$252,797
Space Heat Efficiency	34	-44	-39	-845	-26	-1	9,417	0	\$54,395	\$933,445
Space Heat Fuel Switch	3	0	0	-4	0	0	62	0	\$2,433	\$42,970
Ventilation	11	0	0	-7	5	4	1,895	0	\$4,028	\$86,372
Totals		-25	-22	-459	-22	10	18,834	0	\$118,934	\$1,629,163

4.18 Heating and Process Fuels Business New Construction Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	(\$25,887)
Fossil Fuel Savings (Costs)	\$458,869	\$10,448,379
Water Savings (Costs)	\$0	\$0
Total	\$458,869	\$10,422,492

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	(22)	(22)	(25)
Winter on peak	(8)	(8)	(9)
Winter off peak	(11)	(11)	(13)
Summer on peak	(4)	(4)	(4)
Summer off peak	1	1	1
<u>Coincident Demand Savings (kW)</u>			
Winter	(20)	(20)	(22)
Shoulder	0	0	0
Summer	9	9	10

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu Total	18,845	18,834	388,736
LP	18,802	18,566	378,283
NG	0	0	0
Oil/Kerosene	1,545	1,545	29,606
Wood	(1,502)	(1,277)	(19,153)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$1,051	\$893	\$13,396

Net Societal Benefits	\$11,779,374
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4.19 Heating and Process Fuels Business Existing Facilities Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	147	147
<u>Operating Costs</u>			
Administration	NA	\$10,048	\$10,048
Operations and Implementation	NA	\$11,076	\$11,076
Strategy and Planning	NA	\$8,607	\$8,607
Subtotal Operating Costs	<u>NA</u>	<u>\$29,731</u>	<u>\$29,731</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$6,598	\$6,598
Services to Trade Allies	NA	\$8	\$8
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$6,606</u>	<u>\$6,606</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$1,147	\$1,147
Marketing	NA	\$2,431	\$2,431
EM&V	NA	\$934	\$934
Policy	NA	\$2,999	\$2,999
Information Technology	NA	\$1	\$1
Customer Support	NA	\$1,530	\$1,530
Business Development	NA	\$3	\$3
Subtotal Support Services Costs	<u>NA</u>	<u>\$9,047</u>	<u>\$9,047</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$372,897	\$372,897
Incentives to Trade Allies	NA	\$6,400	\$6,400
Subtotal Incentive Costs	<u>NA</u>	<u>\$379,297</u>	<u>\$379,297</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$424,682</u>	<u>\$424,682</u>
Total Participant Costs	NA	\$2,456,992	\$2,456,992
Total Third Party Costs	NA	\$0	\$0
<u>Total Resource Acquisition Costs</u>	<u>NA</u>	<u>\$2,881,674</u>	<u>\$2,881,674</u>
Annualized MMBtu Savings	NA	33,042	33,042
Lifetime MMBtu Savings	NA	527,893	527,893
TRB Savings (2012 \$)	NA	\$10,208,215	\$10,208,215
Annualized MMBtu Savings/Participant	NA	224.776	224.776
Weighted Lifetime	NA	16	16

4.20 Heating and Process Fuels Business Existing Facilities - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Design Assistance	1	0	0	0	0	0	658	0	\$3,000	\$73,000
Hot Water Efficiency	12	-432	-430	-6,475	0	-81	9,463	0	\$80,241	\$438,885
Industrial Process Eff.	6	0	0	0	0	0	15,751	0	\$51,203	\$1,522,397
Space Heat Efficiency	115	46	43	1,144	0	0	5,655	0	\$217,638	\$202,478
Space Heat Fuel Switch	10	0	0	5	0	0	838	0	\$11,000	\$184,148
Ventilation	7	6	6	61	0	3	677	0	\$9,815	\$36,085
Totals		-379	-380	-5,265	1	-78	33,042	0	\$372,897	\$2,456,992

4.21 Heating and Process Fuels Business Existing Facilities Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	(\$454,286)
Fossil Fuel Savings (Costs)	\$889,233	\$10,662,502
Water Savings (Costs)	\$0	\$0
Total	\$889,233	\$10,208,215

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	(380)	(336)	(379)
Winter on peak	(28)	(24)	(27)
Winter off peak	(4)	(3)	(3)
Summer on peak	(243)	(216)	(216)
Summer off peak	(105)	(93)	(103)
<u>Coincident Demand Savings (kW)</u>			
Winter	1	1	1
Shoulder	0	0	0
Summer	(80)	(71)	(78)

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu Total	38,600	33,042	527,893
LP	3,730	3,600	82,037
NG	0	0	0
Oil/Kerosene	43,552	36,137	548,605
Wood	(8,682)	(6,695)	(102,749)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$3,747	\$3,063	\$49,383

Net Societal Benefits	\$14,418,259
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4.22 Heating and Process Fuels Residential New Construction Summary

	<u>Prior Year</u>	<u>Current Year</u> 2012	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	39	39
<u>Operating Costs</u>			
Administration	NA	\$106	\$106
Operations and Implementation	NA	\$0	\$0
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$106</u>	<u>\$106</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$0	\$0
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$0	\$0
Marketing	NA	\$0	\$0
EM&V	NA	\$0	\$0
Policy	NA	\$0	\$0
Information Technology	NA	\$0	\$0
Customer Support	NA	\$6	\$6
<u>Business Development</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$6</u>	<u>\$6</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$5,974	\$5,974
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$200</u>	<u>\$200</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$6,174</u>	<u>\$6,174</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$6,285</u>	<u>\$6,285</u>
Total Participant Costs	NA	\$4,850	\$4,850
<u>Total Third Party Costs</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
<u>Total Resource Acquisition Costs</u>	<u>NA</u>	<u>\$11,135</u>	<u>\$11,135</u>
<u>Annualized MMBtu Savings</u>			
Annualized MMBtu Savings	NA	252	252
Lifetime MMBtu Savings	NA	4,803	4,803
TRB Savings (2012 \$)	NA	\$60,373	\$60,373
Annualized MMBtu Savings/Participant	NA	6.456	6.456
Weighted Lifetime	NA	19	19

4.23 Heating and Process Fuels Residential New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Design Assistance	39	0	0	0	0	0	0	0	\$1,566	\$34
Space Heat Efficiency	0	0	0	0	0	0	103	0	\$2,408	\$4,816
Ventilation	14	0	0	-7	0	0	149	0	\$2,000	\$0
Totals		0	0	-7	0	0	252	0	\$5,974	\$4,850

4.24 Heating and Process Fuels Residential New Construction Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	(\$502)
Fossil Fuel Savings (Costs)	\$3,705	\$60,875
Water Savings (Costs)	\$0	\$0
Total	\$3,705	\$60,373

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	(0)	(0)	(0)
Winter on peak	(0)	(0)	(0)
Winter off peak	(0)	(0)	(0)
Summer on peak	(0)	(0)	(0)
Summer off peak	(0)	(0)	(0)
<u>Coincident Demand Savings (kW)</u>			
Winter	(0)	(0)	(0)
Shoulder	0	0	0
Summer	(0)	(0)	(0)

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu Total	252	252	4,803
LP	0	0	0
NG	0	0	0
Oil/Kerosene	103	103	2,568
Wood	149	149	2,235
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

