

# Year 2002 Annual Report And Energy Savings Claim

Reflecting Adjustments from Savings Verification Process

September 8, 2003

255 South Champlain Street, Suite 7 Burlington, Vermont 05401-4894 1-888-921-5990

www.efficiencyvermont.com

This revised report is submitted September 8, 2003, to the Vermont Public Service Board, the Vermont Department of Public Service, the Efficiency Vermont Contract Administrator, and the Efficiency Vermont Advisory Committee. The tables contained in this report reflect final adjustments to 2002 savings as reported by the Contract Administrator to the Vermont Public Service Board. The tables have been generated directly from adjusted data contained in the Efficiency Vermont data tracking system. The savings adjustments will be reflected in all reports generated by Efficiency Vermont after September 8, 2003.

# Year 2002 Adjusted Annual Report and Energy Savings Claim

# **Table of Contents**

1. N	Narratives	
1.1.	SUMMARY	1
1.2.	COMMERCIAL & INDUSTRIAL ENERGY SERVICES	8
1.3.	RESIDENTIAL ENERGY SERVICES	15
2. Eı	nergy Savings and Expenditures Tables	21
2.1.	ORGANIZATION OF TABLES	21
2.2.	PROGRESS REPORT	22
2.3.	EFFICIENCY VERMONT OVERALL RESULTS	
	2.3.1. Efficiency Vermont Annual Summary 2002	23
	2.3.2. Total Resource Benefits	24
	2.3.3. End Use Breakdown	
	2.3.4. Utility Breakdown	
	2.3.5. County Breakdown	27
	2.3.6. Distributional Equity of Benefits and Expenditures	
	2.3.6.2. Cumulative Distributions by Customer Sector	28
	2.3.6.3. Cumulative Distributions by County	29
	2.3.6.4. Cumulative Distributions by Utility Service Territory	30
2.4.	COMMERCIAL & INDUSTRIAL ENERGY SERVICES	3
	2.4.1. Program Summary	31
	2.4.2. End Use Breakdown	
2.5.	RESIDENTIAL ENERGY SERVICES	
	2.5.1. Program Summary	33
	2.5.2. End Use Breakdown	
3. In	dividual Program Results	35
3.0.	COMMERCIAL ENERGY OPPORTUNITIES PROGRAM	35
	3.0.2. Program Summary	
	3.0.3. End Use Breakdown	
	3.0.4. Utility Breakdown	
	3.0.5. County Breakdown	
3.1.	CEO New Construction Program	
	3.1.2. Program Summary	39
	3.1.3. End Use Breakdown	
	3.1.4. Utility Breakdown	
	3.1.5. County Breakdown	
	3.1.6. Program-Specific Indicators	
	3.1.6.1. Committed Projects Summary	
	2.1.6.2 Project Country by Trook	43

3.2	CEO MARKET OPPORTUNITIES PROGRAM	44
	3.2.2. Program Summary	44
	3.2.3. End Use Breakdown	45
	3.2.4. Utility Breakdown	46
	3.2.5. County Breakdown	47
	3.2.6. Program-Specific Indicators	
	3.2.6.1. Committed Projects Summary	
	3.2.6.2. Project Counts by Track	
	3.2.6.3. Participating Vendors	
3.3.	Dairy Farms Program	
	3.3.2. Program Summary	
	3.3.3. Not in use	
	3.3.4. Not in use	
	3.3.5. Not in use	
	3.3.6. Program-Specific Indicators	51
	3.3.6.1. Project Counts by Track	51
3.4.	COMMERCIAL & INDUSTRIAL EMERGING MARKETS PROGRAM	52
	3.4.2. Program Summary	52
	3.4.3. End Use Breakdown	53
	3.4.4. Utility Breakdown	54
	3.4.5. County Breakdown	55
3.5.	RESIDENTIAL NEW CONSTRUCTION PROGRAM	56
	3.5.2. Program Summary	56
	3.5.3. End Use Breakdown	57
	3.5.4. Utility Breakdown	58
	3.5.5. County Breakdown	59
	3.5.6. Program-Specific Indicators	60
	3.5.6.1. Home Counts	60
	3.5.6.2. Builder Counts	60
	3.5.6.3. Lighting Fixtures Installed	
3.6.	EFFICIENT PRODUCTS PROGRAM	61
	3.6.2. Program Summary	61
	3.6.3. End Use Breakdown	62
	3.6.4. Utility Breakdown	
	3.6.5. County Breakdown	
	3.6.6. Program-Specific Indicators	
	3.6.6.1. Product Counts	
	3.6.6.2. Retailer Counts	
3.7.	LOW INCOME MULTIFAMILY (RESIDENTIAL ENERGY EFFICIENCY PROGRAM)	
	3.7.2. Program Summary	
	3.7.3. End Use Breakdown	
	3.7.4. Utility Breakdown	
	3.7.5. County Breakdown	
	3.7.6. Program-Specific Indicators	
	3.7.6.1. Committed Projects Summary	
	3.7.6.2. Project Counts	70

	3.7.6.3. Utility Account Counts	71
3.8.	LOW INCOME SINGLE FAMILY PROGRAM	72
	3.8.2. Program Summary	72
	3.8.3. End Use Breakdown	
	3.8.4. Utility Breakdown	74
	3.8.5. County Breakdown	75
3.9.	RESIDENTIAL EMERGING MARKETS PROGRAM	76
	3.9.2. Program Summary	76
	3.9.3. End Use Breakdown	77
	3.9.4. Utility Breakdown	
	3.9.5. County Breakdown	79
	ppendices Not In Use	
4.1.	CUSTOMER CREDIT PROGRAM	02
4.2.	4.2.1. Narrative	
	4.2.2. Program Summary	
	4.2.3. End Use Breakdown	
	4.2.4. Total Resource Benefits	
	4.2.5. Efficiency Vermont Annual Summary 2002 plus Customer Credit	
4.3.	DEFINITIONS AND END NOTES	
	4.3.1. Annual Report Tables Overview	
	4.3.2. Definitions	
	4.3.3. Table End Notes	

### 1.1. SUMMARY

### SUCCESS THROUGH PARTNERSHIPS

2002 was a year of success for Efficiency Vermont, the nation's first statewide energy efficiency utility. Established by the Vermont Public Service Board in 1999, Efficiency Vermont has helped more than 67,840 Vermont businesses and households lower their energy costs by investing in energy efficiency. We have partnered with design professionals, builders, vendors and many others to decrease barriers to participation in energy efficiency. Together, we've accrued a track record of cost-effectively reducing Vermont's need for electricity supply, lowering energy rates, strengthening the state's economy and protecting our environment.

The economic worth of energy efficiency can be clearly seen when compared to the cost of conventional electricity sources in Vermont's energy resource portfolio. In this report, the economic worth of energy savings is referred to as *lifetime economic value*. This term equals the present value of expenditures for electricity, fossil fuels and water savings that would have been made in the absence of energy efficiency. Further, the term includes the worth of the savings over the lifetime of the efficiency measures. In the data table sections of this report, lifetime economic value is referenced as *Total Resource Benefits*. These terms may be used interchangeably.

The benefits of energy efficiency investments made with Efficiency Vermont assistance in 2002 are summarized in the following six categories:

- Major Accomplishments 2002 at a Glance
- A Competitive and Proven Source of Electricity
- Putting More Money in the Pockets of Vermonters
- Helping Keep the Green Mountain State Green
- Adding Efficiency Capacity to Vermont's Energy Portfolio
- Providing a Successful National Model

### MAJOR ACCOMPLISHMENTS – 2002 AT A GLANCE

In 2002, Efficiency Vermont helped 32,306 households and businesses complete energy efficiency investments that resulted in:

- 38,363 megawatt-hours (MWh) of annual energy savings, costing ratepayers 52% less than what utilities would have paid to purchase this energy on the wholesale supply market. These energy savings will last an average of 14.4 years;
- \$25 million in lifetime economic value over the 14.4-year average life of the efficiency measures installed in 2002;
- surpassing Efficiency Vermont's 2002 annual energy savings target by 59% and exceeding the three-year contract savings goal by 17%; and,

• the elimination of 411,000 tons of greenhouse gas emissions that would have been created by conventional power generation.

Additional notable indicators of Efficiency Vermont's achievements in 2002 include:

- clear evidence of significant and lasting effects on Vermont's consumer and business markets:
- recognition of energy efficiency leadership, both regionally and nationally;
- meeting, and most cases exceeding, seven specific contractual indicators of performance established by the Vermont Public Service Board; and
- verification and validation of Efficiency Vermont's performance for 2001.

As was true in 2000 and 2001, our success in 2002 was due to the contributions of numerous partners. These partners included Vermont households, businesses, vendors, suppliers, service professionals, and fellow Vermont ratepayers, as well as the state's regulators and legislators who created Efficiency Vermont and supported its continued operation. Everyone's efforts were indispensable to Efficiency Vermont's success in 2002.

### A COMPETITIVE AND PROVEN SOURCE OF ELECTRICITY SUPPLY

### Efficiency Vermont provides an economical and beneficial energy source

In 2002, Efficiency Vermont expenditures and customer investments in energy efficiency improvements totaled \$16.8 million.

2002 Summary of Costs				
Efficiency Vermont Total Expenditures	\$10.5 Million			
Participant and Third-Party Investments	\$6.3 Million			
Total Investment in Energy Efficiency	\$16.8 Million			
2002 Summary of Benefits				
Lifetime Economic Value	\$25.1 Million			

**Figure 1.1.1.** 

Generating a lifetime savings of 552,705 MWh, the cost of these improvements is 3.0 cents per saved kWh. This is 52% lower than the average 6.3 cents per kWh that Vermont electric utilities would have paid to purchase comparable electricity supply on the New England wholesale market for delivery to Vermont customers over the 14.4-year average life of the savings. Hence, these efficiency investments were significantly more cost-effective than conventional sources of electricity.

Electrical efficiency investments also slow the rise of electricity supply prices and, thereby, lower the cost of electricity for everyone on the system. This is especially true during those times of year when electrical demand is greatest and supply costs are highest. The reduction of electrical demand at peak periods not only helps to reduce the wholesale price on the spot market, but serves as a hedge against long-term price increases, by lowering new contract prices.

Thus, efficiency savings benefit all ratepayers by lowering prices paid for all electricity used, whether or not these customers take direct advantage of Efficiency Vermont's services.

### Efficiency Vermont Savings Validated through 2001

Efficiency Vermont's savings claims were verified and validated in 2002. The Vermont Department of Public Service conducted a rigorous review of our 2001 claim for electricity and other resource savings. This review led to an adjustment in the electrical savings claim by only two percent.

The Vermont Public Service Board also engaged an independent consultant to scrutinize both Efficiency Vermont's estimates and the verification process conducted by the Vermont Department of Public Service. The consultant examined Efficiency Vermont's data tracking system, quality assurance systems, as well as the Technical Reference Manual that documents the basis and algorithms for savings calculations. The independent consultant's report, *Independent Audit of Vermont Energy Efficiency Utility Energy and Capacity Savings for 2000 and 2001*, by Martin Cummings, found that "The EVT [Efficiency Vermont] estimates of annual energy and capacity savings, as verified and adjusted by the Department of Public Service, are reliable and unbiased estimates of program savings," and confirmed that "Efficiency Vermont's programs are highly cost-effective." The report also stated that "the audit has shown that EVT [Efficiency Vermont] and the Department have put appropriate procedures and controls in place to minimize sources of error and bias in the [savings] estimation process."

In 2002, Vermont Energy Investment Corporation continued its successful fulfillment of its fiduciary obligations as the Efficiency Vermont contractor. In addition to maintaining rigorous cost accounting procedures, the contractor participated in regular monthly reviews of Efficiency Vermont expenditures conducted by the Vermont Public Service Board's Contract Administrator for the Energy Efficiency Utility. Vermont Energy Investment Corporation's annual independent financial audit, encompassing all aspects of Efficiency Vermont's operations, established that funds were being managed in accordance with generally accepted accounting principles.

### PUTTING MORE MONEY IN THE POCKETS OF VERMONTERS

### Efficiency Vermont Cuts Household and Business Energy Costs

In 2002, we served 31,719 households and 587 businesses in Vermont. Over their lifetimes, the energy efficiency measures installed in these homes and businesses will generate \$25.1 million in lifetime economic value.

Distribution of Benefits by Sector					
	Commercial &	D 11 41 1			
	Industrial	Residential	Total		
	<b>Benefits Achieved</b>	in 2002			
Annual MWh Savings	18,436 (48%)	19,927 (52%)	38,363		
Lifetime Economic	\$12,000,000 (48%)	\$13,100,000 (52%)	\$25,100,000		
Value					
Cu	mulative Benefits achie	ved 2000-2002			
Annual MWh Savings	48,180 (49%)	49,870 (51%)	98,050		
Lifetime Economic	\$32,500,000 (49%)	\$33,500,000 (51%)	\$66,000,000		
Value					

**Figure 1.1.2.** 

### Serving Vermont, from Bennington to Barton

A key objective of Efficiency Vermont's efforts is to help as many Vermonters as possible, regardless of where they live or work. It is important, therefore, that participation and benefits be widely distributed. In 2002, Efficiency Vermont successfully reached every corner of our state. As in previous years, efficiency investments and their economic benefits were distributed in each county in roughly the same proportion as the energy efficiency charge that each county's ratepayers paid through their electric bills. The widespread distribution of these benefits has been no accident. Our marketing, business development and service teams have worked to establish a network of partnerships with design professionals, builders, contractors and vendors throughout the state. Additionally, we undertook targeted campaigns to increase participation in those markets where customer activity was previously low.

### The Efficiency-Powered Economic Engine

In addition to direct energy savings benefits, Efficiency Vermont's work in 2002 generated a long-term, positive stimulus to the state's economy. In contrast to the performance of the economy in 2002, Vermont's efficiency investments generated strong returns both for individual investors and for the state's economy as a whole. These investments will continue to pay dividends in the years ahead, in the form of lower expenditures on electricity, fossil fuel and water for Vermont's homes and businesses. The average business that took advantage of Efficiency Vermont services in 2002 will realize a return of 71% on its portion of efficiency investment costs, a rate of return that outperforms all but the riskiest financial market investments.

The lifetime economic value resulting from Efficiency Vermont's first three years of service is \$66 million. As these savings unfold over the next 14.4 years, they act as a time-released stimulus to Vermont's economy. The recurring savings from these efficiency investments will spur Vermont's economic growth in the same way that a sustained decrease in energy prices would lower the cost of living, and of doing business, in the state.

Energy efficiency investments decrease the amount of money leaving the state to pay for imported energy; a significantly more costly power source. Savings generated by Vermonters' energy efficiency investments are spent on goods and services or reinvested in other assets. Most of this spending and reinvesting involves transactions with Vermont businesses, resulting in economic stimulus and job creation. According to an analysis by Skip Laitner, a nationally recognized expert on the economic impacts of energy efficiency investment, the investments catalyzed by Efficiency Vermont's efforts through 2002 can be expected to add an estimated \$26 million to Vermont's economic output. They also will have created more than 100 net new full-time Vermont jobs during the 2000-2002 period. Over the next fifteen years, the ensuing lifetime economic value generated by Efficiency Vermont will create another 46 jobs.

### HELPING KEEP THE GREEN MOUNTAIN STATE GREEN

Efficiency is a clean electricity resource because it reduces the need for the energy production that causes pollution. The table below shows the harmful emissions prevented by Efficiency Vermont's work. Since its inception in 2000, Efficiency Vermont has prevented the amount of pollution that 14,000 cars emit in a year.

Power Plant Emissions Reduced by Efficiency Vermont Activities					
Year 2002 (in tons) Years 2000-2002 (in tons)					
Carbon Dioxide	411,213	1,051,990			
Oxides of Nitrogen	525	1,343			
Sulphur Dioxide	1,713	4,383			
Particulates	141	361			

**Figure 1.1.3.** 

### ADDING EFFICIENCY CAPACITY TO VERMONT'S ENERGY PORTFOLIO

### Efficiency Vermont Builds Service Delivery Capacity

A natural and deliberate outcome of Efficiency Vermont's work has been the creation of an energy efficiency infrastructure throughout Vermont. By cultivating and progressively strengthening relationships with businesses, trade associations, key industries, and with providers of energy efficiency services and products, we have been able to tap additional cost-effective efficiency resources in a reliable and predictable manner. This process has been a key factor in enabling Efficiency Vermont to increase savings and to exceed targets in each contract year. With this infrastructure in place, Vermont can now depend on energy efficiency as a ready, reliable and integral component of our state's portfolio of energy resources.

The signs of the successful creation of this infrastructure can be found in many places. We have increased the average number of monthly leads for business projects by 35% from 2001 to 2002. Customers returning to Efficiency Vermont for help with new efficiency projects provide confirmation that efficiency is becoming an integral part of development planning for increasing numbers of Vermont businesses.

Another sign of growing capacity is the increased attendance at Efficiency Vermont's annual conference on new construction. Planning for the 2003 conference began in June 2002. The 2-day event featured advanced training, energy-efficient products, and nationally renowned presenters. Conference attendance increased by 63% over the previous year, to more than 800 builders, architects, engineers, vendors and other industry professionals.

To meet the challenge of helping greater numbers of customers save more comprehensively, we conducted strategic hiring of qualified personnel to provide expert technical assistance. The result today is a staff comprised of architects, engineers, and energy specialists that represent some of the top talent in the country in the energy efficiency field.