Net Societal Benefits	\$80,258
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4.25 Heating and Process Fuels Efficient Products Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	nap	nap	nap
<u>Operating Costs</u>			
Administration	nap	nap	nap
Operations and Implementation	nap	nap	nap
<u>Strategy and Planning</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
Subtotal Operating Costs	<u>nap</u>	<u>nap</u>	<u>nap</u>
<u>Technical Assistance Costs</u>			
Services to Participants	nap	nap	nap
<u>Services to Trade Allies</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
Subtotal Technical Assistance Costs	<u>nap</u>	<u>nap</u>	<u>nap</u>
<u>Support Services</u>			
Transportation	nap	nap	nap
Targeted Implementation	nap	nap	nap
Consulting	nap	nap	nap
Marketing	nap	nap	nap
EM&V	nap	nap	nap
Policy	nap	nap	nap
Information Technology	nap	nap	nap
Customer Support	nap	nap	nap
<u>Business Development</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
Subtotal Support Services Costs	<u>nap</u>	<u>nap</u>	<u>nap</u>
<u>Incentive Costs</u>			
Incentives to Participants	nap	nap	nap
<u>Incentives to Trade Allies</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
Subtotal Incentive Costs	<u>nap</u>	<u>nap</u>	<u>nap</u>
<u>Total Efficiency Vermont Costs</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
Total Participant Costs	nap	nap	nap
<u>Total Third Party Costs</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<u>Total Resource Acquisition Costs</u>	<u>nap</u>	<u>nap</u>	<u>nap</u>
<u>Annualized MMBtu Savings</u>			
Annualized MMBtu Savings	nap	nap	nap
Lifetime MMBtu Savings	nap	nap	nap
TRB Savings (2012 \$)	nap	nap	nap
Annualized MMBtu Savings/Participant	nap	nap	nap
Weighted Lifetime	nap	nap	nap

4.26 Heating and Process Fuels Efficient Products - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Totals	nap	nap	nap	nap	nap	nap	nap	nap	nap	nap

4.27 Heating and Process Fuels Efficient Products Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	nap
Fossil Fuel Savings (Costs)	nap	nap
Water Savings (Costs)	nap	nap
Total	nap	nap

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	nap	nap	nap
Winter on peak	nap	nap	nap
Winter off peak	nap	nap	nap
Summer on peak	nap	nap	nap
Summer off peak	nap	nap	nap
<u>Coincident Demand Savings (kW)</u>			
Winter	nap	nap	nap
Shoulder	nap	nap	nap
Summer	nap	nap	nap

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	nap	nap	nap
Annualized fuel savings (increase) MMBtu Total	nap	nap	nap
LP	nap	nap	nap
NG	nap	nap	nap
Oil/Kerosene	nap	nap	nap
Wood	nap	nap	nap
Solar	nap	nap	nap
Other	nap	nap	nap
Annualized savings (increase) in O&M(\$)	nap	nap	nap

Net Societal Benefits	nap
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4.28 Heating and Process Fuels Existing Homes Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	2,170	2,170
<u>Operating Costs</u>			
Administration	NA	\$145,041	\$145,041
Operations and Implementation	NA	\$558,041	\$558,041
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$22,283</u>	<u>\$22,283</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$725,365</u>	<u>\$725,365</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$23,021	\$23,021
Services to Trade Allies	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$23,021</u>	<u>\$23,021</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$5,747	\$5,747
Marketing	NA	\$67,646	\$67,646
EM&V	NA	\$7,867	\$7,867
Policy	NA	\$2,147	\$2,147
Information Technology	NA	\$37	\$37
Customer Support	NA	\$12,438	\$12,438
<u>Business Development</u>	<u>NA</u>	<u>\$99</u>	<u>\$99</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$95,980</u>	<u>\$95,980</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$2,242,698	\$2,242,698
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$98,026</u>	<u>\$98,026</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$2,340,725</u>	<u>\$2,340,725</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$3,185,091</u>	<u>\$3,185,091</u>
Total Participant Costs	NA	\$6,981,729	\$6,981,729
<u>Total Third Party Costs</u>	<u>NA</u>	<u>\$1,048,636</u>	<u>\$1,048,636</u>
<u>Total Resource Acquisition Costs</u>	<u>NA</u>	<u>\$11,215,456</u>	<u>\$11,215,456</u>
Annualized MMBtu Savings	NA	26,233	26,233
Lifetime MMBtu Savings	NA	483,622	483,622
TRB Savings (2012 \$)	NA	\$10,138,954	\$10,138,954
Annualized MMBtu Savings/Participant	NA	12.089	12.089
Weighted Lifetime	NA	18	184

4.29 Heating and Process Fuels Existing Homes - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	33	0	0	0	0	0	0	0	\$0	\$3,766
Hot Water Efficiency	732	5	5	74	1	0	1,848	2,606	\$53,853	\$70,618
Hot Water Fuel Switch	5	7	8	217	1	1	-9	0	\$0	\$4,086
Motors	37	0	0	0	0	0	28	0	\$0	\$3,583
Other Indirect Activity	139	0	0	0	0	0	0	0	\$0	\$13,153
Space Heat Efficiency	1,667	210	207	3,770	110	0	23,890	0	\$2,136,844	\$6,204,066
Space Heat Fuel Switch	78	11	13	388	7	0	475	0	\$52,000	\$617,564
Ventilation	131	0	0	0	0	0	0	0	\$0	\$64,892
Totals		233	232	4,449	119	1	26,233	2,606	\$2,242,698	\$6,981,729

4.30 Heating and Process Fuels Existing Homes Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$337,354
Fossil Fuel Savings (Costs)	\$704,966	\$9,585,857
Water Savings (Costs)	\$19,498	\$215,743
Total	\$724,464	\$10,138,954

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	232	207	233
Winter on peak	105	94	107
Winter off peak	120	107	199
Summer on peak	3	3	3
Summer off peak	3	3	3
<u>Coincident Demand Savings (kW)</u>			
Winter	121	108	119
Shoulder	0	0	0
Summer	1	1	1

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	2,896	2,606	23,461
Annualized fuel savings (increase) MMBtu Total	28,053	26,233	483,622
LP	5,834	5,458	105,733
NG	450	405	3,753
Oil/Kerosene	24,593	22,223	398,883
Wood	(2,813)	(1,854)	(24,748)
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	(\$2,550)	(\$1,897)	(\$51,313)

Net Societal Benefits	\$7,081,966
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5. SPECIAL PROGRAMS

5.1 CUSTOMER CREDIT PROGRAM

5.2 GEOGRAPHIC TARGETING (ELECTRIC)

The tables presented in **Section 5.2** contain information on results from Resource Acquisition (electric only) activity in the Geographic Targeting areas described in **Section 2.1.4**. The areas of focus for Geographic Targeting were different in 2012 from what they were in previous years. The more streamlined reporting for this section is an outcome of discussions between Efficiency Vermont staff and the Vermont Department of Public Service.

5.1 CUSTOMER CREDIT PROGRAM

5.1.1 NARRATIVE

The Customer Credit program (CCP) provides an alternative path for qualified large businesses showing the capability and resources to identify, analyze, and undertake efficiency projects, and to self-implement energy efficiency measures. Approved project costs are reimbursed up to a maximum of 90% of the company's electric Energy Efficiency Charge payments. CCP customers can receive reimbursement for any retrofit or market-driven project that saves electrical energy and passes the Vermont societal cost-effectiveness test. Once a qualifying customer elects to participate in the CCP, that customer is no longer eligible to participate in other Efficiency Vermont programs.

All CCP projects must be initiated by the customer. In addition, the customer or its contractors must complete all technical analysis. Market-driven projects are eligible for incentives equal to 100% of the incremental measure cost. For retrofit projects, customers can receive incentives that reduce the customer payback time to 12 months.

ELIGIBLE MARKET

To be eligible for CCP, customers must:

- Never have accepted cash incentives from any Vermont utility Demand Side Management program
- Have ISO 14001 certification

5.1.2 Customer Credit Summary

	<u>Prior Year</u>	<u>Current Year</u> 2012	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	1	1
<u>Operating Costs</u>			
Administration	NA	\$7,707	\$7,707
Operations and Implementation	NA	\$4,681	\$4,681
<u>Strategy and Planning</u>	<u>NA</u>	<u>\$203</u>	<u>\$203</u>
Subtotal Operating Costs	<u>NA</u>	<u>\$12,592</u>	<u>\$12,592</u>
<u>Technical Assistance Costs</u>			
Services to Participants	NA	\$22,107	\$22,107
<u>Services to Trade Allies</u>	<u>NA</u>	<u>\$5,741</u>	<u>\$5,741</u>
Subtotal Technical Assistance Costs	<u>NA</u>	<u>\$27,848</u>	<u>\$27,848</u>
<u>Support Services</u>			
Transportation	NA	\$0	\$0
Targeted Implementation	NA	\$0	\$0
Consulting	NA	\$153	\$153
Marketing	NA	\$3,371	\$3,371
EM&V	NA	\$1,082	\$1,082
Policy	NA	\$5,451	\$5,451
Information Technology	NA	\$1	\$1
Customer Support	NA	\$425	\$425
<u>Business Development</u>	<u>NA</u>	<u>\$5</u>	<u>\$5</u>
Subtotal Support Services Costs	<u>NA</u>	<u>\$10,489</u>	<u>\$10,489</u>
<u>Incentive Costs</u>			
Incentives to Participants	NA	\$144,667	\$144,667
<u>Incentives to Trade Allies</u>	<u>NA</u>	<u>\$0</u>	<u>\$0</u>
Subtotal Incentive Costs	<u>NA</u>	<u>\$144,667</u>	<u>\$144,667</u>
<u>Total Efficiency Vermont Costs</u>	<u>NA</u>	<u>\$195,595</u>	<u>\$195,595</u>
Total Participant Costs	NA	\$81,963	\$81,963
Total Third Party Costs	NA	\$0	\$0
Total Resource Acquisition Costs	NA	<u>\$277,558</u>	<u>\$277,558</u>
Annualized MWh Savings	NA	1,046	1,046
Lifetime MWh Savings	NA	15,694	15,694
TRB Savings (2012 \$)	NA	\$1,138,147	\$1,138,147
Winter Coincident Peak kW Savings	NA	117	117
Summer Coincident Peak kW Savings	NA	117	117
Annualized MWh Savings/Participant	NA	1046.270	1046.270
Weighted Lifetime	NA	15	15

5.1.3 Customer Credit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Industrial Process Eff.	1	1,046	929	15,694	117	117	0	0	\$144,667	\$81,963
Totals		1,046	929	15,694	117	117	0	0	\$144,667	\$81,963

5.1.4 Customer Credit Total Resource Benefits

Avoided Cost Benefits	2012	Lifetime (Present Value)
Avoided Cost of Electricity	nap	\$1,138,147
Fossil Fuel Savings (Costs)	\$0	\$0
Water Savings (Costs)	\$0	\$0
Total	\$0	\$1,138,147

Electric Energy & Demand Benefits	Savings at Meter		Savings at Generation
	Gross	Net	Net
<u>Annualized Energy Savings (MWh): Total</u>	929	929	1,046
Winter on peak	295	295	334
Winter off peak	324	324	364
Summer on peak	148	148	148
Summer off peak	163	163	180
<u>Coincident Demand Savings (kW)</u>			
Winter	106	106	117
Shoulder	0	0	0
Summer	106	106	117

Thermal & Other Benefits	Gross	Net	Lifetime Net
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu Total	0	0	0
LP	0	0	0
NG	0	0	0
Oil/Kerosene	0	0	0
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$0	\$0	\$0

5.2 GEOGRAPHIC TARGETING (ELECTRIC)

Based on recommendations from the Vermont System Planning Committee (VSPC) and direction from the Vermont Public Service Board, Efficiency Vermont implements energy efficiency efforts within specific geographic regions of the state to help relieve the electric load on constrained transmission and distribution systems and potentially defer the need for costly system upgrades.

Two geographically targeted areas have been established by the Vermont Public Service Board for the performance period of 2012 – 2014. The first is in the area of Saint Albans. It consists of approximately 1,100 commercial / industrial accounts and 5,900 residential accounts. The second is an area in Essex Junction and Colchester. It consists of approximately 700 commercial / industrial accounts and 4,800 residential accounts.

A constrained transmission and distribution system is an area in which the demand for power on the electric transmission and distribution facilities is at or near capacity during periods of peak demand. These peak demand periods typically occur during the summer on weekdays between 1:00 pm and 5:00 pm. As electricity demand increases, the need to take action—either to upgrade the electric transmission and distribution infrastructure or to reduce the load—becomes more critical.

Efficiency Vermont works with customers in geographically targeted areas to maximize reduction of summer peak demand. Load reduction efforts not only reduce energy costs for participating businesses and homes, but reduce the overall peak demand for electricity. These efforts benefit all electric ratepayers across the state by reducing expensive power supply purchases, and potentially deferring or avoiding the need for additional transmission and distribution upgrades.

5.2.1 Electric Geographic Targeting Summary

	Geographic Area		
	Susie Wilson	Saint Albans	Combined
Efficiency Vermont Costs			
Incentives	\$669,358	\$571,560	\$1,240,918
Allocated Non-Incentives	\$1,421,243	\$1,086,374	\$2,507,617
Year to Date Costs	\$2,090,600	\$1,657,934	\$3,748,535
Costs Starting 1/1/12	\$2,090,600	\$1,657,934	\$3,748,535
Other Costs and Commitments			
Participant Costs Year to Date	\$1,247,306	\$752,486	\$1,999,792
Third Party Costs Year to Date	\$17,021	\$35,239	\$52,260
MWh Savings Results			
Annualized MWh Year to Date	7,017	4,095	11,112
Annualized MWh Cumulative Starting 1/1/12	7,017	4,095	11,112
Lifetime MWh Savings	93,745	49,475	143,220
Annualized MWh Savings/Participant	3.585	4.466	3.866
Weighted Lifetime	13	12	13
Summer Peak Coincident kW Savings Results			
Summer Coincident Peak kW Year to Date	870	584	1,454
Summer Coincident Peak kW Cumulative Starting 1/1/12	870	584	1,454
Summer Coincident Peak kW Goal	1,570	1,800	
% of Summer Coincident Peak kW Goal	55%	32%	
TRB Savings Results			
TRB Year to Date	\$7,395,639	\$3,773,626	\$11,169,265
TRB Cumulative Starting 1/1/12	\$7,395,639	\$3,773,626	\$11,169,265
Participation			
Participants with installations Year to Date	1,957	917	2,874
Participants with installations Cumulative Starting 1/1/12	1,957	917	2,874