Efficiency Vermont also has succeeded in increasing the comprehensiveness of the efficiency projects we have helped advance. Business new construction projects are increasingly incorporating energy efficiency into all aspects of design and construction. Additionally, these projects are becoming more comprehensive; bringing together all project decision-makers, to consider the whole building and its systems, thereby increasing energy savings. There has been a substantial increase in the number of Energy Star® qualified homes built in Vermont this year, as we have made the plan review process significantly easier for participants. We have also developed one of the nation's most comprehensive approaches to providing energy efficiency services to market rate and low-income multifamily housing.

### PROVIDING A SUCCESSFUL NATIONAL MODEL

As other states strive to find more affordable and environmentally friendly ways to supply electricity while boosting their economies, Efficiency Vermont is increasingly looked to as a model for the nation. We are honored to have been contacted in 2002 by organizations and governmental entities in states exploring the possible replication of Vermont's approach. We attribute Vermont's national reputation as a leader in the energy efficiency field to the lasting impact that Efficiency Vermont and our partners, statewide, are having on the ways that energy efficiency decisions are made in the marketplace.

A good illustration of this impact can be seen in the air conditioning market. Despite having one of the shortest and mildest summer seasons in the nation, Vermont stands out regionally and nationally for its market share of high-efficiency air conditioner sales. Nationally, Vermont ranks first in the market share of energy-efficient residential room air conditioners sold in 2002. That success is due in no small measure to our partnership with participating retailers in promoting products that qualify for the ENERGY STAR label. Efficiency Vermont met with similar success in the non-residential cooling market. Ninety percent of the commercial heating and cooling system units that qualified for incentives from Efficiency Vermont met the highest efficiency standard, as compared to only 51% for northeast states undertaking similar efforts (Connecticut, Massachusetts, New Jersey and Rhode Island).

Recent data released by the U.S. Environmental Protection Agency for 2002 reveals that Vermont leads the eastern U.S. in market share for ENERGY STAR labeled homes. Vermont ranks third, nationally, in market share for ENERGY STAR labeled clothes washers.

Vermont's pioneering approach to energy efficiency service delivery brought increasing national attention and interest to our state in 2002. Six recent honors exemplify this recognition:

- Efficiency Vermont was selected from among 1,200 nominees as one of the 15 finalists for the Innovations in American Government Award from Harvard's Kennedy School of Government.
- The American Council for an Energy Efficient Economy (ACEE) selected several of Efficiency Vermont's residential services for their "Exemplary Programs" Award. The awards were for services delivered in the single-family residential new construction market, the multifamily low-income market, and the lighting market (as a part of the Northeast Energy Efficiency Partnerships regional initiatives).
- The U.S. Environmental Protection Agency awarded Efficiency Vermont the New England 2002 Environmental Merit Award for outstanding efforts in preserving New England's environment.
- The U.S. Environmental Protection Agency and Department of Energy awarded Efficiency Vermont:
  - 2002 ENERGY STAR Excellence in Consumer Education for exceptional service to Vermont consumers, as part of a regional energy efficiency partnership with northeast utilities;
  - 2002 ENERGY STAR Partner of the Year, for outstanding commitment to providing expert design assistance and financial incentives to Vermonters building homes that meet or exceed ENERGY STAR standards; and,
  - 2002 ENERGY STAR Labeled Homes Outstanding Achievement Award, for verifying more than 250 ENERGY STAR labeled homes in the past year.

### **CONCLUSION**

Vermont's unique successes in and contributions to the energy efficiency field are achievements in which Vermonters can take pride. After Efficiency Vermont's first three years of operation, we are pleased and proud to have been a successful part of our state's effort to minimize the long-term costs of electricity supply, to strengthen the economy and to protect the environment. We look forward to our continued service to the people of Vermont.

### 1.2. COMMERCIAL & INDUSTRIAL ENERGY SERVICES

### A YEAR OF PERFORMANCE THROUGH PARTNERSHIP

During 2002, Efficiency Vermont partnered with Vermont commercial and industrial customers to complete 661 projects that cut costs, improved business operations, and saved energy. These relationships enabled us to provide technical assistance and financial incentives of \$4.4 million to 587 Vermont businesses. Participants invested \$3 million of their own capital. partnerships in the business community generated \$12 million in lifetime economic value that will be realized throughout the next 15.7 years. Together, we cut 18,436 annual MWh from Vermont's total annual electric consumption, offsetting almost one quarter of the projected growth in commercial and industrial electricity sales forecast by the Vermont Department of Public Service.1

In order to build strong customer and strategic partner relationships, we engaged participants in discussions of technical, business and financial issues. Through these discussions, business operators gained a greater understanding of the role of energy efficiency in long-term profitability. As a result, we were able to increase the implementation of energy efficiency measures across different end-uses such as lighting, heating, cooling, and ventilation in current and planned projects. On average, the businesses that partnered with us and installed efficiency measures are now earning returns of 71% on their investments.

In 2002, Efficiency Vermont strengthened our strategic alliances with key associations of design professionals, including local chapters of:

- American Institute for Architects;
- American Society of Heating, Refrigeration, and Air Conditioning Engineers; and,
- Construction Specifications Institute.

We worked with these associations to inform their members of the resources available from Efficiency Vermont. The success of these alliances was evident in our interactions with design professionals. We experienced a high degree of repeat business through referrals from architects and engineers who had worked with us in the past. We became aware of two design firms that have established an internal policy specifying that all of their Vermont projects will include Efficiency Vermont early in the design phase. Each new project with a returning customer proceeded more smoothly than the last. The players knew what to expect from us, and we in turn knew the strengths of the designers and the areas where our expertise would be most beneficial.

<sup>&</sup>lt;sup>1</sup> Based on projected Vermont commercial & industrial electric sales growth from 2002 to 2003 of 76,526 MWh: Vermont Department of Public Service forecast 10/29/02.

Our success in establishing Efficiency Vermont as a credible asset to the design community is documented in a market assessment conducted on behalf of the Vermont Department of Public Service<sup>2</sup>. This assessment revealed that, in less than three years, Efficiency Vermont has become widely known among commercial and industrial market participants as the primary resource for energy efficiency knowledge and services in Vermont, as is shown in the table below.

Results of Market Assessment Survey of Design Professionals				
Design professional groups	% recognition of Efficiency Vermont name	% recognition of Efficiency Vermont as a "primary resource" without prompting		
Engineers	100%	92%		
Architects	84%	53%		
All types of contractors	73%	36%		

**Figure 1.2.1.** 

Efficiency Vermont also continued outreach to large businesses and related professional associations such as:

- the Association for Facilities Engineering;
- the Vermont Grocers' Association: and.
- the Vermont Ski Areas Association.

By actively participating with groups such as these, we were able to reach a large number of potential customers. We identified customers with large commercial and industrial projects based on a number or criteria, including electricity usage, industry type, opportunities for efficiency, and geographic location. Our activities resulted in more projects with large businesses and greater collaboration with these associations.

Because of the critical role of farming in Vermont's economy, Efficiency Vermont also worked closely with Vermont's agricultural community. We initiated a marketing and business development effort to distribute informational releases encouraging dairy farmers to take advantage of Efficiency Vermont's services. We coordinated this effort with Cabot Cooperative Creamery, Dairy Herd Improvement Association, HP Hood, the Vermont Department of Agriculture and a number of publications serving dairy farmers, This focus on dairy farms resulted in 94 completed projects in 2002 and savings of 960 MWh.

Our efforts to increase overall awareness of Efficiency Vermont's services resulted in greater recognition by business customers. The market assessment study<sup>3</sup> indicates that 55% of business property managers and developers recognized Efficiency Vermont as a source of efficiency services and 24% recognized our name without prompting.

<sup>&</sup>lt;sup>2</sup> GDS Associates Team, Evaluation of the Commercial & Industrial Sector Markets and Activities of Vermont's Energy Efficiency Utility, February 17, 2003.

<sup>&</sup>lt;sup>3</sup> GDS Associates Team.

### NEW CONSTRUCTION, RENOVATION, AND EQUIPMENT REPLACEMENT

### Tailoring Services to Customer Needs

In 2002, Efficiency Vermont completed 597 projects in the new construction, renovation, and equipment replacement markets, providing annual savings of 13,481 MWh. The lifetime economic value is \$9.5 million, as a result of \$5.3 million in total investments (combined Efficiency Vermont and customer investments).

In these markets, Efficiency Vermont worked to integrate energy efficiency at the time of customers' planned modifications to buildings, equipment, ownership, facility use or operations. We addressed all major end uses, including lighting, cooling, ventilation, motors, space heating, service water heating, refrigeration and industrial processes. We also encouraged the implementation of energy efficiency improvements through technical and financial assistance, with three general approaches for incentives geared to specific customer needs, as described below.

- <u>Prescriptive incentives</u> provided fixed dollar amounts for specific eligible efficiency measures.
- <u>Custom incentives</u> were tailored to individual project costs and savings. We provided custom incentives for the majority of our projects, to maximize the electrical and economic savings per dollar invested. This approach enabled us to leverage investments in more comprehensive packages of efficiency measures.
- <u>Comprehensive design incentives</u> were utilized to help customers optimize building performance by fully integrating energy efficiency into building design. Efficiency Vermont completed two comprehensive design projects during the year, and enrolled another 16 active projects that should complete over the next few years. These results exceeded the associated contractual performance target set by the Vermont Public Service Board.<sup>5</sup>

These general approaches, combined with strategic partnerships, resulted in the significant savings cited above. Activity in 2000-2002 in the commercial and industrial new construction and replacement markets achieved savings in excess of the contract savings goal for these markets by 12%.

Efficiency Vermont's 2002 Adjusted Annual Report and Energy Savings Claim

<sup>&</sup>lt;sup>4</sup> Efficiency Vermont tracks and reports savings in these lost-opportunity markets under Commercial Energy Opportunities Program. Efficiency Vermont tracks savings from the new construction market separately from equipment replacement savings, which are reported under the Market Opportunities Program in the tables below.

<sup>&</sup>lt;sup>5</sup> These quantities are remarkable, considering the size of Vermont's commercial and industrial new construction market. After two years of operation, NSTAR's target for comprehensive projects was 21 for a much larger market, according to *NSTAR 2000 Energy Efficiency Plan Update*.

<sup>&</sup>lt;sup>6</sup> 2000-2002 MWh savings of 38,703 exceed the three-year goal of 34,521 MWh savings by 12%. 2002 expenditures of \$3.3 million were 94% of the \$3.5 million Efficiency Vermont budget approved by the Vermont Public Service Board.

Efficiency Vermont's 2002 efforts placed Vermont in a leadership role in the region. Vermont led all northeastern states in the quantity of energy-efficient motors installed and in electrical load eliminated, relative to the size of Vermont's commercial and industrial market.<sup>7</sup>

Vermont also led the region in market share for energy-efficient commercial heating, ventilation, and air conditioning equipment. Ninety percent of the equipment for which Efficiency Vermont paid incentives met the highest efficiency standard. This was the highest percentage of top efficiency equipment achieved by any state in the region that offered these incentives, (Connecticut, Massachusetts, New Jersey, and Rhode Island), and far exceeded the 51% average percentage for top efficiency equipment that the other states achieved. This was particularly remarkable due to the fact that Vermont had the fewest cooling hours among these states.

### COMMERCIAL AND INDUSTRIAL RETROFIT9

In 2002, Efficiency Vermont assisted commercial and industrial ratepayers with the successful completion of 64 retrofit projects, providing annual savings of 4,955 MWh. The lifetime economic value is \$2.5 million, as a result of \$2.2 million in total investments (\$1.1 million in Efficiency Vermont expenditures and customer investments of \$1.1 million).

Efficiency Vermont offered customized technical assistance and financial incentives to spur cost-effective efficiency retrofit investments by commercial and industrial customers. <sup>10</sup> Typical measures included compressed air system upgrades, lighting wattage reduction and/or output enhancements, industrial process improvements, and fuel switches from electricity to alternative fuels. While we promoted cost-effective retrofit savings across all end-uses, the greatest savings came from industrial process, lighting, heating, ventilation, and air conditioning, and compressed air system improvements. Savings in 2000-2002 in the commercial and industrial retrofit markets exceeded the contract savings goal by 31%. <sup>11</sup>

<sup>&</sup>lt;sup>7</sup> 2002 MotorUp program tracking data provided by Applied Proactive Technology.

<sup>&</sup>lt;sup>8</sup> These figures do not include customized cooling efficiency improvements, which are beyond the scope of the regional initiative.

<sup>&</sup>lt;sup>9</sup> Retrofit efficiency measures are those improvements which are not part of other planned facility upgrades and which are undertaken primarily to save energy and cut costs.

<sup>&</sup>lt;sup>10</sup> Efficiency Vermont tracks and reports savings from large retrofit projects under the Commercial and Industrial Emerging Markets Program.

<sup>&</sup>lt;sup>11</sup> 2000-2002 MWh savings of 7,232 exceed the three-year goal of 5,500 MWh savings by 31%. 2002 expenditures of \$1.1 million were 65% of the \$1.7 million Efficiency Vermont budget approved by the Vermont Public Service Board for 2002.

### Sample Commercial and Industrial Efficiency Activities

The table below provides a sampling of the types of facilities and efficiency measures installed, as well as savings and benefits that the businesses received from their investments.

Facility Type	Efficiency Measures Installed ercial and Industrial Nev	Customer Investment	Annual Savings (MWh)	Weighted Lifetime of Investment	Rate of Return on Customer Investment <sup>12</sup>	
Dairy farm	Variable frequency drives, lighting, ventilation	\$14,678	86	13 years	51%	
Mineral manufacturing	Variable frequency drives	\$67,549	886	10 years	58%	
Household furniture manufacturing	Transformer	\$5,255	33	40 years	42%	
Ski resort	Process snowmaking	\$140,430	624	20 years	30%	
Stone products manufacturing	Compressed air system	\$15,782	81	20 years	44%	
Daycare / school	Lighting, HVAC, Act 250 comprehensive measures	\$3,076	27	20 years	74%	
Commercial and Industrial Retrofit						
Furniture manufacturing	Variable frequency drives on dust collection system	\$52,392	325	10 years	36%	
Wood products manufacturing	Improved process equipment	\$60,250	154	30 years	23%	
High school	Transformer, lighting upgrade	\$86,528	215	35 years	18%	

**Figure 1.2.2.** 

### **MARKET INITIATIVES**

Market initiatives are strategies designed to help specific sectors overcome unique barriers to participation in energy efficiency. In 2002, we devoted special attention to two of Vermont's critical market segments: Schools and water/wastewater treatment facilities. These market segments offered, and continue to offer, significant untapped potential for the delivery of cost-effective efficiency services to an economically and geographically diverse population.

<sup>&</sup>lt;sup>12</sup> Rate of Return on Customer Investment is the rate that discounts future customer savings to a present value equal to the customer's investment. Future savings are level over the weighted lifetime of the measures. That is, no inflation is applied to future savings.

### School Facilities

The schools initiative continued the work that Efficiency Vermont began in 2001, addressing all 300+ Vermont K-12 public and private schools, regardless of size. We focused on developing strategic partnerships with numerous market actors, to discover if they were considering facility construction or renovation, equipment replacement projects, and whether and how they were considering discretionary retrofit investments. As a result of these efforts, Efficiency Vermont developed an effective network of decision-makers involved in school construction. Efficiency Vermont is now routinely involved in many schools' project decision processes and frequently engaged by third parties. We worked with numerous strategic partners in these efforts, including:

- Vermont Superintendents' Association and its School Energy Management Program (SEMP);
- Vermont Department of Education;
- Vermont Association of School Business Officials; and,
- Vermont School Board Insurance Trust.

With the assistance of these partners, we completed 24 schools projects, providing net annual savings of 2,536 MWh in 2002. The lifetime economic value is \$1.7 million, as a result of total investments of \$884,000 (\$390,000 in Efficiency Vermont expenditures and customer investments of \$494,000). At year-end, Efficiency Vermont was involved in an additional 80 active projects. Combined with the 52 projects completed in 2000 and 2001, the total number of Efficiency Vermont's completed and active school projects was 156 at the close of 2002.

### Water and Wastewater Facilities

This initiative investigates efficiency opportunities in municipal, industrial, and private water and wastewater treatment facilities across the state. Through this initiative we served the approximately 100 municipal and 100 private wastewater systems, as well as 700 public and private water systems in Vermont in 2002. We targeted municipal systems as an important submarket because they typically are larger and have more savings opportunities than private systems.

In 2002, we continued to develop a network with water and wastewater facility decision-makers, enabling us to increase our involvement whenever systems investments were contemplated. Our strategic partners in this initiative included:

- Green Mountain Water Environment Association:
- Northeast Rural Water Association;
- Vermont Technical College; and,
- Vermont Agency of Natural Resources.

<sup>&</sup>lt;sup>13</sup> These school savings represent new construction, equipment replacement and retrofit efficiency measures and are reported in Commercial Energy Opportunities or Commercial and Industrial Emerging Markets programs, as appropriate.

With these partners, Efficiency Vermont sponsored a facility operator training seminar called "Basics of Motor, Drives and Energy Efficiency". Held at Vermont Technical College, this highly successful seminar was booked to capacity (22 attendees), and has since generated several new projects that utilized variable frequency drives (VFDs). Efficiency Vermont previously had funded the school's purchase of VFDs to enhance their training facility and to encourage efficient motors training.

We also strengthened our partnership with the water and wastewater market through trade show displays and presentations targeting facility operators, engineers, and other decision-makers, to inform them about our services and the benefits of energy efficiency. Efficiency Vermont helped facilities overcome market barriers through data collection -- such as metering of efficiency upgrade projects and pilot testing technologies -- to validate savings estimates before customers committed to installing new equipment.

Efficiency Vermont completed 12 water and wastewater projects in 2002, which more than doubles the completions from previous years. At year-end, Efficiency Vermont was working on another 25 projects. In all, Efficiency Vermont has engaged with 46 completed or active waste/wastewater facility projects since our inception in 2000. This project count is particularly notable in view of the nationally low participation in energy efficiency by wastewater facilities.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> The Consortium for Energy Efficiency reported in <u>Market Transformation News</u>, winter 2003, that nationally, the wastewater industry "…is paying little attention to [energy efficiency]".

### 1.3. RESIDENTIAL ENERGY SERVICES

Efficiency Vermont delivered services in the following four residential efficiency markets during 2002:

- Products and appliances;
- New construction;
- Single-family retrofit; and
- Low-income multifamily housing.

Efficiency Vermont succeeded in helping to broaden and deepen the transformation of Vermont's residential efficiency markets while raising the yield of electricity and other resource savings. Electricity savings from Efficiency Vermont's residential services in 2002 totaled 19,927 MWh. Total expenditures (Efficiency Vermont, participant and third party) of \$9 million for residential energy efficiency measures in 2002 will return an estimated \$13.2 million in lifetime economic value for the efficiency measures installed during the year. Since its inception in 2000, Efficiency Vermont has served 66,567 Vermont households, saving an average of \$81 per participant annually.

Efficiency Vermont's residential services continued to garner national recognition as models for the rest of the nation. The American Council for an Energy Efficient Economy (ACEEE) selected several of Efficiency Vermont's residential programs for their Exemplary Programs Award. The awards recognized services delivered in the residential new construction market, the multifamily low-income market, and the lighting market (as a part of the Northeast Energy Efficiency Partnerships regional initiatives).

Below, we highlight Efficiency Vermont's accomplishments in each residential efficiency market.

### PRODUCTS AND APPLIANCES

Efficiency Vermont's efforts to increase market share for ENERGY STAR® products and appliances met with continued success in 2002. Signs of progress were particularly strong in the residential lighting market. ENERGY STAR lighting products continued to sell extremely well in Vermont retail stores in 2002, despite a 25% reduction in bulb and fixture rebates from the prior year. Vermont retailers demonstrated increasing commitment to stocking, selling, and promoting a wider variety of high-efficiency lighting products. Retailers held a larger portion of sales events promoting efficient lighting on their premises in 2002, as opposed to the special events that Efficiency Vermont conducted in previous years at home shows and county fairs. Aubuchon Hardware stores throughout Vermont began an ongoing torchiere turn-in program in 2002, following the turn-in model we developed and implemented around the state in previous years. Efficiency Vermont supported these 2002 retailer events with co-op advertising, point of purchase materials, and banners.

Market assessments<sup>15</sup> conducted in 2002 indicate that sales of compact fluorescent lighting products in Vermont stores were 50 to 100 times higher than sales by counterpart stores in Maine (which has no turn-in program) in 2000 and 2001.

Efficiency Vermont's efforts met with similar success in the residential appliance market. At the close of 2002, as a result of these efforts, Efficiency Vermont was well positioned to meet two contractual performance indicators established by the Vermont Public Service Board for this market. The first such indicator specified a 6% increase in the number of ENERGY STAR labeled refrigerators and dishwashers on showroom floors. In 2002, the actual increase was 19.5%. According to sales data from national retail chains, Vermont's market share of ENERGY STAR labeled refrigerators ranked seventh in the nation.

The second indicator specified the achievement of a 27% market share of ENERGY STAR clothes washers in 2002 in Vermont. In 2002, actual the market share at national chain stores in Vermont was 34%. Vermont had the third highest market share of ENERGY STAR qualified clothes washers in the country. <sup>16</sup>

Other signs of Efficiency Vermont's success in transforming our efficient appliance market are evidenced by the following occurrences in 2002:

- A major retail chain approached Efficiency Vermont with an offer to match the \$25 rebate we offered during the second half of 2002 for ENERGY STAR labeled refrigerators.
- Vermont ranked first, nationwide, in market share for ENERGY STAR labeled room airconditioners.
- For the third year in a row, Efficiency Vermont, along with the other regional sponsors of efficient lighting and appliance initiatives, received a national ENERGY STAR award for "Excellence in Consumer Education" from the U.S. Environmental Protection Agency and the Department of Energy.

All of Vermont's 280,000+ residential customers are eligible for Efficiency Vermont's efficient product and appliance services. While virtually all electricity users purchase lighting products each year, fewer people purchase new appliances. Our best current estimate of the number of annual appliance purchases made in the state is based on 2001 data from the American Home Appliance Manufacturers (AHAM), which reports Vermont sales as:

- 12,600 clothes washers;
- 13,100 refrigerators;
- 8,500 dishwashers; and
- 6,100 room air conditioners.<sup>17</sup>

As was the case in 2001, the lighting and appliance markets proved to be the largest combined source of residential electricity savings for Efficiency Vermont in 2002. A total of 25,688

<sup>&</sup>lt;sup>15</sup> Xenergy, Inc., <u>Final Report of the Phase 1 Evaluation of Efficiency Vermont's Products Program</u>, submitted to the Vermont Department of Public Service, December 2002.

<sup>&</sup>lt;sup>16</sup> Provided by U.S. Environmental Protection Agency, ENERGY STAR 2002 sales data at national chain stores.

<sup>&</sup>lt;sup>17</sup> This is based on sales data provided by the Association of Home Appliance Manufacturers.

Vermont residential customers purchased one or more efficient lighting products or appliances in 2002, excluding the significant number of individuals who purchased qualifying products or appliances without claiming a rebate. These participants collectively produced net annualized savings of 12,292 MWh, providing an estimated \$6.2 million in lifetime economic value. 19

### **NEW CONSTRUCTION**

2002 was the first full year in which Efficiency Vermont offered completely redesigned services under the Vermont Energy Star Homes label. Introduced in November 2001, this approach was designed to integrate Vermont Gas Systems services, and to combine lighting and appliances into a single offering. It has been so successful that it is now considered a national model for services incorporating efficient lighting and appliances with home energy ratings in Energy Star labeled homes.<sup>20</sup>

To help ensure that high-efficiency housing construction extends beyond the high growth area of Vermont's northwest region, the Vermont Public Service Board established contractual performance indicators for participating new homes built outside of Chittenden County. Efficiency Vermont completed projects for 75 new homes outside of Chittenden County, nine more than the contractual performance indicator of 66.

Efficiency Vermont's efforts to reach more of the multifamily new construction market met with tangible success. To encourage participating builder/developers to achieve ENERGY STAR building performance ratings, we began offering customized incentives for comprehensive energy efficiency upgrades. In 2002, we provided services for eight completed market-rate new construction projects, with a combined total of 163 housing units.

Nationwide, preliminary data shows that Vermont achieved the fourth highest market share for ENERGY STAR labeled new homes. Vermont's market share of ENERGY STAR labeled homes was between five and six times the national average.<sup>21</sup> The table below presents the results for 2002.

ENERGY STAR Qualified Homes Constructed in 2002 with Efficiency Vermont Assistance				
Single-family homes	234			
Market rate multifamily dwellings	163			
Subsidized multifamily dwellings	150			
Total ENERGY STAR qualified homes	547			

**Figure 1.3.1.** 

<sup>19</sup> 2000-2002 MWh savings of 34,207 exceed the three-year MWh savings goal by 22%. 2002 expenditures of \$1.6 million were 10% higher than the \$1.5 million Efficiency Vermont budget approved by the Vermont Public Service Board for 2002

<sup>&</sup>lt;sup>18</sup> Xenergy Inc.

<sup>&</sup>lt;sup>20</sup> Efficiency Vermont received recognition from the U.S. Department of Energy and the U.S. Environmental Protection Agency's ENERGY STAR program for our efforts in the residential new construction market. Vermont Energy Investment Corporation, the non-profit organization under contract to the Vermont Public Service Board to administer Efficiency Vermont, was named ENERGY STAR Partner of the Year in March 2002.

<sup>&</sup>lt;sup>21</sup> Estimates for the number of new homes built in Vermont in 2002 vary. The U.S. Environmental Protection Agency reports 1,958 units through September 2002. A January 22, 2003 Burlington Free Press article cites 2,798 residential permits issued through November 2002.

Efficiency Vermont achieved total electricity savings in the residential new construction market of 1,334 MWh in 2002. Efficiency Vermont's expenditures of \$1.1 million and customer expenditures of \$500,000 in 2002 will produce an estimated \$2.3 million in lifetime economic value.<sup>22</sup>

### **SINGLE-FAMILY RETROFIT**

In 2002, Efficiency Vermont helped residents of single-family homes pursue cost-effective efficiency retrofit investments. We targeted our efforts to the following segments of Vermont's single-family retrofit market:

- Low-income retrofit:
- Customer driven retrofit:
- Vendor driven retrofit; and
- Targeted high use retrofit.

2002 was the first full year of operation for our efforts in the last three of the above segments.<sup>23</sup>

### Low-Income Single-Family Retrofit

In partnership with Vermont's statewide low-income Weatherization Assistance Program (WAP), Efficiency Vermont helped improve the efficiency of 3,136 low-income Vermont homes in 2002 through the installation of a comprehensive set of electrical efficiency measures.<sup>24</sup> Whereas WAP services traditionally focus on the thermal shell of the customer's home and the reduction of fossil fuel energy use, Efficiency Vermont provides financial and technical assistance for electrical efficiency improvements recommended as cost-effective. Qualifying measures include efficient lighting, electric water heating conservation, conversion of electric space and/or water heating equipment to less costly fuels, and early replacement of inefficient refrigerators with high-efficiency ENERGY STAR labeled models.

In 2002, Efficiency Vermont began a partnership with Rutland West Neighborhood Housing Services, Inc. to provide services similar to those offered through WAP. This effort served Vermonters at or below 80% of the median income level in Rutland County who failed to meet WAP income guidelines.

Total annual electricity savings among low-income single-family households was 2,262 MWh from our expenditures of \$1.2 million in 2002. For customers who had both audits performed and efficiency measures installed, the average annual savings generated per household was 1,639 gross kWh. This is 1.6 times the associated contractual performance indicator set for Efficiency

<sup>&</sup>lt;sup>22</sup> 2000-2002 MWh savings of 3,026 exceed the three-year MWh savings goal by 39%. 2002 expenditures of \$1.1 million were 84% of the \$1.3 million Efficiency Vermont budget approved by the Vermont Public Service Board for 2002

<sup>&</sup>lt;sup>23</sup> Results from these three efforts are reported in the tables for the Residential Emerging Markets Initiative.

<sup>&</sup>lt;sup>24</sup> The eligible market is estimated to be 63,300 households, as was reported in the Efficient Vermont Annual Report 2001, page 92.

Vermont by the Vermont Public Service Board. Combined with water and fossil fuel savings, the \$1.3 million in efficiency investments made in participating homes in 2002 produced \$952,508 in lifetime economic value.<sup>25</sup>

### Customer Driven Retrofit

Using software customized for Vermont by Nexus, Inc., Efficiency Vermont enabled Vermonters to assess the potential for cost-effective efficiency opportunities in their homes. We distributed this software on compact discs through our web site, at special events, and by mail. In total, we distributed 1,800 compact discs to Vermont households.

### Vendor Driven Retrofit

Efficiency Vermont completed planning to serve more Vermonters through cooperative agreements with residential insulation and air sealing contractors as well as energy specialists. The contractors will offer cost-effective electrical efficiency products at no cost to their customers and will be reimbursed by Efficiency Vermont. During 2002, we launched a pilot of this concept with the Vermont Consumer Energy Cooperative, which served 72 households with electrical efficiency measures.

### Targeted High Use Retrofit

To yield maximum value from its budget, Efficiency Vermont offered a comprehensive retrofit service to Vermonters with historically high electric usage. During 2002, we served 465 customers, of whom 46% (213) replaced electric space heating or electric water heating equipment. These customers received an on-site assessment of a home's efficiency potential, financial incentives for qualifying measures, and were eligible to arrange for loans for the balance of measure costs through the Vermont Development Credit Union.

In aggregate, Efficiency Vermont customer, vendor, and targeted high use retrofit efforts produced total savings of 1,784 annualized MWh and \$848,754 of lifetime economic value<sup>26</sup>.

<sup>&</sup>lt;sup>25</sup> 2000-2002 MWh savings of 4,345 exceed the three-year MWh savings goal by 16%. Year 2002 expenditures of \$1.2 million were 97% of the \$1.3 million Efficiency Vermont budget approved by the Vermont Public Service Board for 2002.

<sup>&</sup>lt;sup>26</sup> 2000-2002 MWh savings of 2,049 exceed the three-year MWh savings goal by 31%. 2002 expenditures of \$602,434 were 96% of the \$630,714 Efficiency Vermont budget approved by the Vermont Public Service Board for 2002.

### LOW-INCOME MULTIFAMILY HOUSING

Efficiency Vermont strives to lower the operating costs of Vermont's subsidized multifamily housing through comprehensive energy efficiency services. We provide customized financial incentives as well as recommendations on efficient lighting applications, appliances, fuel use, water conservation and building envelope measures. Efficiency Vermont's efforts target efficiency investments in major rehabilitation or renovation, and discretionary retrofit projects in multi-unit rental properties, condominiums and townhouses. We also provide rebates for the purchase of energy efficient appliances.

We help housing developers, owners and managers to identify cost-effective efficiency measures in end uses involving all energy sources. By including all efficiency opportunities, we are able to optimally leverage owner investment and thus maximize electricity savings and lifetime economic value generated by each dollar of Efficiency Vermont expenditure.

In 2002, we completed 69 projects serving 1,657 individual housing units, including properties in every Vermont county. We also successfully increased participation in the non-subsidized affordable housing market. By the end of 2002, Efficiency Vermont provided energy audits for a total of 23 private, non-subsidized housing projects.

We continued our successful role as a leveraging agent in the affordable housing market. Our expenditures in 2002 of \$1.1 million leveraged \$1.1 million in additional investment on the part of property owners and third parties, resulting in more than \$2.2 million in energy improvements to Vermont's affordable housing stock. Building owners contributed 45%, while third parties the state Weatherization Assistance Program and Vermont Gas Systems- provided 5% of the total investment. These investments will yield an estimated \$2.9 million in lifetime economic value and 2,253 MWh in annual electrical savings.<sup>28</sup>

In addition, Efficiency Vermont helped three public housing projects include major efficiency improvements in their capital investment plans submitted to the U.S. Department of Housing and Urban Development. Through these efforts, we exceeded the multifamily performance target that the Vermont Public Service Board established for Efficiency Vermont in 2002, which specified that two such projects would be completed.

By the close of the year, we had 18 efficiency projects under contract in the low-income multifamily market involving 419 dwelling units scheduled for future completion, including two new construction projects with 25 units. Upon completion, these projects will offer total estimated electricity savings of 1,645 MWh annually.

Efficiency Vermont's 2002 Adjusted Annual Report and Energy Savings Claim

<sup>&</sup>lt;sup>27</sup> Based on the 1990 U.S. Census, multifamily housing units in Vermont total approximately 80,000, of which approximately 25,000 are in buildings with five or more units. Census data also indicates that approximately 35% of all Vermont households can be classified as low-income; defined as a household at or below 80% of median income. Published census data does not, however, quantify the number of multifamily units that are occupied by low-income tenants.

<sup>&</sup>lt;sup>28</sup> 2000-2002 MWh savings of 6,234 exceed the three-year MWh savings goal by 4%. 2002 expenditures of \$1.1 million were 73% of the \$1.5 million Efficiency Vermont budget approved by the Vermont Public Service Board for 2002

### 2.0. ENERGY SAVINGS AND EXPENDITURES TABLES

### 2.1. ORGANIZATION OF TABLES

This report presents detailed information about expenditures and savings for Efficiency Vermont activities in 2002. Data is provided in a series of tables that follow this section. Aggregate data for Efficiency Vermont activities is provided in tables 2.2. through 2.3.6.4. Activity totals for the Commercial & Industrial sector are provided in tables 2.4.1. and 2.4.2. Residential sector totals are provided in tables 2.5.1. and 2.5.2.