5.2.2 Electric Geographic Targeting Susie Wilson - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	46	960	852	20,534	17	83	0	0	\$26,162	\$302,210
Cooking and Laundry	147	45	35	628	6	5	46	1,784	\$7,785	\$55,806
Design Assistance	5	264	235	3,403	27	28	1,336	0	\$57,011	\$168,973
Electronics	2	35	31	346	2	0	0	0	\$2,046	\$8,000
Hot Water Efficiency	8	2	2	18	0	0	2	32	\$138	\$0
Hot Water Fuel Switch	16	32	55	970	5	3	-143	0	\$7,600	\$9,000
Industrial Process Eff.	3	462	511	4,449	54	55	0	0	\$90,370	\$110,265
Lighting	1,457	4,983	4,953	60,103	891	672	-2,598	0	\$440,052	\$546,870
Motors	2	40	35	524	3	2	0	0	\$2,549	\$11,772
Other Efficiency	6	0	0	0	0	0	0	0	\$6,200	-\$1,200
Other Fuel Switch	39	20	25	611	5	4	-69	0	\$1,314	\$138
Other Indirect Activity	1	0	0	0	0	0	0	0	\$650	-\$800
Refrigeration	294	41	38	503	4	4	0	0	\$19,192	\$7,103
Space Heat Efficiency	24	9	8	162	1	2	55	0	\$4,229	-\$5,702
Space Heat Fuel Switch	2	11	11	323	6	0	-41	0	\$0	\$9,160
Ventilation	43	112	101	1,172	13	13	722	0	\$4,061	\$25,711
Totals		7,017	6,892	93,745	1,034	870	-689	1,816	\$669,358	\$1,247,306

5.2.3 Electric Geographic Targeting Saint Albans - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	32	31	28	388	0	4	0	0	\$16,985	-\$4,742
Cooking and Laundry	155	31	25	437	5	4	59	2,046	\$8,244	\$40,994
Design Assistance	5	28	25	139	0	0	0	0	\$43,071	\$15,555
Electronics	16	1	1	2	0	0	0	0	\$319	\$0
Hot Water Efficiency	48	13	13	116	1	1	3	262	\$818	\$60
Hot Water Fuel Switch	6	75	88	2,237	11	11	-303	0	\$10,500	\$5,547
Industrial Process Eff.	3	539	620	1,797	74	73	0	0	\$27,700	\$13,950
Lighting	735	2,235	2,202	26,583	470	418	-952	0	\$276,249	\$491,437
Motors	3	472	423	6,880	3	6	0	0	\$7,744	\$19,656
Other Efficiency	5	22	19	195	4	4	0	0	\$19,403	-\$18,705
Other Fuel Switch	67	33	33	991	26	10	-115	0	\$2,839	\$3,853
Refrigeration	157	160	156	2,247	26	7	0	0	\$44,454	\$27,957
Space Heat Efficiency	36	16	14	300	2	3	35	0	\$3,304	\$2,025
Space Heat Fuel Switch	32	131	116	3,919	0	0	-387	0	\$40,000	\$150,099
Ventilation	146	311	283	3,243	7	43	818	0	\$69,930	\$4,799
Totals		4,095	4,046	49,475	632	584	-842	2,308	\$571,560	\$752,486

6. SUBMARKET RESOURCE ACQUISITION RESULTS—

ELECTRIC ONLY

6.1 Electric Market Rate Multifamily New Construction Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	230	230
Costs			
EVT Incentives	NA	\$80,710	\$80,710
Participant Costs	NA	\$230,482	\$230,482
Third Party Costs	NA	\$9,072	\$9,072
Annualized MWh Savings	NA	380	380
Lifetime MWh Savings	NA	6,496	6,496
TRB Savings (2012\$)	NA	\$1,881,732	\$1,881,732
Winter Coincident Peak KW Savings	NA	70	70
Summer Coincident Peak KW Savings	NA	59	59
Annualized MWh Savings/Participant	NA	1.652	1.652
Weighted Lifetime	NA	17	17

6.2 Electric Market Rate Multifamily New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	92	36	32	687	0	11	0	0	\$10,863	\$16,534
Cooking and Laundry	132	7	6	98	2	1	52	1,682	\$507	\$41,117
Hot Water Efficiency	39	0	0	0	0	0	366	1,755	\$11,258	-\$5,800
Lighting	202	237	214	3,456	48	23	-45	0	\$38,333	\$43,386
Motors	0	0	0	9	0	0	0	0	\$0	\$368
Other Fuel Switch	71	42	54	1,274	10	8	-130	0	\$2,411	\$16,465
Refrigeration	145	17	16	281	2	2	0	0	\$4,255	\$8,549
Space Heat Efficiency	132	14	12	258	5	10	2,141	0	\$3,256	\$105,736
Ventilation	144	27	26	433	4	4	233	0	\$9,827	\$4,127
Totals		380	360	6,496	70	59	2,616	3,437	\$80,710	\$230,482

6.3 Electric Market Rate Multifamily Retrofit Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	283	283
Costs			
EVT Incentives	NA	\$82,530	\$82,530
Participant Costs	NA	\$175,082	\$175,082
Third Party Costs	NA	\$0	\$0
Annualized MWh Savings	NA	488	488
Lifetime MWh Savings	NA	6,950	6,950
TRB Savings (2012\$)	NA	\$594,702	\$594,702
Winter Coincident Peak KW Savings	NA	131	131
Summer Coincident Peak KW Savings	NA	27	27
Annualized MWh Savings/Participant	NA	1.724	1.724
Weighted Lifetime	NA	14	14

6.4 Electric Market Rate Multifamily Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	0	7	7	110	1	3	0	0	\$920	\$230
Cooking and Laundry	100	2	2	25	0	0	9	50	\$1,319	\$1,081
Electronics	100	1	1	3	0	0	0	0	\$477	\$123
Hot Water Efficiency	109	14	14	192	2	1	270	77	\$38	\$60,000
Lighting	117	217	205	2,213	44	11	-27	0	\$35,756	\$8,495
Refrigeration	279	26	26	440	3	3	0	0	\$6,477	\$25,483
Space Heat Efficiency	100	150	148	3,265	73	0	18	0	\$25,932	\$72,081
Ventilation	100	70	69	703	8	8	0	0	\$11,610	\$7,590
Totals		488	471	6,950	131	27	271	127	\$82,530	\$175,082

6.5 Electric Low Income Multifamily New Construction and Retrofit Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	2,207	2,207
<u>Costs</u>			
EVT Incentives	NA	\$382,777	\$382,777
Participant Costs	NA	\$693,990	\$693,990
Third Party Costs	NA	\$20,000	\$20,000
Annualized MWh Savings	NA	1,222	1,222
Lifetime MWh Savings	NA	20,676	20,676
TRB Savings (2012\$)	NA	\$2,944,237	\$2,944,237
Winter Coincident Peak KW Savings	NA	219	219
Summer Coincident Peak KW Savings	NA	130	130
Annualized MWh Savings/Participant	NA	0.554	0.554
Weighted Lifetime	NA	17	17