The remaining tables are organized by the programs that Efficiency Vermont offered in 2002. These programs relate to the markets addressed in the narrative sections of this report, as follows:

Sector	Market	Program Name	Tables
		Commercial Energy	3.0.2. –3.0.5.
	New Construction, Renovation,	Opportunities	
Commercial &	and Equipment Replacement	CEO New Construction	3.1.2 3.1.6.2.
Industrial		CEO Market Opportunities	3.2.2 3.3.6.1.
	Commercial and Industrial	Commercial & Industrial	3.4.2. – 3.4.5.
	Retrofit	Emerging Markets	<i>3.4.2.</i> – <i>3.4.3.</i>
	Products and Appliances	Efficient Products	3.6.2 3.6.6.2.
	New Construction	Residential New Construction	3.5.2 3.5.6.3.
		Low-Income Single-Family	3.8.2 3.8.5.
Residential	Single-Family Retrofit	Residential Emerging 3.9.2. – 3.	
		Markets	3.9.4. – 3.9.3.
	Low-Income Multifamily	Low-Income Multifamily	3.7.2 3.7.6.3.
	Housing		

**Figure 2.1.1.** 

# 2.2. Progress Report<sup>[a]</sup>

	MWh Savings (Net at Generation)			
			Projected	Actual Savings to
		Program to	savings	Date/Total Projected
Program	Year 2002	Date	through 2002	Savings through 2002
CEO New Construction	2,873	12,632	MOP/CINC h	nave a combined target
CEO Market Opportunities	10,608	26,071	34,521	112%
Dairy Farms	nap	2,246	2,246	100%
C&I Emerging Markets	<u>4,955</u>	7,232	<u>5,500</u>	<u>131%</u>
Subtotal C&I	<u>18,436</u>	<u>48,180</u>	<u>42,267</u>	<u>114%</u>
Residential New Construction	1,334	3,026	2,170	139%
Efficient Products	12,292	34,207	28,054	122%
Low Income MultiFamily (REEP)	2,253	6,234	5,979	104%
Low Income Single-Family	2,262	4,345	3,731	116%
Residential Emerging Markets	<u>1,784</u>	<u>2,049</u>	<u>1,565</u>	<u>131%</u>
Subtotal Residential	<u> 19,926</u>	<u>49,870</u>	<u>41,499</u>	<u>120%</u>
TOTAL	<u>38,361</u>	<u>98,051</u>	<u>83,766</u>	117%

	Total R	esource Benef	fits (2001 Dollars	s, Present Worth)
			Projected	Actual Savings to
		Program to	savings	Date/Total Projected
Program	Year 2002	Date	through 2002	Savings through 2002
CEO New Construction	\$1,667,489	\$8,963,325	nav	nav
CEO Market Opportunities	7,837,636	18,143,284	nav	nav
Dairy Farms	nap	1,160,839	nav	nav
C&I Emerging Markets	2,454,798	4,187,242	nav	nav
Subtotal C&I	\$11,959,923	\$32,454,689	nav	nav
Residential New Construction	\$2,316,056	\$5,061,087	nav	nav
Efficient Products	6,182,048	18,216,431	nav	nav
Low Income MultiFamily (REEP)	2,867,867	7,332,331	nav	nav
Low Income Single-Family	952,508	1,977,594	nav	nav
Residential Emerging Markets	<u>848,754</u>	<u>950,442</u>	nav	nav
Subtotal Residential	\$13,167,233	\$33,561,716	nav	nav
TOTAL	<u>\$25,127,156</u>	<u>\$66,016,406</u>	<u>\$36,162,000</u>	183%

		Program	Costs and Bud	dgets
			Budgeted	Program to Date Costs
		Program to	Costs	as % of Budgeted
Program	Year 2002	Date	through 2002	Costs through 2002
CEO New Construction	\$1,040,839	\$2,866,245	MOP/CINC h	ave a combined budget
CEO Market Opportunities	2,220,152	4,629,022		
Subtotal CEO	\$3,260,991	\$7,495,267	\$7,683,541	98%
Dairy Farms	\$0	\$822,620	\$822,620	100%
C&I Emerging Markets	1,107,631	1,694,254	2,289,068	<u>74%</u>
Subtotal C&I	\$4,368,623	\$10,012,141	\$10,795,229	<u>93%</u>
Residential New Construction	\$1,113,459	\$2,558,902	\$2,766,523	92%
Efficient Products	1,645,049	5,271,968	5,121,168	103%
Low Income Multifamily (REEP)	1,134,019	2,706,110	3,118,607	87%
Low Income Single Family	1,235,119	2,128,274	2,169,583	98%
Residential Emerging Markets	602,434	<u>750,266</u>	<u>778,546</u>	<u>96%</u>
Subtotal Residential	\$5,730,079	\$13,415,520	\$13,954,428	<u>96%</u>
TOTAL <sup>[b]</sup>	<u>\$10,098,702</u>	<u>\$23,427,661</u>	<u>\$24,749,657</u>	<u>95%</u>

# 2.3.1. Efficiency Vermont Annual Summary 2002

Prior Year	Actual Year 2002	Projected Year 2002	Estimated Year 2003	Program to Date
30,971	32,306	nav	nap	67,840
3,482	3,555	nav	nap	11,022
2,250	2,004	nav	nap	2,084
3,139	3,678	nav	nap	8,487
	30,971 3,482 2,250	Prior Year         2002           30,971         32,306           3,482         3,555           2,250         2,004	Prior Year         2002         Year 2002           30,971         32,306         nav           3,482         3,555         nav           2,250         2,004         nav	Prior Year         2002         Year 2002         Year 2003           30,971         32,306         nav         nap           3,482         3,555         nav         nap           2,250         2,004         nav         nap

Program Costs					
Administration					
General	\$91,044	\$94,751	\$205,080	\$136,902	\$275,412
Implementation	1,822,514	2,270,975	2,499,883	nap	5,464,157
Program Planning	357,180	315,656	330,812	nap	977,110
Marketing	949,524	1,367,073	1,736,534	nap	2,842,028
IT Development	<u>256,431</u>	300,327	<u>370,076</u>	<u>397,082</u>	695,248
Subtotal Administration	\$3,476,692	\$4,348,782	\$5,142,385	\$533,984	\$10,253,954
Implementation Costs					
Services to Participants	\$1,199,898	\$1,682,223	\$1,965,608	nap	\$3,606,623
Services to Trade Allies	<u>250,072</u>	<u>255,827</u>	<u>219,623</u>	<u>nap</u>	700,909
Subtotal Implementation Costs	\$1,449,971	\$1,938,050	\$2,185,231	nap	\$4,307,533
Incentive Costs					
Incentives to Participants	\$3,581,362	\$4,206,339	\$4,631,003	nap	\$9,836,225
Incentives to Trade Allies	0	609	41,595	nap	609
Subtotal Incentive Costs	<u>\$3,581,362</u>	<u>\$4,206,947</u>	\$4,672,597	<u>nap</u>	<u>\$9,836,834</u>
Total Efficiency Vermont Costs [a]	\$8,508,025	\$10,493,780	\$12,000,213	\$13,039,983	\$24,398,321
Total Participant Costs	\$5,122,443	\$5,831,679	nav	nap	\$14,495,202
Total Third Party Costs	\$383,656	\$513,229	nav	nap	\$955,819
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>nap</u>	<u>\$0</u>
Total Program Costs	<u>\$14,014,125</u>	<u>\$16,838,688</u>	<u>\$12,000,213</u>	<u>nap</u>	\$39,849,342

Total Measure Costs	\$9,087,462	\$10,551,856	\$4,672,597	nap	\$25,287,855
Total Cost of Services	\$1,449,971	\$1,938,050	\$2,185,231	nap	\$4,307,533
Annualized MWh Savings	36,894	38,363	24,078	37,792	98,051
Lifetime MWh Savings	531,042	552,705	nav	nap	1,413,965
Winter Coincident Peak KW Savings	6,399	7,215	nav	nap	18,892
Summer Coincident Peak KW Savings	4,161	4,745	nav	nap	10,926
Annualized MWh Savings/Participant	1.191	1.187	nav	nap	1.445
Weighted Lifetime	14	14	nav	nap	14
Loan Activity	\$0	\$0	\$0	nap	\$0

Budget and MWh Savings projections for 2003 include MultiFamily in Commercial & Industrial Energy Services. Costs and MWh Savings for 2000, 2001 and 2002 include Multifamily in Residential Energy Services.

# 2.3.2. Total Resource Benefits, overall

		Lifetime (Present
	2002	Value)
Avoided Cost of Electricity	nap	\$21,645,819
Fossil Fuel Savings (Costs)	\$202,922	\$1,596,487
Water Savings (Costs)	<u>\$245,864</u>	<b>\$1,888,008</b>
Total	\$448,786	\$25,129,989

	Savings at m	neter	Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	33,127	32,764	38,363
Winter on peak	9,514	9,421	11,294
Winter off peak	3,472	3,411	3,916
Summer on peak	11,970	11,833	13,960
Summer off peak	8,170	8,098	9,195
Coincident Demand Savings (kW)			
Winter	6,370	6,318	7,215
Shoulder	5,780	5,747	6,483
Summer	4,259	4,188	4,745

	Gross	Net	Net Lifetime Savings [a]
Annualized Water Savings (ccf)	30,226	32,983	414,700
Annualized fuel savings (increase) MMBtu	23,795	26,545	309,245
LP	2,955	3,432	62,196
NG	11,736	12,583	200,654
Oil/Kerosene	9,104	10,537	46,428
Wood	0	0	0
Solar	0	0	0
Other	0	0	0
Annualized savings (increase) in O&M(\$)	\$339,869	\$349,014	\$2,922,860

			2.3.3. 0	. Overall - End Use Breakdown	d Use Bi	reakdowr				
End Use Parti	# 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	Incentives	Participant Costs
Air Conditioning Eff.	1,468	865	160	12,926	56	651	0	0	\$128,795	\$101,763
Cooking and Laundry	3,437	1,226	912	17,029	243	178	4,764	22,702	\$144,451	\$669,937
Design Assistance	<b>∞</b>	0	0	0	0	0	0	0	\$25,417	\$6,703
Hot Water Efficiency	1,496	344	296	2,716	29	43	7,468	9,727	\$25,872	\$240,712
Hot Water Fuel Switch	420	2,077	1,871	60,978	363	350	-7,600	182	\$301,413	\$299,599
Industrial Process Eff.	20	3,568	3,137	59,654	1,844	234	-756	321	\$302,970	\$826,612
Lighting	27,459	20,145	17,163	219,223	3,115	2,277	-4,937	0	\$1,813,122	\$1,225,428
Motors	148	4,209	3,642	52,208	520	287	12,128	0	\$329,882	\$459,824
Other Efficiency	9	267	251	9,650	30	29	0	0	\$41,420	\$97,608
Other Fuel Switch	207	361	310	9,622	20	59	-1,104	37	\$30,121	\$47,689
Other Indirect Activity	638	0	0	0	0	0	0	0	\$183,526	-\$81,227
Refrigeration	2,096	2,334	2,079	33,240	223	227	0	0	\$414,975	\$348,208
Space Heat Efficiency	266	94	82	2,221	25	_	19,024	0	\$1,709	\$844,488
Space Heat Fuel Switch	178	2,243	2,079	66,022	617	2	-7,816	0	\$333,951	\$609,692
Ventilation	686	630	544	7,215	52	105	5,374	0	\$123,655	\$135,565
Water Conservation	9	0	0	0	0	0	0	14	\$0	25
Totals		38,363	33,127	552,705	7,215	4,745	26,545	32,983	\$4,201,280	\$5,832,608

			2.3.4. (	.4. Overall - Utility Breakdown	Itility Bre	akdown				
Utility Pa	# 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	Incentives Paid	Participant Costs
Barton	136	133	114	2,490	22	13	-229	29	\$26,656	\$11,636
Burlington	139 ر	1,465	1,381	27,020	109	42	-1,574	0	\$89,408	\$185,051
Citizens	1,651	2,309	1,997	37,092	510	211	-57	1,330	\$353,421	\$398,317
CVPS	\$ 14,659	16,149	13,875	226,297	2,880	2,133	7,176	15,736	\$1,735,717	\$2,897,210
Enosburg Falls	s 237	217	181	3,218	34	21	-147	130	\$33,116	\$15,581
Green Mountain	9,512	11,414	9,823	167,041	1,713	1,535	21,560	11,487	\$1,225,706	\$1,391,233
Hardwick	540	314	258	3,523	49	36	-30	279	\$47,539	\$21,738
Hyde Park	<b>c</b> 162	310	287	5,082	49	84	-111	31	\$44,353	\$46,494
Jacksonville	5 29	165	153	4,725	27	37	9	30	\$16,856	\$61,526
Johnson	40 ر	165	149	4,028	37	∞	-411	17	\$25,711	\$69,813
Properties	v 207	699	299	7,598	100	94	-236	44	\$50,208	\$77,523
Lyndonville	• 426	340	292	4,318	54	41	-330	165	\$49,216	\$20,972
Morrisville	• 460	672	609	7,765	102	92	41	298	\$60,530	\$87,881
Northfield	244	188	163	2,354	30	24	-86	26	\$22,046	\$7,522
Orleans	9 90	102	92	2,102	19	∞	-166	12	\$16,650	\$23,160
Readsboro	4	_	_	<b>o</b>	0	0	_	7	\$76	\$220
Rochester	r 41	39	33	620	9	5	09	4	\$9,860	\$4,326
Stowe	<b>3</b> 264	1,205	1,037	17,619	1,072	82	297	290	\$106,440	\$233,049
Swanton	395	544	485	8,080	9/	09	-295	263	\$39,076	\$39,594
VT Electric Coop	1,664	1,198	066	13,633	204	137	1,072	1,815	\$174,956	\$163,355
VT Marble	• 58	62	53	1,185	13	5	-103	44	\$5,278	\$20,288
Washington Electric	1,321	203	256	906'9	109	74	134	837	\$68,463	\$56,118
Totals	32,306	38,363	33,127	552,705	7,215	4,745	26,545	32,983	\$4,201,280	\$5,832,608

			2.3.5. C	2.3.5. Overall - County Breakdown	ounty Br	eakdown				
County P	# 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	Incentives Paid	Participant Costs
Addison	<b>on</b> 1,947	2,384	2,042	31,054	340	381	162	1,793	\$288,921	\$489,520
Bennington	on 1,911	2,846	2,459	44,407	820	214	-307	1,915	\$300,973	\$510,769
Caledonia	iia 1,748	1,984	1,802	29,476	306	257	623	1,189	\$235,382	\$410,097
Chittenden	en 6,018	8,549	7,530	141,295	1,132	1,112	10,085	9,533	\$907,820	\$1,134,317
Essex	<b>ex</b> 241	151	127	2,161	24	16	09	73	\$37,815	\$20,911
Franklin	in 2,531	2,733	2,334	39,173	427	310	592	2,139	\$369,869	\$333,319
Grand Isle	<b>ile</b> 391	189	153	2,387	31	22	164	370	\$25,335	\$22,363
Lamoille	lle 1,524	2,727	2,390	38,885	1,334	310	183	1,132	\$307,214	\$495,400
Orange	ge 1,457	1,014	845	12,293	151	132	296	1,057	\$112,004	\$97,987
Orleans	<b>ns</b> 1,126	1,845	1,619	28,230	421	178	-1,492	765	\$245,824	\$302,079
Rutland	3,942	2,716	2,248	34,070	453	329	-131	2,758	\$291,937	\$271,668
Washington	on 4,159	4,284	3,637	57,426	199	544	11,490	3,217	\$429,773	\$490,545
Windham	ım 2,323	2,663	2,292	42,625	447	310	4,509	4,733	\$260,498	\$859,681
Windsor	<b>or</b> 2,995	4,277	3,648	49,224	640	630	312	2,308	\$387,915	\$393,952
Totals	32,313	38,363	33,127	552,705	7,215	4,745	26,545	32,983	\$4,201,280	\$5,832,608

2.3.6.2. Cumulative Distributions by Customer Sector [a]

	Total Resource Bene Program to Date	Benefits Date	Annualized MWh Energy Savings Program to Date	Sector Allocation PSB Approved Five-Year Budget	SB Sector Allocation by tar Customer Rate jet Revenue	n by Rate enue
	Total	%	Total	9%	%	%
Commercial & Industrial	\$32,454,689	46%				%29
Residential	\$33,561,716	51%	49,870 51%		20%	43%
Total	\$66,016,406	100%			•	%00

2.3.6.3. Cumulative Distributions by County [a]

County	% of Statewide	Number of Participants Program to Date	cipants ate	Total Resource Benefits Program to Date	Senefits Date	Annualized MWh Energy Savings Program to Date	/h Energy gram to
	Population	Total	%	Total	%	Total	%
Addison	2.9%	4,335	6.4%	\$3,131,977	4.6%	5,482	5.4%
Bennington	6.1%	3,921	2.8%	9,197,948	13.5%	11,357	11.2%
Caledonia	4.9%	3,452	5.1%	2,757,223	4.1%	4,161	4.1%
Chittenden	24.1%	15,007	22.1%	16,528,917	24.3%	24,288	23.9%
Essex	1.1%	471	0.7%	188,207	0.3%	343	0.3%
Franklin	7.5%	5,448	8.0%	3,771,918	2.5%	6,454	6.4%
Grand Isle	1.1%	951	1.4%	401,382	%9.0	631	%9.0
Lamoille	3.8%	3,383	2.0%	4,223,793	6.2%	5,041	2.0%
Orange	4.6%	2,727	4.0%	1,322,858	1.9%	2,333	2.3%
Orleans	4.3%	2,539	3.7%	3,175,077	4.7%	4,768	4.7%
Rutland	10.4%	7,977	11.8%	5,849,399	8.6%	9,710	%9.6
Washington	9.5%	7,917	11.7%	5,712,756	8.4%	9,197	9.1%
Windham	7.3%	4,187	6.2%	6,384,766	9.4%	8,904	8.8%
Windsor	9.4%	5,564	8.2%	5,355,228	7.9%	8,915	8.8%
Total	100.0%	67,879	100.0%	\$68,001,449	100.0%	101,586	100.0%

# 2.3.6.4. Cumulative Distributions by Utility Service Territory [a]

	,	MWh	:		:						EVT Program and	m and
11:1:1	Statewide	Sales	Num	Number of	Annualized MWh	ed MWh	<b>Total Resource Benefits</b>	Benefits	<b>EE Charges Paid through</b>	id through	Administration	ation
Oulling	Customore	Subject to	Program	rariicipaliis	Errergy Savings  Program to Date	to Date	Program to Date	c Date	December 31, 2002 [b]	, 2002 <sup>[b]</sup>	Expenditures	nres
	Customers	EEC	riogiai	riogiaiii to Date	riogian	to Date					Program to Date	ر Date
	%	%	Total	%	Total	%	Total	%	Total	%	Total	%
Barton	0.62%	0.28%	320	0.47%	320	0.32%	\$189,643	0.28%	\$110,199	0.37%	\$111,598	0.44%
Citizens	6.28%	6.05%	3,614	5.33%	5,563	5.48%	\$3,749,319	5.51%	\$2,044,158	6.92%	\$1,539,776	6.07%
CVPS	43.71%	42.79%	29,326	43.23%	45,517	44.81%	\$30,898,435	45.44%	\$13,228,052	44.77%	\$10,956,231	43.16%
<b>Enosburg Falls</b>	0.46%	0.40%	456	0.67%	229	0.67%	\$340,509	0.50%	\$135,061	0.46%	\$200,587	0.79%
GMP	26.16%	38.73%	20,923	30.84%	32,571	32.06%	\$21,920,009	32.23%	\$9,715,894	32.88%	\$8,515,138	33.55%
Hardwick	1.21%	%09.0	1,219	1.80%	857	0.84%	\$411,136	%09.0	\$223,955	0.76%	\$194,536	0.77%
Hyde Park	0.36%	0.21%	372	0.55%	496	0.49%	\$277,391	0.41%	\$79,089	0.27%	\$114,837	0.45%
Jacksonville	0.19%	0.11%	29	0.10%	187	0.18%	\$158,015	0.23%	\$44,481	0.15%	\$45,657	0.18%
Johnson	0.25%	0.31%	203	0.30%	273	0.27%	\$150,250	0.22%	\$124,630	0.42%	\$71,566	0.28%
Ludlow	1.06%	0.87%	316	0.47%	2,388	2.35%	\$1,677,446	2.47%	\$337,896	1.14%	\$525,683	2.07%
Lyndonville	1.54%	1.31%	824	1.21%	762	0.75%	\$350,591	0.52%	\$495,130	1.68%	\$212,523	0.84%
Morrisville	1.06%	0.85%	941	1.39%	1,212	1.19%	\$656,660	0.97%	\$313,086	1.06%	\$289,993	1.14%
Northfield	0.68%	0.51%	463	0.68%	368	0.36%	\$172,433	0.25%	\$188,334	0.64%	\$79,642	0.31%
Orleans	0.21%	0.34%	106	0.16%	512	0.50%	\$344,521	0.51%	\$121,531	0.41%	\$117,404	0.46%
Readsboro	0.12%	0.04%	24	0.04%	35	0.03%	\$23,574	0.03%	\$18,102	0.06%	\$6,639	0.03%
Rochester	0.25%	0.12%	120	0.18%	113	0.11%	\$78,085	0.11%	\$45,765	0.15%	\$30,886	0.12%
Stowe	1.04%	1.12%	548	0.81%	1,702	1.68%	\$2,126,488	3.13%	\$416,180	1.41%	\$356,338	1.40%
Swanton	0.98%	1.17%	897	1.32%	1,209	1.19%	\$645,490	0.95%	\$401,953	1.36%	\$308,193	1.21%
VT Elec Coop	4.82%	2.80%	4,238	6.25%	3,391	3.34%	\$2,245,195	3.30%	\$995,214	3.37%	\$922,525	3.63%
Vt Marble	0.27%	0.20%	142	0.21%	127	0.13%	\$66,856	0.10%	\$66,568	0.23%	\$24,276	0.10%
WEC	2.83%	1.19%	2,471	3.64%	1,551	1.53%	\$779,216	1.15%	\$136,754	0.46%	\$293,261	1.16%
sub-Total	94.10%	100.00%	67,590	99.63%	99,831	98.27%	\$67,261,262	98.91%	\$29,242,032	98.97%	\$24,917,288	98.16%
-												
BED <sup>[c]</sup>	5.90%	0.00%	251	<u>0.37%</u>	1,755	<u>1.73%</u>	\$740,186	1.09%	\$305,676	<u>1.03%</u>	\$466,207	<u>1.84%</u>
I Otal	100.00%	100.00%	07,841	100.00%	101,580	100.00%	\$08,001,448	100.00%	\$7,247,708	100.00%	\$25,383,495	100.00%

# **EEU Expenditures**

EVT program and administration expenditures	\$25,383,495
Contract Administrator, Fiscal Agent, DPS Eval.	\$1,635,860
EVT Performance-based Fee	\$795,000
EEU charges collected but not expended in Year 2002	\$1,733,353
Total EEU Expenditures	\$29,547,708

### 2.4.1. Commercial & Industrial Energy Services Program Summary

	Prior Year	Actual Year 2002	Projected Year 2002	Estimated Year 2003	Program to Date
# participants with installations	470	587	nav	nap	1,273
# participants with audit/analysis	522	324	nav	nap	1,156
# of audits/analyses with pending action	235	168	nav	nap	229
# of audits/analyses with installations	324	238	nav	nap	666

Program Costs					
Administration					
Implementation	\$946,043	\$1,062,159	\$1,177,379	nap	\$2,689,201
Program Planning	174,489	146,008	143,878	nap	476,542
Marketing	<u>356,516</u>	<u>669,776</u>	<u>867,974</u>	<u>nap</u>	1,192,512
Subtotal Administration	\$1,477,048	\$1,877,943	\$2,189,231	nap	\$4,358,255
Implementation Costs					
Services to Participants	\$691,904	\$826,661	\$1,199,858	nap	\$2,010,572
Services to Trade Allies	<u>15,418</u>	9,084	<u>11,790</u>	nap	<u>39,070</u>
Subtotal Implementation Costs	\$707,322	\$835,745	\$1,211,648	nap	\$2,049,642
Incentive Costs					
Incentives to Participants	\$1,302,448	\$1,654,935	\$1,753,056	nap	\$3,604,244
Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>0</u>	nap	<u>0</u>
Subtotal Incentive Costs	\$1,302,448	\$1,654,935	<b>\$1,753,056</b>	<u>nap</u>	\$3,604,244
Total Efficiency Vermont Costs	\$3,486,817	\$4,368,623	\$5,153,935	\$7,271,098	\$10,012,141
Total Participant Costs	\$2,595,021	\$2,966,272	nav	nap	\$7,318,171
Total Third Party Costs	\$117,495	\$124,752	nav	nap	\$242,247
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	nap	<u>\$0</u>
Total Program Costs	<u>\$6,199,333</u>	<u>\$7,459,647</u>	\$5,153,93 <u>5</u>	<u>nap</u>	<u>\$17,572,559</u>

Total Measure Costs	\$4,014,964	\$4,745,960	\$1,753,056	nap	\$11,164,663
Total Cost of Services	\$707,322	\$835,745	\$1,211,648	nap	\$2,049,642
Annualized MWh Savings	17,978	18,436	12,522	22,105	48,180
Lifetime MWh Savings	292,807	288,803	nav	nap	757,971
Winter Coincident Peak KW Savings	3,225	3,915	nav	nap	10,318
Summer Coincident Peak KW Savings	2,306	2,460	nav	nap	5,716
Annualized MWh Savings/Participant	38.251	31.406	nav	nap	37.848
Weighted Lifetime	16	16	nav	nap	16
Loan Activity	\$0	\$0	\$0	nap	\$0

Budget and MWh Savings projections for 2003 include MultiFamily in Commercial & Industrial Energy Services. Costs and MWh Savings for 2000, 2001 and 2002 include Multifamily in Residential Energy Services.

2.4.2. Commercial & Industrial Energy Services - End Use Breakdown

End Use	# of Participants	# of pants	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	Incentives Paid	Participant Costs
Air Conditioning Eff.	Eff.	20	777	989	11,533	99	241	0	0	\$92,581	\$80,493
<b>Cooking and Laundry</b>	dry	2	6	80	12	က	က	6	26	\$228	\$1,599
Design Assistance	nce	80	0	0	0	0	0	0	0	\$22,171	\$6,703
Hot Water Efficiency	ncy	2	16	14	159	_	2	0	0	\$3,104	\$2,040
Hot Water Fuel Switch	tch	35	438	403	11,919	98	174	-1,635	182	\$52,509	\$139,957
Industrial Process Eff.	E#.	20	3,568	3,137	59,654	1,844	234	-756	321	\$302,970	\$826,612
Lighting	ing	360	000'9	5,740	78,187	931	946	-4,931	0	\$474,638	\$671,410
Motors	ors	108	4,202	3,636	52,108	518	587	12,128	0	\$326,293	\$458,636
Other Efficiency	ncy	9	267	251	9,650	30	29	0	0	\$41,420	\$97,608
Other Fuel Switch	tch	7	137	120	2,903	26	26	-392	37	\$18,476	\$46,418
Other Indirect Activity	vity	7	0	0	0	0	0	0	0	\$5,267	-\$5,117
Refrigeration	ion	64	1,646	1,488	27,603	139	147	0	0	\$167,948	\$293,227
Space Heat Efficiency	ncy	9	27	27	545	4	_	201	0	\$1,319	\$21,478
Space Heat Fuel Switch	tch	30	066	933	29,157	256	7	-3,469	0	\$90,338	\$271,360
Ventilation	ion	4	358	317	5,374	22	89	4,603	0	\$55,672	\$53,850
Totals	, ,		18,436	16,760	288,803	3,915	2,460	5,758	999	\$1,654,935	\$2,966,272

### 2.5.1. Residential Energy Services Program Summary

	<u>Prior Year</u>	Actual Year 2002	Projected Year 2002	Estimated Year 2003	Program to Date
# participants with installations	30,501	31,719	nav	nap	66,567
# participants with audit/analysis	2,960	3,231	nav	nap	9,866
# of audits/analyses with pending action	2,015	1,836	nav	nap	1,855
# of audits/analyses with installations	2,815	3,440	nav	nap	7,821

Program Costs					
Administration					
Implementation	\$876,471	\$1,208,816	\$1,322,504	nap	\$2,774,956
Program Planning	182,691	169,649	186,933	nap	500,567
Marketing	<u>593,008</u>	<u>697,297</u>	<u>868,560</u>	<u>nap</u>	<u>1,649,516</u>
Subtotal Administration	\$1,652,170	\$2,075,762	\$2,377,998	nap	\$4,925,040
Implementation Costs					
Services to Participants	\$507,994	\$855,562	\$765,750	nap	\$1,596,051
Services to Trade Allies	<u>234,655</u>	<u>246,743</u>	207,832	<u>nap</u>	<u>661,840</u>
Subtotal Implementation Costs	\$742,649	\$1,102,305	\$973,583	nap	\$2,257,891
Incentive Costs					
Incentives to Participants	\$2,278,914	\$2,551,403	\$2,877,947	nap	\$6,231,981
Incentives to Trade Allies	<u>\$0</u>	<u>\$609</u>	<u>\$41,595</u>	<u>nap</u>	<u>\$609</u>
Subtotal Incentive Costs	\$2,278,914	\$2,552,012	<u>\$2,919,541</u>	<u>nap</u>	<u>\$6,232,589</u>
Total Efficiency Vermont Costs	\$4,673,733	\$5,730,079	\$6,271,122	\$5,234,901	\$13,415,520
Total Participant Costs	\$2,527,422	\$2,865,407	nav	nap	\$7,177,031
Total Third Party Costs	\$266,161	\$388,477	nav	nap	\$713,572
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>nap</u>	<u>\$0</u>
Total Program Costs	<u>\$7,467,317</u>	<u>\$8,983,963</u>	<u>\$6,271,122</u>	<u>nap</u>	<u>\$21,306,123</u>

Total Measure Costs	\$5,072,498	\$5,805,896	\$2,919,541	nap	\$14,123,192
Total Cost of Services	\$742,649	\$1,102,305	\$973,583	nap	\$2,257,891
Annualized MWh Savings	18,916	19,927	11,556	15,686	49,870
Lifetime MWh Savings	238,236	263,902	nav	nap	655,994
Winter Coincident Peak KW Savings	3,175	3,300	nav	nap	8,573
Summer Coincident Peak KW Savings	1,855	2,285	nav	nap	5,210
Annualized MWh Savings/Participant	0.620	0.628	nav	nap	0.749
Weighted Lifetime	13	13	nav	nap	13
Loan Activity	\$0	\$0	\$0	nap	\$0

Budget and MWh Savings projections for 2003 include MultiFamily in Commercial & Industrial Energy Services. Costs and MWh Savings for 2000, 2001 and 2002 include Multifamily in Residential Energy Services.

		2.5.2. Residential Energy Services - End Use Breakdown	idential E	nergy Se	rvices - I	Ind Use	3reakdow	٤		
End Use Pa	# 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	Incentives Paid	Participant Costs
Air Conditioning Eff.	f. 1,418	87	75	1,393	0	410	0	0	\$36,214	\$21,270
<b>Cooking and Laundry</b>	<b>y</b> 3,435	1,217	904	17,018	240	175	4,755	22,676	\$144,223	\$668,338
Design Assistance	0	0	0	0	0	0	0	0	\$3,246	\$0
Hot Water Efficiency	<b>y</b> 1,494	328	282	2,558	28	41	7,468	9,727	\$22,768	\$238,672
Hot Water Fuel Switch	<b>h</b> 385	1,639	1,467	49,059	276	177	-5,965	0	\$248,904	\$159,642
Lighting	<b>g</b> 27,099	14,145	11,423	141,036	2,184	1,331	9	0	\$1,338,484	\$554,018
Motors	<b>s</b> 40	7	9	100	2	0	0	0	\$3,589	\$1,189
Other Fuel Switch	<b>h</b> 200	224	190	6,719	44	32	-712	0	\$11,645	\$1,271
Other Indirect Activity	y 636	0	0	0	0	0	0	0	\$178,259	-\$76,110
Refrigeration	n 2,032	688	591	5,637	84	80	0	0	\$247,027	\$54,981
Space Heat Efficiency	<b>y</b> 991	29	22	1,676	21	0	18,823	0	\$390	\$823,010
Space Heat Fuel Switch	<b>h</b> 148	1,253	1,146	36,865	361	0	-4,346	0	\$243,614	\$338,332
Ventilation	n 975	272	228	1,841	30	37	770	0	\$67,983	\$81,716
Water Conservation	9	0	0	0	0	0	0	41	\$0	2\$
Totals		19,927	16,367	263,902	3,300	2,285	20,787	32,417	\$2,546,345	\$2,866,336

# 3.0.2. Commercial Energy Opportunities Program Summary<sup>[a]</sup>

	Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations	364	518	nav	1,013
# participants with audit/analysis	393	253	nav	873
# of audits/analyses with pending action	214	144	nav	197
# of audits/analyses with installations	245	187	nav	502

Program Costs				
Administration				
Implementation	\$638,801	\$777,458	\$626,678	\$1,966,689
Program Planning	137,247	95,459	94,879	372,278
Marketing	307,988	<u>539,995</u>	625,160	<u>1,014,155</u>
Subtotal Administration	\$1,084,036	\$1,412,912	\$1,346,718	\$3,353,123
Implementation Costs				
Services to Participants	\$498,519	\$663,113	\$847,950	\$1,568,046
Services to Trade Allies	12,691	9,012	11,525	36,271
Subtotal Implementation Costs	\$511,210	\$672,125	\$859,474	\$1,604,317
Incentive Costs				
Incentives to Participants	\$907,306	\$1,175,954	\$1,245,299	\$2,537,827
Incentives to Trade Allies	<u>0</u>	<u>0</u>	0	0
Subtotal Incentive Costs	\$907,306	\$1,175,954	\$1,245,299	\$2,537,827
Total Efficiency Vermont Costs	\$2,502,553	\$3,260,991	\$3,451,491	\$7,495,267
Total Participant Costs	\$2,114,041	\$1,894,235	nav	\$5,545,027
Total Third Party Costs	\$117,495	\$117,952	nav	\$235,447
Evaluation Costs	\$0	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$4,734,089</u>	<u>\$5,273,178</u>	<u>\$3,451,491</u>	<u>\$13,275,741</u>
Total Measure Costs	\$3,138,843	\$3,188,140	\$1,245,299	\$8,318,301
Total Cost of Services	\$511,210	\$672,125	\$859,474	\$1,604,317
Annualized MWh Savings	14,724	13,481	9,300	38,703
Lifetime MWh Savings	239,655	195,551	nav	595,515
Winter Coincident Peak KW Savings	2,500	3,299	nav	8,785
Summer Coincident Peak KW Savings	2,004	1,845	nav	4,680
Annualized MWh Savings/Participant	40.452	26.025	nav	38.206
land a second se				_

16

\$0

15

\$0

nav

\$0

Weighted Lifetime

Loan Activity

15

\$0

	e Breakdown
	Š
:	End
• • • • • • • • • • • • • • • • • • • •	portunities -
	ဌ
	l Energy (
	ommercial
,	3.0.3. C