6.6 Electric Low Income Multifamily New Construction & Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	150	13	11	192	0	7	0	0	\$6,364	\$1,092
Cooking and Laundry	171	29	26	406	4	3	87	1,675	\$9,680	\$36,674
Electronics	180	14	12	54	1	2	0	0	\$7,118	\$0
Hot Water Efficiency	267	93	91	802	10	6	591	2,437	\$3,288	\$566
Hot Water Fuel Switch	1	44	39	1,306	7	4	-158	0	\$7,950	\$11,424
Lighting	1,876	542	498	7,417	141	54	-70	0	\$137,610	\$37,729
Motors	253	80	71	1,482	20	13	2	0	\$13,570	\$11,553
Other Fuel Switch	169	61	71	1,824	15	11	-212	0	\$5,219	\$4,582
Refrigeration	718	144	128	1,967	10	11	0	0	\$103,722	\$8,512
Space Heat Efficiency	116	15	13	281	5	12	3,499	0	\$0	\$422,256
Space Heat Fuel Switch	32	131	116	3,919	0	0	-387	0	\$40,000	\$150,099
Ventilation	602	58	52	1,027	6	7	0	0	\$48,257	\$9,504
Totals		1,222	1,127	20,676	219	130	3,352	4,112	\$382,777	\$693,990

6.7 Electric Low Income Multifamily New Construction Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	198	198
Costs			
EVT Incentives	NA	\$89,770	\$89,770
Participant Costs	NA	\$237,648	\$237,648
Third Party Costs	NA	\$0	\$0
Annualized MWh Savings	NA	341	341
Lifetime MWh Savings	NA	6,030	6,030
TRB Savings (2012\$)	NA	\$1,466,749	\$1,466,749
Winter Coincident Peak KW Savings	NA	69	69
Summer Coincident Peak KW Savings	NA	61	61
Annualized MWh Savings/Participant	NA	1.720	1.720
Weighted Lifetime	NA	18	18

6.8 Electric Low Income Multifamily New Construction - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	69	12	10	176	0	7	0	0	\$5,544	\$1,012
Cooking and Laundry	41	5	4	65	1	1	16	1,261	\$265	\$16,040
Hot Water Efficiency	26	0	0	0	0	0	579	827	\$0	\$288
Lighting	198	190	186	2,757	41	19	-44	0	\$62,784	\$8,384
Motors	28	54	48	1,073	12	10	0	0	\$8,867	-\$875
Other Fuel Switch	110	44	56	1,327	11	8	-153	0	\$4,155	\$3,831
Refrigeration	153	17	15	295	2	2	0	0	\$3,416	\$10,396
Space Heat Efficiency	39	7	6	101	0	12	1,931	0	\$0	\$197,743
Ventilation	136	12	11	236	1	1	0	0	\$4,739	\$829
Totals		341	336	6,030	69	61	2,330	2,088	\$89,770	\$237,648

6.9 Electric Low Income Multifamily Retrofit Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	2,034	2,034
Costs			
EVT Incentives	NA	\$293,007	\$293,007
Participant Costs	NA	\$456,342	\$456,342
Third Party Costs	NA	\$20,000	\$20,000
Annualized MWh Savings	NA	882	882
Lifetime MWh Savings	NA	14,646	14,646
TRB Savings (2012\$)	NA	\$1,477,488	\$1,477,488
Winter Coincident Peak KW Savings	NA	150	150
Summer Coincident Peak KW Savings	NA	69	69
Annualized MWh Savings/Participant	NA	0.433	0.433
Weighted Lifetime	NA	17	17

6.10 Electric Low Income Multifamily Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	81	1	1	16	0	0	0	0	\$820	\$80
Cooking and Laundry	130	24	22	341	3	2	71	414	\$9,414	\$20,635
Electronics	180	14	12	54	1	2	0	0	\$7,118	\$0
Hot Water Efficiency	241	93	91	802	10	6	12	1,610	\$3,288	\$278
Hot Water Fuel Switch	1	44	39	1,306	7	4	-158	0	\$7,950	\$11,424
Lighting	1,703	352	312	4,660	100	36	-27	0	\$74,826	\$29,344
Motors	225	27	24	409	8	2	2	0	\$4,703	\$12,428
Other Fuel Switch	59	17	15	497	4	3	-59	0	\$1,064	\$751
Refrigeration	565	126	112	1,672	8	9	0	0	\$100,306	-\$1,884
Space Heat Efficiency	77	8	7	180	4	0	1,568	0	\$0	\$224,513
Space Heat Fuel Switch	32	131	116	3,919	0	0	-387	0	\$40,000	\$150,099
Ventilation	466	46	41	790	5	5	0	0	\$43,518	\$8,675
Totals		882	791	14,646	150	69	1,022	2,024	\$293,007	\$456,342

6.11 Electric Business Non-Farm Equipment Replacement Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	2,300	2,300
Costs			
EVT Incentives	NA	\$5,307,948	\$5,307,948
Participant Costs	NA	\$3,685,101	\$3,685,101
Third Party Costs	NA	\$250,000	\$250,000
Annualized MWh Savings	NA	28,373	28,373
Lifetime MWh Savings	NA	331,426	331,426
TRB Savings (2012\$)	NA	\$22,984,074	\$22,984,074
Winter Coincident Peak KW Savings	NA	4,014	4,014
Summer Coincident Peak KW Savings	NA	3,707	3,707
Annualized MWh Savings/Participant	NA	12.336	12.336
Weighted Lifetime	NA	12	12

6.12 Electric Business Non-Farm Equipment Replacement - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	103	1,193	1,093	21,486	59	136	0	0	\$225,475	\$187,147
Cooking and Laundry	5	28	26	360	3	2	103	721	\$3,806	\$11,444
Design Assistance	8	0	0	0	0	0	0	0	\$25,029	\$12,255
Electronics	2	88	79	441	10	10	0	0	\$2,848	\$13,627
Hot Water Efficiency	3	5	4	68	0	1	11	0	\$750	\$3,520
Industrial Process Eff.	33	3,712	4,004	41,726	402	429	5,395	0	\$190,082	\$660,850
Lighting	1,862	19,204	17,749	223,983	2,873	2,840	-10,581	0	\$4,533,267	\$2,300,731
Motors	33	2,102	1,980	23,137	181	195	-2,792	0	\$80,793	\$262,623
Other Efficiency	296	750	644	5,132	339	11	33	70	\$71,071	-\$2,280
Refrigeration	94	1,181	1,097	13,458	134	74	0	63	\$162,420	\$197,884
Space Heat Efficiency	23	39	36	755	6	2	-20	0	\$8,344	\$5,481
Space Heat Fuel Switch	1	0	0	0	0	0	-130	0	\$1,000	\$16,790
Ventilation	9	55	52	794	6	6	559	0	\$2,065	\$13,161
Water Conservation	1	18	17	88	2	1	0	0	\$1,000	\$1,868
Totals		28,373	26,781	331,426	4,014	3,707	-7,422	854	\$5,307,948	\$3,685,101

6.13 Electric Business Non-Farm Retrofit Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	630	630
Costs			
EVT Incentives	NA	\$3,669,237	\$3,669,237
Participant Costs	NA	\$10,038,022	\$10,038,022
Third Party Costs	NA	\$30,002	\$30,002
Annualized MWh Savings	NA	22,141	22,141
Lifetime MWh Savings	NA	302,339	302,339
TRB Savings (2012\$)	NA	\$23,919,885	\$23,919,885
Winter Coincident Peak KW Savings	NA	3,304	3,304
Summer Coincident Peak KW Savings	NA	3,050	3,050
Annualized MWh Savings/Participant	NA	35.145	35.145
Weighted Lifetime	NA	14	14

6.14 Electric Business Non-Farm Retrofit - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	8	138	138	1,575	7	16	158	0	\$16,775	\$21,875
Cooking and Laundry	1	29	29	373	4	0	196	280	\$1,700	\$43,491
Design Assistance	87	371	335	1,898	4	0	747	0	\$326,681	\$224,871
Hot Water Efficiency	4	4	4	73	1	1	2	0	\$434	\$1,140
Hot Water Fuel Switch	3	87	98	2,617	12	13	-328	0	\$10,100	\$5,180
Industrial Process Eff.	35	5,124	5,306	59,806	1,075	460	6,237	0	\$532,213	\$2,858,095
Lighting	429	12,304	12,066	183,217	1,779	2,096	-6,125	0	\$2,200,823	\$4,687,930
Motors	44	3,231	3,220	40,046	319	401	-287	0	\$177,467	\$1,211,201
Other Efficiency	245	215	193	3,458	7	7	1,941	791	\$332,107	-\$85,914
Other Fuel Switch	1	75	75	1,508	13	14	310	0	\$20,000	\$94,000
Other Indirect Activity	5	0	0	0	0	0	0	0	\$1,200	\$1,881
Refrigeration	12	317	309	4,418	49	22	185	0	\$28,490	\$89,934
Space Heat Efficiency	69	118	117	1,954	26	1	7,476	0	\$10,120	\$800,170
Ventilation	10	128	128	1,396	7	18	3,703	0	\$11,127	\$84,168
Totals		22,141	22,017	302,339	3,304	3,050	14,213	1,071	\$3,669,237	\$10,038,022

6.15 Electric Market Rate Single Family Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	659	659
Costs			
EVT Incentives	NA	\$136,444	\$136,444
Participant Costs	NA	\$236,101	\$236,101
Third Party Costs	NA	\$88,899	\$88,899
Annualized MWh Savings	NA	568	568
Lifetime MWh Savings	NA	12,854	12,854
TRB Savings (2012\$)	NA	\$723,726	\$723,726
Winter Coincident Peak KW Savings	NA	137	137
Summer Coincident Peak KW Savings	NA	52	52
Annualized MWh Savings/Participant	NA	0.862	0.862
Weighted Lifetime	NA	23	23

6.16 Electric Market Rate Single Family - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	11	1	1	24	0	3	0	0	\$1,200	\$450
Hot Water Efficiency	96	38	37	228	4	4	1	28	\$3,364	\$1,000
Hot Water Fuel Switch	130	325	483	9,738	50	25	-1,303	0	\$49,700	\$112,200
Lighting	397	137	135	1,209	58	15	0	0	\$72,987	\$0
Other Fuel Switch	4	4	4	119	1	1	-12	0	\$400	\$469
Other Indirect Activity	1	0	0	0	0	0	0	0	\$0	\$125
Space Heat Efficiency	122	29	26	523	6	3	398	0	\$8,793	\$44,443
Space Heat Fuel Switch	8	34	37	1,014	18	0	-85	0	\$0	\$76,755
Ventilation	2	0	0	0	0	0	0	0	\$0	\$659
Totals		568	725	12,854	137	52	-1,001	28	\$136,444	\$236,101

6.17 Electric Low Income Single Family Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	1,884	1,884
Costs			
EVT Incentives	NA	\$1,586,467	\$1,586,467
Participant Costs	NA	\$12,274	\$12,274
Third Party Costs	NA	(\$5,957)	(\$5,957)
Annualized MWh Savings	NA	2,187	2,187
Lifetime MWh Savings	NA	23,966	23,966
TRB Savings (2012\$)	NA	\$1,766,354	\$1,766,354
Winter Coincident Peak KW Savings	NA	351	351
Summer Coincident Peak KW Savings	NA	194	194
Annualized MWh Savings/Participant	NA	1.161	1.161
Weighted Lifetime	NA	11	11

6.18 Electric Low Income Single Family - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Cooking and Laundry	437	363	321	5,077	48	36	0	4,117	\$299,731	\$663
Electronics	684	79	70	315	8	10	0	0	\$40,428	\$0
Hot Water Efficiency	788	380	337	2,785	43	33	0	3,652	\$29,470	\$1,069
Hot Water Fuel Switch	4	16	14	477	2	1	-53	0	\$8,950	\$1,986
Lighting	1,498	406	360	3,317	170	47	0	0	\$127,182	\$402
Other Fuel Switch	6	7	6	198	2	1	-20	0	\$4,640	\$0
Refrigeration	1,296	898	798	10,778	62	64	0	0	\$1,056,349	\$0
Space Heat Efficiency	11	3	3	48	2	0	0	0	\$14,665	-\$12,180
Space Heat Fuel Switch	3	26	23	781	14	0	-92	0	\$0	\$14,275
Ventilation	83	10	9	189	1	1	0	0	\$5,050	\$6,060
Totals		2,187	1,941	23,966	351	194	-165	7,769	\$1,586,467	\$12,274

6.19 Electric Large Industrial Summary

	<u>Prior Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting 1/1/12</u>
# participants with installations	NA	58	58
<u>Costs</u>			
EVT Incentives	NA	\$1,123,373	\$1,123,373
Participant Costs	NA	\$6,035,999	\$6,035,999
Third Party Costs	NA	\$0	\$0
Annualized MWh Savings	NA	13,727	13,727
Lifetime MWh Savings	NA	170,735	170,735
TRB Savings (2012\$)	NA	\$21,571,218	\$21,571,218
Winter Coincident Peak KW Savings	NA	1,881	1,881
Summer Coincident Peak KW Savings	NA	1,450	1,450
Annualized MWh Savings/Participant	NA	236.672	236.672
Weighted Lifetime	NA	12	12

6.20 Electric Large Industrial - End Use Breakdown

End Use	# of Participants	Net MWH Saved	Gross MWH Saved	Net Lifetime MWH Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBTU	Net Water CCF Saved	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	10	689	637	16,111	36	56	0	0	\$28,679	\$221,565
Cooking and Laundry	3	33	32	425	4	0	197	321	\$1,864	\$45,567
Design Assistance	18	0	0	0	0	0	0	0	\$117,369	\$126,706
Hot Water Fuel Switch	1	65	73	1,953	10	10	-263	0	\$7,500	\$2,847
Industrial Process Eff.	22	5,065	5,529	52,003	870	432	10,763	0	\$296,619	\$2,348,481
Lighting	38	3,574	3,462	48,757	470	490	-2,070	0	\$464,215	\$1,219,667
Motors	19	3,832	3,629	45,137	433	425	-2,720	0	\$107,986	\$897,656
Other Efficiency	8	155	138	2,201	17	17	510	0	\$60,770	\$189,270
Refrigeration	5	132	132	1,982	25	3	0	13	\$12,093	\$32,817
Space Heat Efficiency	4	23	21	375	5	0	26,117	0	\$17,132	\$839,654
Ventilation	6	158	151	1,791	12	18	2,121	0	\$9,146	\$111,771
Totals		13,727	13,804	170,735	1,881	1,450	34,655	334	\$1,123,373	\$6,035,999