End Use	Partic	# 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	Incentives Paid	Participant Costs
Air Conditioning Eff.	ng Eff.	48	737	648	10,927	99	229	0	0	\$88,974	\$72,394
<b>Cooking and Laundry</b>	undry	2	0	80	12	3	က	0	26	\$228	\$1,599
Design Assistance	stance	က	0	0	0	0	0	0	0	\$4,565	\$0
Hot Water Efficiency	ciency	2	16	14	159	_	2	0	0	\$3,104	\$2,040
Hot Water Fuel Switch	Switch	19	242	217	6,041	20	32	-950	0	\$32,204	\$44,026
Industrial Process Eff	ss Eff.	10	2,605	2,226	43,962	1,775	86	0	0	\$205,985	\$587,298
Lig	Lighting	342	4,632	4,452	58,562	748	747	-4,380	0	\$367,779	\$478,525
2	Motors	103	3,442	2,915	42,340	463	512	12,128	0	\$249,919	\$335,110
Other Efficiency	ciency	က	53	47	2,103	9	9	0	0	\$8,801	\$8,670
Other Fuel Switch	Switch	က	108	93	2,162	20	21	-303	0	\$15,477	\$42,193
Refrigeration	ration	29	1,173	1,037	20,511	127	131	0	0	\$142,704	\$244,663
Space Heat Efficiency	ciency	2	27	27	545	4	~	197	0	\$1,319	\$21,428
Space Heat Fuel Switch	Switch	7	117	105	3,411	29	0	-422	0	\$4,295	\$7,772
Venti	Ventilation	13	321	281	4,816	17	64	4,603	0	\$50,600	\$48,518
Tot	Totals		13,481	12,070	195,551	3,299	1,845	10,881	26	\$1,175,953	\$1,894,235

\$4,852 \$7,643 \$5,710 \$42,428 \$9,096 \$10,548 \$14,513 -\$185 \$349 \$760 \$2,892 \$109 \$1,894,235 **Participant** \$919,675 3446,349 \$189,823 \$63,917 \$175,051 Incentives \$2,006 \$5,346 \$8,836 \$33,716 \$11,702 \$3,624 \$3,860 \$82,729 \$11,514 \$50,009 \$1,570 \$893 \$3,044 \$1,175,953 \$59,967 \$9,491 \$551,766 332,369 \$3,511 Water CCF Saved 3.0.4. Commercial Energy Opportunities - Utility Breakdown Fuel MMBTU 13,499 -1,851 -109 Other 1,845 Summer Saved 3,299 Winter Saved Lifetime H M M Saved 578 4,114 2,065 623 479 1,166 53,454 1,194 4,070 90,387 195,551 12,070 100 Gross MWH Saved 67 13,481 Net MWH Saved 6,195 4,387 226 222 112 # of 155 9 **Participants** CVPS **Enosburg Falls** Morrisville Orleans Stowe Swanton VT Electric Coop Lyndonville Rochester Washington Electric Barton Citizens **Green Mountain Hyde Park** Johnson Ludlow Northfield Hardwick **Utility** 

	3.0	3.0.5. Commercial		Energy Opportunities - County Breakdown	ortunitie	s - Count	y Breakd	own		
County Partic	# 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	Incentives Paid	Participant Costs
Addison	47	1,058	933	15,573	164	181	-279	26	\$127,421	\$220,417
Bennington	29	1,430	1,247	23,713	615	51	96-	0	\$123,464	\$292,533
Caledonia	30	992	926	16,749	145	146	968-	0	\$101,110	\$163,606
Chittenden	100	2,626	2,385	40,942	302	415	2,621	0	\$167,943	\$220,048
Essex	2	12	1	232	2	_	-50	0	\$3,023	\$1,826
Franklin	62	861	758	11,487	114	114	-170	0	\$107,835	\$136,241
Grand Isle	2	9	2	111	_	_	7	0	\$1,319	\$1,412
Lamoille	32	1,311	1,170	19,875	1,096	139	54	0	\$138,002	\$264,915
Orange	15	272	252	4,766	36	47	-170	0	\$31,371	\$30,306
Orleans	37	726	637	11,056	231	32	-483	0	\$54,805	\$176,500
Rutland	34	218	198	2,690	38	46	-281	0	\$24,365	\$23,018
Washington	52	1,145	1,045	15,316	156	197	11,399	0	\$119,764	\$140,532
Windham	46	617	545	9,701	83	82	-123	0	\$39,402	\$68,516
Windsor	30	2,208	1,912	23,340	316	393	-643	0	\$136,130	\$154,365
Totals	518	13,481	12,070	195,551	3,299	1,845	10,881	26	\$1,175,953	\$1,894,235

## **3.1.2. CEO New Construction Program Summary**

	Prior Year	Actual Year 2002	Projected I Year 2002	Program to Date
# participants with installations	77	56	nav	169
# participants with audit/analysis	130	76	nav	313
# of audits/analyses with pending action	116	78	nav	94
# of audits/analyses with installations	61	48	nav	121

Program Costs				_
Administration				
Implementation	\$291,515	\$260,040	nap	\$772,073
Program Planning	62,632	31,929	nap	168,562
Marketing	<u>140,549</u>	<u>180,615</u>	<u>nap</u>	382,962
Subtotal Administration	\$494,696	\$472,583	nap	\$1,323,597
Implementation Costs				
Services to Participants	\$227,498	\$293,426	nap	\$680,279
Services to Trade Allies	<u>5,791</u>	<u>0</u>	<u>nap</u>	<u>11,309</u>
Subtotal Implementation Costs	\$233,289	\$293,426	nap	\$691,588
Incentive Costs	****	0074 000		0054 000
Incentives to Participants	\$390,088	\$274,829	nap	\$851,060
Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>nap</u>	<u>0</u>
Subtotal Incentive Costs	\$390,088	\$274,829	<u>nap</u>	\$851,060
Total Efficiency Vermont Costs	\$1,118,073	\$1,040,839	nap	\$2,866,245
Total Participant Costs	\$1,138,034	\$365,708	nap	\$2,194,381
Total Third Party Costs	\$8,416	\$37,053	nap	\$45,469
Evaluation Costs	\$0	\$0	nap	, \$0
Total Program Costs	\$2,264,524	\$1,443,601		\$5,106,0 <u>95</u>
Total Measure Costs	\$1,536,539	\$677,591	nap	\$3,090,910
Total Cost of Services	\$233,289	\$293,426	nap	\$691,588
Annualized MWh Savings	5,467	2,873	nav	12,632
Lifetime MWh Savings	94,186	44,486	nav	203,117
Winter Coincident Peak KW Savings	1,021	348	nav	3,124
Summer Coincident Peak KW Savings	693	483	nav	1,291
Annualized MWh Savings/Participant	71.002	51.306	nav	74.744
lance and the second				

17

\$0

15

\$0

nav

\$0

**Weighted Lifetime** 

**Loan Activity** 

16

\$0

			3.1.3. Cl	EO New	3.1.3. CEO New Construction - End Use Breakdown	tion - En	d Use Bre	eakdown			
End Use	# of Participants	# of ants	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	Incentives Paid	Participant Costs
Air Conditioning Eff.	Eff.	24	292	255	4,178	9	103	0	0	\$36,285	\$6,236
<b>Cooking and Laundry</b>	ndry	_	6	80	12	က	က	0	0	\$228	\$265
Design Assistance	ance	က	0	0	0	0	0	0	0	\$4,565	\$0
Hot Water Fuel Switch	/itch	က	30	27	868	1	1	-95	0	\$4,327	\$22,960
Industrial Process Eff.	Eff.	_	37	34	738	0	27	0	0	\$2,130	\$2,100
Lighting	ting	20	1,328	1,298	20,329	201	203	-1,323	0	\$145,287	\$194,900
Mo	Motors	13	694	593	9,045	70	78	0	0	\$30,063	\$54,083
Other Fuel Switch	/itch	_	93	6/	1,860	17	18	-257	0	\$13,812	\$40,843
Refrigeration	tion	9	240	206	4,683	24	29	0	0	\$16,279	\$17,891
Space Heat Efficiency	ency	က	လ	2	09	0	0	15	0	\$0	\$4,136
Space Heat Fuel Switch	/itch	2	32	29	896	∞	0	-113	0	\$299	\$597
Ventilation	tion	9	114	66	1,717	∞	7	3,801	0	\$21,254	\$21,697
Totals	<u>s</u>		2,873	2,633	44,486	348	483	2,029	0	\$274,829	\$365,708

		3.1.4	3.1.4. CEO Nev	New Construction - Utility Breakdown	ction - U	tility Brea	ıkdown			
Utility	# of Participants	Net F 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	Incentives	Participant Costs
Citizens	ens	1	_	15	0	0	<u>-</u>	0	\$0	\$262
ับ	CVPS 16	16 490	481	7,455	71	81	-31	0	\$61,342	\$53,370
Green Mountain	tain 25	5 2,028	1,806	30,841	226	303	2,247	0	\$159,591	\$260,628
Hardwick	vick	1 0	0	0	0	0	0	0	\$254	\$0
Hyde Park	ark	1 226	219	4,114	36	72	-109	0	\$33,716	\$42,428
Johnson	son	1	_	18	0	0	7	0	\$325	\$25
Morrisville	ville	2 12	15	205	2	7	-15	0	\$1,999	\$0
Stc	Stowe	3 39	39	280	4	10	-13	0	\$8,883	\$4,247
VT Electric Coop	doo	3 68	64	1,143	80	41	-48	0	\$7,351	\$4,154
Washington Electric		3	7	116	~	_	7	0	\$1,370	\$595
Totals	<b>s</b> 56	5 2,873	2,633	44,486	348	483	2,029	0	\$274,829	\$365,708

		3.1.5. CEO		New Construction - County Breakdown	tion - Co	ounty Bre	akdown			
# of County Participants	# of pants	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	Incentives Paid	Participant Costs
Addison	5	233	206	3,520	32	34	-114	0	\$26,588	\$68,907
Bennington	7	73	63	1,075	80	80	434	0	\$9,433	\$8,681
Caledonia	က	144	161	2,434	24	24	-176	0	\$23,740	\$3,072
Chittenden	16	1,106	978	17,415	102	168	2,762	0	\$56,457	\$93,182
Franklin	က	37	42	588	5	6	-29	0	\$6,990	\$1,404
Grand Isle	_	_	~	15	0	0	-	0	\$0	\$262
Lamoille	6	307	299	5,468	45	93	-161	0	\$50,112	\$49,858
Orange	က	61	09	546	6	80	-68	0	\$5,881	\$5,112
Orleans	~	0	0	0	0	0	0	0	\$254	\$0
Rutland	~	28	24	425	5	7	-35	0	\$0	\$6,978
Washington	6	786	716	11,348	102	113	-465	0	\$88,239	\$104,403
Windham	~	17	15	243	2	_	-19	0	\$0	\$3,386
Windsor	7	80	89	1,411	4	18	66-	0	\$7,136	\$20,464
Totals	56	2,873	2,633	44,486	348	483	2,029	0	\$274,829	\$365,708

## 3.1.6.1. CEO New Construction Committed Projects Summary

	Committed Measure	Participants with
Committed MWh as of 12/31/02	Incentive as of 12/31/02	Committed Projects
4,063	\$912,642	24

## 3.1.6.2. CEO New Construction Project Counts by Track

	Committed Projects as Completed	d Projects Year	Completed Projects
Track	of 12/31/02	2002	Program to Date
Act 250	10	58	172
New Construction	8	27	77
Comprehensive Act 250	6	2	2
Comprehensive Non-Act 250	0	0	0

## 3.2.2. CEO Market Opportunities Program Summary

	Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations	287	462	nav	844
# participants with audit/analysis	263	177	nav	560
# of audits/analyses with pending action	98	66	nav	103
# of audits/analyses with installations	184	139	nav	381

Program Costs				
Administration				
Implementation	\$347,287	\$517,418	nap	\$1,194,616
Program Planning	74,615	63,530	nap	203,716
Marketing	<u>167,439</u>	<u>359,380</u>	<u>nap</u>	631,194
Subtotal Administration	\$589,340	\$940,329	nap	\$2,029,526
Implementation Costs				
Services to Participants	\$271,022	\$369,687	nap	\$887,768
Services to Trade Allies	<u>6,899</u>	<u>9,012</u>	<u>nap</u>	24,962
Subtotal Implementation Costs	\$277,921	\$378,699	nap	\$912,730
Incentive Costs				
Incentives to Participants	\$517,218	\$901,124	nap	\$1,686,767
Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>nap</u>	<u>0</u>
Subtotal Incentive Costs	<u>\$517,218</u>	\$901,124	<u>nap</u>	\$1,686,767
Total Efficiency Vermont Costs	\$1,384,479	\$2,220,152	nap	\$4,629,022
Total Participant Costs	\$976,007	\$1,528,527	nap	\$3,350,646
Total Third Party Costs	\$109,079	\$80,899	nap	\$189,977
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	<u>nap</u>	<u>\$0</u>
Total Program Costs	<u>\$2,469,565</u>	<u>\$3,829,577</u>	nap	<u>\$8,169,646</u>

Total Measure Costs	\$1,602,304	\$2,510,549	nap	\$5,227,390
Total Cost of Services	\$277,921	\$378,699	nap	\$912,730
Annualized MWh Savings	9,257	10,608	nav	26,071
Lifetime MWh Savings	145,469	151,065	nav	392,399
Winter Coincident Peak KW Savings	1,479	2,951	nav	5,661
Summer Coincident Peak KW Savings	1,311	1,362	nav	3,389
Annualized MWh Savings/Participant	32.256	22.961	nav	30.890
Weighted Lifetime	16	14	nav	15
Loan Activity	\$0	\$0	\$0	\$0

		3.2.3. CE	O Marke	3.2.3. CEO Market Opportunities - End Use Breakdown	nities - E	ind Use B	reakdowr	_		
End Use Partic	# 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	Incentives Paid	Participant Costs
Air Conditioning Eff.	24	445	392	6,749	20	126	0	0	\$52,689	\$66,158
<b>Cooking and Laundry</b>	_	0	0	0	0	0	6	26	\$0	\$1,334
Hot Water Efficiency	7	16	14	159	_	2	0	0	\$3,104	\$2,040
Hot Water Fuel Switch	16	212	191	5,143	40	21	-855	0	\$27,877	\$21,066
Industrial Process Eff.	6	2,568	2,192	43,224	1,775	71	0	0	\$203,855	\$585,198
Lighting	292	3,304	3,154	38,233	547	544	-3,058	0	\$222,491	\$283,625
Motors	06	2,748	2,323	33,296	393	434	12,128	0	\$219,856	\$281,027
Other Efficiency	က	53	47	2,103	9	9	0	0	\$8,801	\$8,670
Other Fuel Switch	7	15	14	302	3	7	-47	0	\$1,665	\$1,350
Refrigeration	53	933	831	15,829	103	102	0	0	\$126,425	\$226,772
Space Heat Efficiency	7	24	22	485	4	_	182	0	\$1,319	\$17,292
Space Heat Fuel Switch	2	84	92	2,444	21	0	-310	0	\$3,696	\$7,175
Ventilation	7	207	182	3,098	6	53	803	0	\$29,346	\$26,821
Totals		10,608	9,437	151,065	2,951	1,362	8,852	26	\$901,124	\$1,528,527

		3.2.4. CI	EO Mark	3.2.4. CEO Market Opportunities - Utility Breakdown	unities -	Utility Bre	akdown			
Utility Par	# 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	Incentives	Participant Costs
Barton	8	18	16	229	က	_	-13	0	\$2,006	\$4,852
Citizens	35	758	655	11,846	232	34	-414	0	\$59,967	\$174,789
CVPS	202	5,706	5,070	82,932	1,225	292	-1,820	26	\$490,424	\$866,306
Enosburg Falls	4	46	40	287	9	က	0	0	\$5,346	\$7,643
Green Mountain	130	2,359	2,145	32,613	324	412	11,251	0	\$172,778	\$185,722
Hardwick	9	39	37	578	9	2	-44	0	\$8,583	\$5,710
Johnson	8	_	_	18	0	0	7	0	\$568	-\$210
Ludlow	2	222	193	2,065	34	36	-39	0	\$9,491	\$9,096
Lyndonville	16	112	100	1,194	18	16	-133	0	\$11,702	\$10,548
Morrisville	33	16	17	200	က	က	-22	0	\$1,625	\$349
Northfield	2	34	38	623	9	7	-45	0	\$3,860	\$760
Orleans	2	31	27	479	က	က	0	0	\$3,044	\$2,892
Rochester	<u>-</u>	12	10	177	2	_	0	0	\$3,511	\$109
Stowe	12	914	791	13,415	1,020	41	238	0	\$73,845	\$185,577
Swanton	9	78	29	1,166	1	∞	0	0	\$11,514	\$14,513
VT Electric Coop	32	262	230	2,928	22	24	-105	0	\$42,658	\$59,763
Washington Electric	ო	_	_	17	0	0	-5	0	\$201	\$108
Totals	462	10,608	9,437	151,065	2,951	1,362	8,852	26	\$901,124	\$1,528,527

		3.2.5. CE	O Marke	3.2.5. CEO Market Opportunities - County Breakdown	ınities - (	Sounty B	eakdown			
County Parti	# 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	Incentives Paid	Participant Costs
Addison	42	825	726	12,053	133	147	-165	26	\$100,833	\$151,510
Bennington	27	1,357	1,184	22,638	809	44	-530	0	\$114,031	\$283,852
Caledonia	27	849	815	14,316	121	122	-720	0	\$77,370	\$160,534
Chittenden	84	1,519	1,407	23,527	200	246	-141	0	\$111,485	\$126,866
Essex	2	12	1	232	2	_	-50	0	\$3,023	\$1,826
Franklin	29	824	716	10,899	108	105	-141	0	\$100,845	\$134,837
Grand Isle	_	5	4	96	0	~	0	0	\$1,319	\$1,150
Lamoille	23	1,003	871	14,408	1,050	46	215	0	\$87,890	\$215,058
Orange	12	211	192	4,220	28	39	-102	0	\$25,490	\$25,194
Orleans	36	726	637	11,056	231	32	-483	0	\$54,551	\$176,500
Rutland	33	189	174	2,265	33	39	-246	0	\$24,365	\$16,040
Washington	43	359	329	3,968	54	83	11,864	0	\$31,525	\$36,130
Windham	45	601	527	9,458	81	81	-104	0	\$39,402	\$65,130
Windsor	28	2,128	1,844	21,930	302	375	-544	0	\$128,994	\$133,902
Totals	462	10,608	9,437	151,065	2,951	1,362	8,852	26	\$901,124	\$1,528,527

## 3.2.6.1. CEO Market Opportunities Committed Projects Summary

Committed MWh as of	Committed Measure	Participants with
12/31/02	Incentive as of 12/31/02	<b>Committed Projects</b>
2,719	\$259,267	28

## 3.2.6.2. CEO Market Opportunities Project Counts by Track

	Committed Projects as	Completed Projects	Completed Projects
Track	of 12/31/02	Year 2002	Program to Date
Custom	25	92	222
Farm	3	93	93
Prescriptive	0	324	717

# 3.2.6.3. CEO Market Opportunities Participating Vendors [a]

Vendor Type	Lighting	Motors	HVAC	Total
Electrical Supplier/Contractor	70			70
Motor Supplier/Contractor		15		15
HVAC Supplier/Contractor			<u>25</u>	<u>25</u>
Total	70	15	25	110

## 3.3.2. Dairy Farms Program Summary

	Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations	81	nap	nap	169
# participants with audit/analysis [a]	87	nap	nap	171
# of audits/analyses with pending action [a]	0	nap	nap	0
# of audits/analyses with installations	60	nap	nap	94

Program Costs				
Administration				
Implementation	\$94,940	nap	nap	\$225,509
Program Planning	11,600	nap	nap	24,649
Marketing	<u>0</u>	<u>nap</u>	<u>nap</u>	<u>0</u>
Subtotal Administration	\$106,540	nap	nap	\$250,158
Implementation Costs				
Services to Participants	\$81,201	nap	nap	\$166,795
Services to Trade Allies	<u>0</u>	<u>nap</u>	<u>nap</u>	<u>0</u>
Subtotal Implementation Costs	\$81,201	nap	nap	\$166,795
Incentive Costs				
Incentives to Participants	\$213,373	nap	nap	\$405,667
Incentives to Trade Allies	<u>0</u>	<u>nap</u>	<u>nap</u>	<u>0</u>
Subtotal Incentive Costs	\$213,373	<u>nap</u>	<u>nap</u>	\$405,667
Total Efficiency Vermont Costs	\$401,114	nap	nap	\$822,620
Total Participant Costs	\$159,312	nap	nap	\$379,438
Total Third Party Costs	\$0	nap	nap	\$0
Evaluation Costs	<u>\$0</u>	nap	nap	<u>\$0</u>
Total Program Costs	<u>\$560,426</u>	<u>nap</u>	nap	<u>\$1,202,058</u>

Total Measure Costs	\$372,685	nap	nap	\$785,105
Total Cost of Services	\$81,201	nap	nap	\$166,795
Annualized MWh Savings	976	nap	nap	2,246
Lifetime MWh Savings	13,481	nap	nap	29,533
Winter Coincident Peak KW Savings	150	nap	nap	343
Summer Coincident Peak KW Savings	100	nap	nap	220
Annualized MWh Savings/Participant	12.053	nap	nap	13.289
Weighted Lifetime	14	nap	nap	13
Loan Activity	\$0	nap	nap	nap

Starting in Year 2002, Dairy Farm projects are reported under the CEO Market Opportunities Program.

# 3.3.6.1. Dairy Farms Project Counts by Track [a]

Track	Committed Projects as of 12/31/02	Completed Projects Year 2002	Completed Projects Program to Date
New Construction	0	0	16
Retrofit	0	0	158

## 3.4.2. C&I Emerging Markets Program Summary

	Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations	25	69	nav	91
# participants with audit/analysis	42	71	nav	112
# of audits/analyses with pending action	21	24	nav	32
# of audits/analyses with installations	19	51	nav	70

Program Costs				
Administration				
Implementation	\$212,302	\$284,701	\$550,701	\$497,003
Program Planning	25,642	50,548	48,999	79,615
Marketing	<u>48,528</u>	<u>129,781</u>	<u>242,813</u>	<u>178,356</u>
Subtotal Administration	\$286,472	\$465,030	\$842,513	\$754,974
Implementation Costs				
Services to Participants	\$112,183	\$163,548	\$351,908	\$275,731
Services to Trade Allies	<u>2,727</u>	<u>72</u>	<u> 266</u>	<u>2,799</u>
Subtotal Implementation Costs	\$114,910	\$163,619	\$352,174	\$278,530
Incentive Costs				
Incentives to Participants	\$181,769	\$478,981	\$507,757	\$660,751
Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Incentive Costs	\$181,769	<u>\$478,981</u>	\$507,757	\$660,751
Total Efficiency Vermont Costs	\$583,151	\$1,107,631	\$1,702,445	\$1,694,254
Total Participant Costs	\$321,668	\$1,072,038	nav	\$1,393,706
Total Third Party Costs	\$0	\$6,800	nav	\$6,800
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$904,819</u>	<u>\$2,186,469</u>	<u>\$1,702,445</u>	<u>\$3,094,760</u>

i				
Total Measure Costs	\$503,437	\$1,557,819	\$507,757	\$2,061,256
Total Cost of Services	\$114,910	\$163,619	\$352,174	\$278,530
Annualized MWh Savings	2,277	4,955	3,223	7,232
Lifetime MWh Savings	39,671	93,252	nav	132,923
Winter Coincident Peak KW Savings	574	616	nav	1,191
Summer Coincident Peak KW Savings	201	615	nav	816
Annualized MWh Savings/Participant	91.090	71.807	nav	79.472
Weighted Lifetime	17	19	nav	18
Loan Activity	\$0	\$0	\$0	\$0

\$8,099 \$6,703 \$192,885 \$4,225 -\$5,117 \$5,332 \$95,931 \$48,564 \$50 **Participant** \$239,314 \$123,526 \$88,938 \$263,588 \$1,072,038 Incentives \$20,305 \$76,375 \$2,999 \$25,244 \$86,043 \$5,073 \$5,267 \$3,607 \$17,605 \$96,985 \$106,860 \$32,620 \$478,981 CCF Water Saved 540 3.4.3. C&I Emerging Markets Initiatives - End Use Breakdown Net Other Fuel MMBTU -684 -756 -5,123-551 Net Summer Saved 16 616 69 183 99 Winter Saved Lifetime H M M Saved 5,878 19,625 9,768 7,547 25,746 93,252 15,692 7,091 Gross H M M Saved ,289 203 4,690 911 451 721 Net MWH 196 260 214 473 4,955 Saved 964 ,368 29 # of က **Participants** Refrigeration **Design Assistance** Other Efficiency Other Fuel Switch Other Indirect Activity Space Heat Efficiency Space Heat Fuel Switch Ventilation Hot Water Fuel Switch Lighting Motors Air Conditioning Eff. Industrial Process Eff. **Totals End Use** 

	3.	3.4.4. C&I Emer	Emerging	J Markets	Initiative	es - Utility	rging Markets Initiatives - Utility Breakdown	۸n		
Utility Parti	# 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	Incentives Paid	Participant Costs
Burlington	9	992	944	14,149	8	8	0	0	\$54,242	\$125,551
Citizens	7	389	366	5,151	63	65	-214	0	\$66,875	\$80,221
CVPS	26	1,574	1,488	36,798	232	291	-2,232	22	\$203,577	\$437,368
Enosburg Falls	_	2	4	139	_	_	-14	0	\$446	096\$
<b>Green Mountain</b>	16	718	929	14,696	122	86	-1,772	485	\$59,718	\$138,275
Jacksonville	2	154	145	4,635	26	36	0	0	\$14,964	\$60,250
Johnson	_	93	88	2,792	24	0	-331	0	\$8,953	\$68,575
Ludlow	7	273	259	2,885	30	39	0	0	\$23,579	\$42,358
Morrisville	4	415	393	5,151	09	59	-42	0	\$33,175	\$71,421
Orleans	_	0	0	0	0	0	0	0	\$1,065	\$1,050
Stowe	_	55	52	1,642	15	2	-174	0	\$4,159	\$23,900
Swanton	_	255	243	4,269	29	28	-234	0	\$5,083	\$3,774
VT Marble	~	31	30	945	80	0	-112	0	\$3,145	\$18,335
Totals	69	4.955	4.690	93.252	616	615	-5.123	540	\$478.981	\$1.072.038

\$3,620 \$5,000 \$30,724 \$189,048 \$51,830 \$163,896 \$68,614 \$100,070 \$54,740 \$1,072,038 **Participant** \$238,177 \$54,142 \$112,177 \$10,145 \$41,108 Incentives \$5,797 \$41,231 \$63,679 \$43,123 \$108,425 \$16,254 \$46,288 \$50,312 \$21,516 \$478,981 Water CCF Saved 540 3.4.5. C&I Emerging Markets Initiatives - County Breakdown Fuel MMBTU -409 -446 -546 -68 -1,489 -5,123-731 -887 Other Saved 62 54 Summer 66 49 54 Winter Saved 10 Lifetime H M M Saved 6,140 9,585 3,853 93,252 6,014 25,330 6,360 11,135 12,220 325 Gross MWH M Saved 340 342 305 534 206 507 393 4,690 1,317 Net MWH ,386 563 345 Saved 53 321 217 540 4,955 361 361 # of 9 9 0 9 69 **Participants** Essex Orleans Rutland Washington Chittenden Addison Bennington Caledonia Franklin Lamoille Windham Windsor **Totals** County

## 3.5.2. Residential New Construction Program Summary

	Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations <sup>[a]</sup>	622	700	640	1,898
# participants with audit/analysis <sup>[b]</sup>	783	858	594	3,222
# of audits/analyses with pending action	52	812	nap	812
# of audits/analyses with installations	729	538	594	2,480

Program Costs				
Administration				
Implementation	\$132,359	\$178,597	\$210,187	\$435,330
Program Planning	46,753	47,807	39,282	118,824
Marketing	<u>261,456</u>	218,730	<u>389,611</u>	579,082
Subtotal Administration	\$440,568	\$445,134	\$639,080	\$1,133,236
Implementation Costs				
Services to Participants	\$124,586	\$208,152	\$160,439	\$392,123
Services to Trade Allies	<u>34,157</u>	<u>70,689</u>	<u>54,486</u>	<u>115,689</u>
Subtotal Implementation Costs	\$158,743	\$278,841	\$214,925	\$507,812
Incentive Costs				
Incentives to Participants	\$321,148	\$389,484	\$467,567	\$917,854
Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Incentive Costs	<u>\$321,148</u>	<u>\$389,484</u>	\$467,567	<u>\$917,854</u>
Total Efficiency Vermont Costs	\$920,459	\$1,113,459	\$1,321,572	\$2,558,902
Total Participant Costs	\$381,793	\$363,632	nav	\$986,749
Total Third Party Costs	\$27,367	\$134,411	nav	\$161,779
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$1,329,619</u>	<u>\$1,611,502</u>	<u>\$1,321,572</u>	<u>\$3,707,430</u>

Total Measure Costs	\$730,308	\$887,527	\$467,567	\$2,066,382
Total Cost of Services	\$158,743	\$278,841	\$214,925	\$507,812
Annualized MWh Savings	974	1,334	470	3,026
Lifetime MWh Savings	17,969	24,339	nav	55,429
Winter Coincident Peak KW Savings	148	199	nav	456
Summer Coincident Peak KW Savings	130	178	nav	386
Annualized MWh Savings/Participant	1.565	1.906	0.736	1.594
Weighted Lifetime	18	18	nav	18
Loan Activity	\$0	\$0	\$0	\$0

3.5.3. Residential New Construction - End Use Breakdown

End Use	Partic	# 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	Incentives Paid	Participant Costs
Air Conditioning Eff.	ng Eff.	114	22	18	540	0	64	0	0	\$127	\$75
<b>Cooking and Laundry</b>	undry	452	29	46	962	12	8	371	1,084	\$1,775	\$38,922
Design Assistance	stance	0	0	0	0	0	0	0	0	\$3,246	\$0
Hot Water Efficiency	siency	537	0	0	0	0	0	3,090	493	\$0	\$177,866
Lig	Lighting	899	1,016	889	19,183	147	85	0	0	\$166,891	\$33,120
Other Fuel Switch	witch	82	22	19	672	4	8	92-	0	\$3,354	69\$
Other Indirect Activity	ctivity	511	0	0	0	0	0	0	0	\$177,143	-\$97,360
Refrigeration	ration	401	24	20	404	3	3	0	0	\$4,639	\$7,787
Space Heat Efficiency	siency	593	55	45	1,377	17	0	9,468	0	\$0	\$186,800
Venti	Ventilation	480	137	112	1,368	15	15	4	0	\$33,944	\$16,352
Tot	Totals		1,334	1,149	24,339	199	178	12,897	1,578	\$391,119	\$363,632

		3.5.4. Res	idential	New Cons	struction	- Utility E	3.5.4. Residential New Construction - Utility Breakdown	ء		
Utility Partici	# 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	Incentives	Participant Costs
Citizens	18	31	27	574	2	က	381	2	\$12,291	\$7,185
CVPS	276	522	451	9,476	92	75	4,505	341	\$129,363	\$161,357
Enosburg Falls	7	4	3	74	_	0	34	0	\$796	\$1,025
Green Mountain	332	648	258	11,886	26	87	6,424	1,093	\$192,455	\$160,342
Hardwick	_	2	2	42	0	0	34	0	\$1,329	\$460
Hyde Park	_	2	2	34	0	0	34	0	\$994	\$380
Morrisville	7	4	4	71	_	0	69	0	\$2,384	\$902
Northfield	_	2	2	49	0	0	18	0	\$609	\$640
Rochester	2	က	က	9	0	7	89	0	\$918	\$1,955
Stowe	7	15	13	283	2	7	209	23	\$8,965	\$3,136
Swanton	2	2	2	35	0	0	27	0	\$1,030	\$749
VT Electric Coop	26	26	83	1,750	15	8	1,094	117	\$39,986	\$25,498
Totals	200	1.334	1,149	24.339	199	178	12,897	1.578	\$391,119	\$363,632

	6	3.5.5. Residentia	_	New Construction - County Breakdown	truction	- County	Breakdow	L,		
County Partic	# 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	Incentives Paid	Participant Costs
Addison	21	35	30	627	5	လ	307	24	\$9,272	\$10,810
Bennington	80	41	12	247	2	_	75	_	\$3,031	\$3,499
Caledonia	4	7	9	131	_	_	69	0	\$3,146	\$1,107
Chittenden	341	656	564	11,953	66	88	6,789	1,132	\$196,461	\$173,086
Essex	<b>~</b>	က	2	53	0	0	0	0	\$304	\$150
Franklin	35	26	48	991	6	2	740	18	\$22,927	\$15,656
Grand Isle	7	41	12	255	2	_	172	_	\$5,170	\$2,754
Lamoille	29	09	51	1,091	10	9	658	108	\$32,178	\$11,256
Orange	2	80	7	150	_	_	87	0	\$1,808	\$2,895
Orleans	9	80	7	147	_	_	87	0	\$3,614	\$1,596
Rutland	61	228	198	4,012	31	22	928	179	\$32,943	\$43,272
Washington	18	27	23	487	4	7	383	16	\$9,816	\$10,085
Windham	9	100	98	1,967	14	36	1,132	24	\$13,666	\$57,815
Windsor	66	119	102	2,227	19		1,441	73	\$56,785	\$29,651
Totals	200	1,334	1,149	24,339	199	178	12,897	1,578	\$391,119	\$363,632

#### 3.5.6.1. Residential New Construction Home Counts

Indicator	Quantity - Year 2002
Number of homes enrolled:	2,321
Number of Vermont Energy Star Homes enrolled:	2,021
Number of completed homes:	700
Number of completed Vermont Star and completed Vermont Energy Star Homes:	397

#### 3.5.6.2. Residential New Construction Builder Counts

Indicator	Quantity - Year 2002
Number of different builders who participated:	72
Number of new builders who participated:	34

## 3.5.6.3. Residential New Construction Lighting Fixtures Installed

Indicator	Quantity - Year 2002
Average number of efficient fixtures installed in Vermont Star and Vermont Energy	
Star Homes:	11.66
Average number of efficient fixtures installed in non-Vermont Star or non-Vermont	
Energy Star Homes:	5.50

## 3.6.2. Efficient Products Program Summary

	<u>Prior Year</u>	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations	27,596	25,688	nav	57,084
# participants with audit/analysis	nap	nap	nap	nap
# of audits/analyses with pending action	nap	nap	nap	nap
# of audits/analyses with installations	nap	nap	nap	nap

Program Costs				
Administration				
Implementation	\$280,839	\$297,519	\$340,135	\$893,877
Program Planning	64,099	61,035	70,046	191,210
Marketing	<u>214,798</u>	<u>263,736</u>	233,716	683,760
Subtotal Administration	\$559,736	\$622,290	\$643,897	\$1,768,847
Implementation Costs				
Services to Participants	\$0	\$0	\$0	\$0
Services to Trade Allies	<u>197,713</u>	<u>175,152</u>	<u>152,303</u>	539,784
Subtotal Implementation Costs	\$197,713	\$175,152	\$152,303	\$539,784
Incentive Costs				
Incentives to Participants	\$1,270,658	\$846,998	\$657,469	\$2,962,728
Incentives to Trade Allies	<u>0</u>	<u>609</u>	<u>41,595</u>	<u>609</u>
Subtotal Incentive Costs	<b>\$1,270,658</b>	\$847,606	<u>\$699,064</u>	\$2,963,337
Total Efficiency Vermont Costs	\$2,028,108	\$1,645,049	\$1,495,263	\$5,271,968
Total Participant Costs	\$1,311,447	\$1,087,851	nav	\$3,174,179
Total Third Party Costs	\$42,628	\$51,089	nav	\$93,717
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$3,382,183</u>	<u>\$2,783,988</u>	<u>\$1,495,263</u>	<u>\$8,539,864</u>