7. LIST OF SUPPORT DOCUMENTS, BY SERVICE

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7.1 DOCUMENTS, CORRESPONDING MARKETS, AND 2012 STATUS

#	Document Name / Title	Major Market	Status	Date
94	Tracking and Claiming Savings for Projects using Natural Gas	BNC, BEF, RNC, EP, EH	Implemented	1/1/2012
0	C&I New Construction Savings Adjustments	BNC	Obsolete	12/31/2012
0	Providing Shell Analysis and Recommendations for Homes Heated with Fossil Fuel Fired Systems	EH	Obsolete	12/31/2012
2	CD Marketing and Distribution Plan	EH	Obsolete	12/31/2012
3	Tracking & Reporting Farm Customers	BEF, BNC	Obsolete	12/31/2012
4	Calculation of MWh and TRB for Committed Projects	BNC, BEF, RNC, EP, EH	Obsolete	12/31/2012
10	Space Heat Load Adjustment for Weatherization	EH	Obsolete	12/31/2012
18	ENERGY STAR Computer Monitor Power Management Initiative	BNC, BEF	Obsolete	12/31/2012
22	EVT Services for customers of Vermont Electric Cooperative located in Massachusetts	BNC, BEF, RNC, EP, EH	Obsolete	12/31/2012
25	Expand Comprehensive Track Enrollment Options for Simple Track Projects	BNC, BEF	Obsolete	12/31/2012
28	Offer of financing for energy efficiency measures on Vermont farms	BEF, BNC	Obsolete	12/31/2012
31	Salesperson Incentives	EP	Obsolete	12/31/2012
33	Act 250 Procedures and Savings Claims	BNC	Obsolete	12/31/2012
39	Reporting procedures regarding merger of VEC and CUC	BNC, BEF, RNC, EP, EH	Obsolete	12/31/2012
41	Total Resource Benefits without Electric Savings	EH	Obsolete	12/31/2012
44	C&I Master Plan and Snowmaking Savings Adjustments	BEF	Obsolete	12/31/2012
47	Rx Lighting Documentation	BEF	Obsolete	12/31/2012
52	Moratorium on TRM Portfolios during savings verification	BNC, BEF, RNC, EP, EH	Obsolete	12/31/2012
53	Facility Operational Efficiency Pilot	BEF	Obsolete	12/31/2012
54	State of VT lighting equipment purchased under State Purchasing Contract #8262	BEF	Obsolete	12/31/2012
58	VT College CFLs	BEF	Obsolete	12/31/2012
59	Point of Sale ENERGY STAR® CFL Lighting Instant Rebate Coupons	EP	Obsolete	12/31/2012
61	VESH Rating System revision	RNC	Obsolete	12/31/2012
67	Upstream Lighting Distributor Incentive Model	BNC, BEF, RNC, EP, EH	Obsolete	12/31/2012
79	Policy Guidance for External Funding	BNC, BEF, RNC, EP, EH	Obsolete	12/31/2012

#	Document Name / Title	Major Market	Status	Date
80	Commercial T12 and HID High-Bay Retirement Program	BNC, BEF	Obsolete	12/31/2012
83	Commercial Lighting – LED Screw-Based (iLED) 2010 rebate offer	BNC, BEF	Obsolete	12/31/2012
85	Savings claim approach for agricultural engine block timers	BNC, BEF	Obsolete	12/31/2012

Key:

BEF Business Existing Facilities

BNC Business New Construction

EH Existing Homes

EP Efficient Products

RNC Residential New Construction

8. DEFINITIONS AND END NOTES

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8.1 DATA TABLES OVERVIEW

1 – **Section 8.2** includes a list of definitions for items in the data tables.

2 – Data items for which data are not available are labeled “nav.” Data items for which data are not applicable are labeled “nap” or “NA”

3 – Except where noted, Efficiency Vermont expenditures data in this report were incurred during the period January 1, 2012, through December 31, 2012. Similarly, measure savings are for measures installed during the period January 1, 2012, through December 31, 2012.

4 – Efficiency Vermont Resource Acquisition and Non Resource Acquisition costs include an operations fee of 1.71% and are reported in all applicable cost categories. The operations fees for “Incentives to Participants” are reported with the “Administration” costs.

5 – Data for “Incentives to Participants” in Tables **3.8, 3.9, 3.14, 3.16, 3.19, 3.22 3.24, 4.1, 4.4, 4.7, 4.10, 4.13, 4.16, 4.19, 4.22, 4.25, 4.28,** and **5.1.2** are based on financial data from Vermont Energy Investment Corporation’s (VEIC’s) accounting system. “Participant Incentives Paid” on all other tables are based on data entered in Efficiency Vermont’s Knowledge-based Information Technology Tool (KITT) tracking system.

6 – “Annualized MWh Savings (adjusted for measure life),” “Winter Coincident Peak kW Savings (adjusted for measure life),” and “Summer Coincident Peak kW Savings (adjusted for measure life)” on Tables **3.8** and **3.9** are provided for reference only. These data exclude savings for measures that have reached the end of their specified lifetime.

8.2 DEFINITIONS AND REPORT TEMPLATE

The table templates that appear in the 2012 Efficiency Vermont Savings Claim Summary/Annual Report were developed as a collaborative effort among Efficiency Vermont, the Vermont Department of Public Service, and Burlington Electric Department. Note that there are two major table formats, one for the markets and services summary and the other for breakdowns by end use, county, and utility savings.

The definitions of the data reported in these tables follow. The numbers in parentheses on the template refer to the footnoted definitions that immediately follow.

	<u>Prior</u> <u>Year</u>	<u>Current Year</u> <u>2012</u>	<u>Cumulative</u> <u>starting</u> <u>1/1/12</u>	<u>Cumulative</u> <u>starting</u> <u>1/1/12</u>
	(1)	(2)	(3)	(4)
# participants with installations	(5)			
<u>Operating Costs</u>				
Administration	(6)			
Operations and Implementation	(7)			
<u>Strategy and Planning</u>	(8)			
Subtotal Operating Costs	(9)			
<u>Technical Assistance Costs</u>				
Services to Participants	(10)			
<u>Services to Trade Allies</u>	(11)			
Subtotal Technical Assistance Costs	(12)			
<u>Support Services</u>				
Transportation	(13)			
Targeted Implementation	(14)			
Consulting	(15)			
Marketing	(16)			
EM&V	(17)			
Policy	(18)			
Information Technology	(19)			
Customer Support	(20)			
<u>Business Development</u>	(21)			
Subtotal Support Services Costs	(22)			
<u>Incentive Costs</u>				
Incentives to Participants ¹	(23)			
<u>Incentives to Trade Allies</u>	(24)			
Subtotal Incentive Costs	(25)			
<u>Total Efficiency Vermont Costs</u>				
	(26)			
Total Participant Costs	(27)			
<u>Total Third Party Costs</u>	(28)			
<u>Total Resource Acquisition Costs</u>				
	(29)			
Annualized MWh Savings				
	(30)			
Lifetime MWh Savings				
	(31)			
TRB Savings (2012 \$)				
	(32)			
Winter Coincident Peak kW Savings				
	(33)			
Summer Coincident Peak kW Savings				
	(34)			
Annualized MWh Savings/Participant				
	(35)			
Weighted Lifetime				
	(36)			
Annualized MWh Savings (adjusted for measure life)				
			(37)	
Winter Coincident Peak kW Savings (adjusted for measure life)				
			(38)	
Summer Coincident Peak kW Savings (adjusted for measure life)				
			(39)	

X.X.X. Breakdown Report

End Use or Utility or County	# of Parti- cipants	Net MWh Saved	Gross MWh Saved	Net Lifetime MWh Saved	Net Winter KW Saved	Net Summer KW Saved	Net Other Fuel MMBtu	Net Water CCF	Parti- cipant Incentives Paid	Parti- cipant Costs
	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)

Footnotes for the report table templates:

(1) Activity for the prior reporting year.

(2) Activity for the current reporting year. For savings, the figure reported is estimated savings for measures actually implemented for the current reporting period. Savings are reported in at generation and net of all approved adjustment factors, except as otherwise noted.

(3) Data reported for the performance period starting January 1, 2012 and continuing through December 31, 2014.

(4) Data reported for the performance period starting January 1, 2012 and continuing through December 31, 2014.

(5) Number of customers with installed measures. The “# participants with installations” is counted by summing unique physical locations (sites) where efficiency measures have been installed for the reporting period. For multifamily, the “#of participants with installations” is counted by summing the number of individual units. Under “Cumulative starting 1/1/12” customers are counted once, regardless of the number of times the customer participates in Efficiency Vermont services throughout the period. Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, the same participants may be counted and reported by more than one organization. As a result, total statewide participation might be less than the sum of all the organizations’ reported participants.

(6) Costs include Efficiency Vermont senior management, budgeting and financial oversight.

(7) Costs directly associated with the operations and implementation of resource acquisition activities.

(8) Costs related to program design, planning, screening, and other similar strategy and planning functions.

(9) Subtotal of all operating costs detailed in the categories above: (6) + (7) + (8).

(10) Costs related to technical assistance, conducting technical analyses, preparing packages of efficiency measures, contract management, and project follow-up provided to customers.

(11) Costs related to technical assistance, educational or other support services provided to entities other than individual participants, such as trade allies, manufacturers, wholesalers, builders, and architects.

(12) Subtotal reflecting total technical assistance costs: (10) + (11).

(13) Costs related to support provided by the VEIC transportation division.

(14) Costs related to support provided by the VEIC targeted implementation division.

(15) Costs related to support provided by the VEIC consulting division.

(16) Costs related to support provided by the VEIC marketing division.

(17) Costs related to support provided by the VEIC evaluation, measurement and verification division.

(18) Costs related to support provided by the VEIC policy division.

(19) Costs related to support provided by the VEIC information technology division.

(20) Costs related to support provided by the VEIC customer support services division.

(21) Costs related to support provided by the VEIC business development division.

(22) Total cost of Support Services.

(23) Direct payments to participants to defray the costs of specific efficiency measures.

(24) Incentives paid to manufacturers, wholesalers, builders, retailers, or other non-customer stakeholders that do not defray the costs of specific efficiency measures.

(25) Subtotal reflecting total incentive costs: (23) + (24).

(26) Total costs incurred by Efficiency Vermont. All costs are in nominal dollars: (9) + (12) + (22) + (25).

(27) Total costs incurred by participants and related to Efficiency Vermont or utility activities. This category includes the participant contribution to the capital costs of installed measures and to specific demand-side-management (DSM)-related services, such as technical assistance or energy ratings.

(28) Total costs incurred by third parties (i.e., entities other than Efficiency Vermont, utilities, and participants) and directly related to Efficiency Vermont or utility DSM activities. This category includes contributions by third parties to the capital costs of installed measures and to specific DSM-related services, such as technical assistance or energy ratings.

(29) Total cost of Resource Acquisition: (26) + (27) + (28).

(30) Annualized MWh savings at generation, net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period.

(31) Lifetime estimated MWh savings for measures installed during the current reporting year, at generation and net of all approved adjustment factors. (Typically, this value is calculated by multiplying estimated annualized savings by the life of the measure.)

(32) Total Resource Benefits (TRB) savings for measures installed during the current reporting year. TRB includes gross electric benefits, fossil fuel savings, and water savings. TRB is stated in 2012 dollars throughout the report. Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, the same savings might be counted and reported by more than one organization. As a result, the total statewide savings might be less than the sum of all the organizations' reported savings.

(33) Estimated impact of measures at time of winter system peak, at generation, net of adjustment factors.

(34) Estimated impact of measures at time of summer system peak, at generation, net of adjustment factors.

(35) Annualized MWh savings per participant, net at generation: (30) ÷ (5).

(36) Average lifetime, in years, of measures weighted by savings: (31) ÷ (30).

(37) Adjusted annualized MWh savings at generation and net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period. These data include savings for measures that have not yet expired during the reporting period and exclude savings for measures that have reached the end of their specified lifetime.

(38) Adjusted impact of measures at time of winter system peak, at generation, net of adjustment factors. These data include savings for measures that have not yet expired during the reporting period and exclude savings for measures that have reached the end of their specified lifetime.

(39) Adjusted impact of measures at time of summer system peak, at generation, net of adjustment factors. These data include savings for measures that have not yet expired during the reporting period and exclude savings for measures that have reached the end of their specified lifetime.

Items 40-49 reflect installed measures for the current reporting period.

(40) Number of participants with installed measures for the "End Use, Utility and County Breakdown." Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, the same participants may be counted and reported by more than one organization. As a result, total statewide participation might be less than the sum of all the organizations' reported participants.

(41) Annualized MWh savings at generation, net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period. This is the same number as that reported on line (23).

(42) Annualized MWh savings, gross at the customer meter.

(43) Lifetime estimated MWh savings for measures installed during the current reporting period, at generation and net of all approved adjustment factors. This is the same number as that reported on line (31).

(44) Estimated impact of measures at time of winter system peak, at generation, net of adjustment factors. This is the same number as that reported on line (33).

(45) Estimated impact of measures at time of summer system peak, at generation, net of adjustment factors. This is the same number as that reported on line (34).

(46) MMBtu estimated to be saved (positive) or used (negative) for alternative fuels as a result of measures installed in the end use.

(47) Water saved (positive) or used (negative) as a result of measures installed in the end use.

(48) Incentives paid by Efficiency Vermont to participants for measures installed during the current reporting period. This is the same number as that reported on line (23).

(49) Costs incurred by participants and related to Efficiency Vermont or utility activities. This is the same number as that reported on line (27).



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