Total Measure Costs	\$2,624,733	\$1,986,546	\$699,064	\$6,231,233
Total Cost of Services	\$197,713	\$175,152	\$152,303	\$539,784
Annualized MWh Savings	14,168	12,292	6,139	34,207
Lifetime MWh Savings	143,015	109,320	nav	335,277
Winter Coincident Peak KW Savings	2,314	1,971	nav	5,660
Summer Coincident Peak KW Savings	1,403	1,592	nav	3,788
Annualized MWh Savings/Participant	0.513	0.479	nav	0.599
Weighted Lifetime	10	9	nav	10
Loan Activity	\$0	\$0	\$0	\$0

		3.6.3. Effi		cient Products - End Use Breakdown	s - End L	Jse Break	rdown			
End Use Part	# 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	Incentives Paid	Participant Costs
Air Conditioning Eff.	1,203	99	99	842	0	344	0	0	\$35,834	\$21,195
<b>Cooking and Laundry</b>	2,767	1,155	854	16,164	227	167	3,881	20,513	\$140,773	\$607,690
Lighting	21,784	11,039	8,681	91,731	1,740	1,074	0	0	\$655,147	\$444,712
Refrigeration	545	33	28	563	4	4	0	0	\$13,847	\$855
Ventilation	87	_	_	20	0	4	0	0	\$2,359	\$13,399
Totals		12,292	9,621	109,320	1,971	1,592	3,881	20,513	\$847,960	\$1,087,851

		3.6	.4. Efficie	3.6.4. Efficient Products - Utility Breakdown	cts - Utili	ty Breako	lown			
Utility P	# 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	Incentives Paid	Participant Costs
Barton	02 uc	21	17	170	3	က	7	37	\$1,474	\$2,001
Burlington	on 51	63	20	999	6	2	0	0	\$4,171	\$3,616
Citizens	<b>ns</b> 1,126	3 442	346	4,133	69	29	154	814	\$32,434	\$44,327
CVPS	<b>S</b> 11,484	5,439	4,254	46,541	877	713	1,772	9,368	\$365,392	\$455,186
Enosburg Falls	IIs 189	83	92	289	13	6	13	29	\$5,504	\$3,715
Green Mountain	in 7,753	3,784	2,961	34,837	209	501	1,245	6,579	\$267,650	\$369,201
Hardwick	<b>ck</b> 450	202	159	1,872	32	24	39	207	\$14,277	\$14,956
Hyde Park	<b>rk</b> 140	09 (	47	530	တ	10	4	22	\$4,177	\$2,966
Jacksonville	lle 17	9	4	62	_	_	9	30	\$515	\$1,276
Johnson	on 57	, 25	20	192	4	4	_	7	\$1,676	\$1,123
Programme	w 180	110	87	849	18	16	80	4	\$6,224	\$5,224
Lyndonville	lle 289	104	82	876	16	7	13	29	\$7,191	\$6,520
Morrisville	lle 375	196	154	1,753	31	27	55	289	\$13,807	\$14,884
Northfield	<b>Id</b> 210	116	91	962	18	14	10	52	\$7,162	\$4,709
Orleans	<b>ns</b> 31	12	<u></u>	103	7	_	0	0	\$756	\$600
Readsboro	ro 3		_	80	0	0	_	7	\$70	\$220
Rochester	<b>er</b> 32	13	10	139	2	_	80	4	\$1,102	\$1,637
Stowe	<b>ve</b> 235	175	137	1,561	30	27	20	266	\$9,361	\$15,279
Swanton	327 ac	149	116	1,319	24	19	42	222	\$10,226	\$9,762
VT Electric Coop	op 1,399	623	487	5,633	100	92	293	1,547	\$45,876	\$73,277
VT Marble	<b>le</b> 51	30	23	236	2	2	80	4	\$1,834	\$1,953
Washington Electric	ic 1,219	9 640	505	6,191	100	29	151	266	\$47,080	\$55,415
Totals	25,688	3 12,292	9,621	109,320	1,971	1,592	3,881	20,513	\$847,960	\$1,087,851

		3.6.5	. Efficie	3.6.5. Efficient Products - County Breakdown	ts - Cour	nty Break	down			
County Partic	# 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	Incentives Paid	Participant Costs
Addison	1,701	782	612	6,646	126	100	263	1,391	\$52,592	\$65,974
Bennington	1,429	634	496	5,353	103	94	237	1,251	\$43,153	\$54,272
Caledonia	1,243	562	442	4,973	88	64	80	422	\$37,761	\$33,431
Chittenden	4,767	2,068	1,613	18,561	337	316	1,037	5,483	\$151,315	\$261,696
Essex	138	22	45	484	6	9	7	37	\$3,509	\$3,563
Franklin	2,012	923	722	8,342	146	115	300	1,584	\$66,359	\$74,964
Grand Isle	335	128	100	1,212	20	17	09	318	\$9,694	\$15,635
Lamoille	1,212	630	493	5,623	102	88	183	696	\$42,140	\$51,889
Orange	1,200	299	470	5,873	92	71	162	828	\$43,976	\$51,636
Orleans	694	265	207	2,340	43	38	86	518	\$18,574	\$28,320
Rutland	3,068	1,609	1,259	13,089	261	216	427	2,257	\$101,819	\$108,043
Washington	3,599	2,051	1,609	19,793	323	229	389	2,057	\$144,580	\$160,332
Windham	1,760	818	640	6,839	133	92	241	1,273	\$51,915	\$78,097
Windsor	2,536	1,168	914	10,191	187	146	396	2,094	\$80,572	\$100,000
Totals	25,694	12,292	9,621	109,320	1,971	1,592	3,881	20,513	\$847,960	\$1,087,851

### 3.6.6.1. Efficient Products Product Counts

Indicator	Quantity
Number of rebates for efficient clothes washers:	2,772
Number of rebates for CFLs:	95,665
Number of rebates for efficient hardwired fixtures:	10,329
Number of rebates for torchieres:	4,890

#### 3.6.6.2. Efficient Products Retailer Counts

Indicator	Quantity
Number of participating lighting dealers:	140
Number of participating appliance dealers:	60

## 3.7.2. Low Income Multifamily (REEP) Program Summary

	<u>Prior Year</u>	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations <sup>[a]</sup>	1,254	1,657	nav	2,579
# participants with audit/analysis	1,126	808	nav	3,514
# of audits/analyses with pending action	1,963	1,024	nav	1,043
# of audits/analyses with installations	1,060	1,402	nav	2,344

Program Costs				
Administration				
Implementation	\$262,368	\$356,187	\$364,688	\$813,615
Program Planning	42,992	19,002	21,267	107,418
Marketing	72,577	<u>88,513</u>	128,399	207,678
Subtotal Administration	\$377,937	\$463,702	\$514,353	\$1,128,711
Implementation Costs				
Services to Participants	\$197,901	\$269,012	\$311,265	\$609,670
Services to Trade Allies	<u>2,784</u>	<u>902</u>	<u>1,044</u>	6,367
Subtotal Implementation Costs	\$200,684	\$269,914	\$312,309	\$616,037
Incentive Costs				
Incentives to Participants	\$257,528	\$400,403	\$720,295	\$961,362
Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Incentive Costs	\$257,528	\$400,403	\$720,295	\$961,362
Total Efficiency Vermont Costs	\$836,149	\$1,134,019	\$1,546,957	\$2,706,110
Total Participant Costs	\$785,195	\$1,003,891	nav	\$2,556,843
Total Third Party Costs	\$114,012	\$117,345	nav	\$288,887
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$1,735,356</u>	\$2,255,256	<u>\$1,546,957</u>	<u>\$5,551,840</u>

Total Measure Costs	\$1,156,735	\$1,521,640	\$720,295	\$3,807,092
Total Cost of Services	\$200,684	\$269,914	\$312,309	\$616,037
Annualized MWh Savings	1,822	2,253	1,998	6,234
Lifetime MWh Savings	39,488	46,484	nav	140,347
Winter Coincident Peak KW Savings	334	360	nav	1,243
Summer Coincident Peak KW Savings	164	201	nav	525
Annualized MWh Savings/Participant	1.453	1.360	nav	2.417
Weighted Lifetime	22	21	nav	23
Loan Activity	\$0	\$0	\$0	\$0

\$60,486 \$1,189 \$1,202 \$21,000 \$31,397 \$76,007 \$42,691 **Participant** \$633,668 \$62,554 \$51,964 \$1,003,891 Incentives \$38,148 \$3,589 \$1,015 \$59,365 \$254 \$1,674 \$288 \$400,309 \$754 \$8,291 \$221,394 \$34,346 \$31,191 CCF Water Saved 1,079 6,978 8,071 3.7.3. Low Income Multi-Family (REEP) - End Use Breakdown Fuel MMBTU 4,304 -635 9,342 -773 12,393 -1,070 Other Saved ₹ 15 201 Summer 360 Winter Saved Lifetime MWH M Saved 483 21,815 100 6,048 2,145 242 6,362 435 8,791 46,484 Gross MWH M Saved 194 1,972 1,070 108 126 228 2,253 MWH M Saved 1,196 202 297 118 # of 100 409 108 ,145 40 124 753 396 407 **Participants** 47 Other Fuel Switch Refrigeration Space Heat Efficiency Water Conservation Cooking and Laundry Hot Water Efficiency Lighting Motors Other Indirect Activity Space Heat Fuel Switch Ventilation Air Conditioning Eff. Hot Water Fuel Switch **Totals End Use** 

		3.7	.4. Low I	ncome A	Aulti-Fam	ily (REEF	e) - Utility	3.7.4. Low Income Multi-Family (REEP) - Utility Breakdown	۸n		
Utility	# of Participants	# of ants	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	Incentives	Participant Costs
Citizens		62	245	209	6,170	53	15	951	178	\$74,118	\$55,943
CVPS		988	945	829	16,213	135	06	7,364	4,938	\$114,828	\$775,442
<b>Green Mountain</b>		565	1,056	928	24,003	172	94	4,077	2,955	\$209,318	\$172,314
Johnson		19	4	4	83	_	0	0	0	\$1,775	\$192
Morrisville		23	5	2	15	0	0	0	0	\$270	\$0
Totals		1,657	2,253	1,972	46,484	360	201	12,392	8,071	\$400,309	\$1,003,891

	က်	3.7.5. Low Income Multi-Family (REEP) - County Breakdown	ncome M	lulti-Famil	Iy (REEP	) - Count	y Breakdo	wn		
County Pa	# 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	Incentives Paid	Participant Costs
Addison	9 <b>u</b>	4	က	63	0	0	4	14	\$1,116	\$828
Bennington	n 189	137	118	2,391	16	7	538	664	\$17,536	\$62,296
Caledonia	i <b>a</b> 152	121	110	2,365	19	12	1,834	486	\$25,090	\$195,406
Chittenden	n 373	808	714	17,671	121	74	3,241	2,745	\$153,769	\$100,462
Essex	12 12	23	19	578	4	2	169	0	\$4,011	\$9,905
Franklin	n 82	207	177	5,087	47	7	844	203	\$69,137	\$46,539
Lamoille	le 89	13	12	176	2	_	28	0	\$5,554	\$1,382
Orange	Je 53	36	31	929	2	4	230	105	\$5,975	\$13,150
Orleans	<b>S</b> 5	18	15	529	3	2	-53	0	\$1,871	-\$100
Rutland	<b>d</b> 305	101	98	1,901	14	6	-39	0	\$5,002	\$16,266
Washington	n 175	296	255	7,048	26	24	1,106	929	\$49,785	\$52,398
Windham	<b>n</b> 180	420	373	5,909	62	42	4,697	3,279	\$46,145	\$488,380
Windsor	or 36	20	29	2,091	12	∞	-207	0	\$15,319	\$16,980
Totals	1,657	2,253	1 972	46.484	360	201	12 392	8.071	\$400,309	\$1,003,891

# 3.7.6.1. Low Income Multifamily Committed Projects Summary

Committed MWh as of 12/31/02	Committed Measure Incentive as of 12/31/02	Participants with Committed Projects
1,645	\$356,558	18

# 3.7.6.2. Low Income Multifamily Project Counts

	Committed Projects as of Completed	l Projects Year	Completed Projects
Track	12/31/02	2002	Program to Date
New Construction	2	7	9
Retrofit/Rehab	16	62	108

# 3.7.6.3. Low Income Multifamily Utility Account Counts

Unique Utility Account Number Year 2002	Unique Utility Account Number Program to Date
571	1,019

# 3.8.2. Low Income Single Family Program Summary

	Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
# participants with installations	941	3,136	1,053	4,385
# participants with audit/analysis <sup>[a]</sup>	953	1,048	nap	2,515
# of audits/analyses with pending action <sup>[b]</sup>	nap	nap	nap	nap
# of audits/analyses with installations	938	1,032	nap	2,450

Program Costs				
Administration				
Implementation	\$139,179	\$230,573	\$266,974	\$424,468
Program Planning	21,163	27,716	34,006	57,853
Marketing	<u>36,094</u>	85,723	76,098	130,318
Subtotal Administration	\$196,435	\$344,012	\$377,078	\$612,639
Implementation Costs				
Services to Participants	\$152,895	\$207,523	\$168,535	\$390,770
Services to Trade Allies	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal Implementation Costs	\$152,895	\$207,523	\$168,535	\$390,770
Incentive Costs				
Incentives to Participants	\$395,344	\$683,584	\$731,003	\$1,124,865
Incentives to Trade Allies	0	0	0	<u>0</u>
Subtotal Incentive Costs	\$395,344	\$683,584	\$731,003	\$1,124,865
Total Efficiency Vermont Costs	\$744,674	\$1,235,119	\$1,276,616	\$2,128,274
Total Participant Costs	\$0	\$9,324	nav	\$9,324
Total Third Party Costs	\$76,094	\$71,641	nav	\$149,139
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$820,768</u>	<u>\$1,316,084</u>	<u>\$1,276,616</u>	<u>\$2,286,737</u>

Total Measure Costs	\$471,438	\$764,549	\$731,003	\$1,283,328
Total Cost of Services	\$152,895	\$207,523	\$168,535	\$390,770
Annualized MWh Savings	1,689	2,262	1,647	4,345
Lifetime MWh Savings	31,152	35,444	nav	69,850
Winter Coincident Peak KW Savings	320	366	nav	751
Summer Coincident Peak KW Savings	145	215	nav	399
Annualized MWh Savings/Participant	1.794	0.721	1.565	0.991
Weighted Lifetime	18	16	nav	16
Loan Activity	\$0	\$0	\$0	\$0

		3.8.3. Low Inco	w Incom€	Single F	amily - E	nd Use B	me Single Family - End Use Breakdown			
End Use Pa	# 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	Incentives Paid	Participant Costs
Hot Water Efficiency	<b>y</b> 475	255	218	1,944	43	32	64	2,169	\$20,199	\$70
Hot Water Fuel Switch	<b>h</b> 106	909	517	18,190	102	65	-2,108	0	\$140,368	\$9,254
Lighting	<b>g</b> 3,084	718	614	7,252	110	58	0	0	\$255,115	\$0
Refrigeration	n 326	496	425	2,480	61	28	0	0	\$192,963	\$0
Space Heat Fuel Switch	<b>h</b> 18	185	158	5,560	51	0	-649	0	\$71,410	\$0
Ventilation	<b>-</b>	_	_	18	0	ဇ	0	0	\$488	\$0
Totals		2,262	1,934	35,444	366	215	-2,692	2,169	\$680,544	\$9,324

			3.8.4. Lo	w Incom	3.8.4. Low Income Single Family - Utility Breakdown	Family -	Utility Br	eakdown			
Utility	# of Participants	# of ants	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	Incentives	Participant Costs
Barton	L L	53	75	64	1,621	13	7	-164	30	\$19,656	\$1,228
Burlington	nc	_	0	0	0	0	0	0	0	\$6	\$0
Citizens		359	298	254	5,254	54	27	-456	324	\$86,027	\$1,648
CVPS		1,499	1,032	883	15,886	161	98	-1,179	994	\$310,308	\$3,114
Enosburg Falls	<u>s</u>	35	29	22	1,426	1	7	-144	29	\$19,142	\$481
Green Mountain		547	296	253	3,757	20	27	-227	326	\$94,235	\$346
Hardwick	×	72	62	53	985	10	9	09-	92	\$21,472	\$612
Hyde Park	돈	17	16	4	273	3	7	-27	2	\$4,531	\$0
Jacksonville	<u>e</u>	10	4	4	28	_	0	0	0	\$1,377	\$0
Johnson	nc	16	41	35	926	6	လ	-80	6	\$12,414	\$109
Ludlow	<b>*</b>	18	2	4	30	~	0	0	0	\$1,112	\$0
Lyndonville	<u>e</u>	92	82	73	1,465	13	6	-121	87	\$24,116	\$0
Morrisville	<u>e</u>	48	19	16	155	3	7	0	6	\$6,893	\$0
Northfield	힏	30	28	24	200	4	ဇ	-41	0	269'6\$	\$499
Orleans	SL	14	2	4	23	_	0	0	0	\$1,284	\$0
Readsboro	2	_	0	0	0	0	0	0	0	\$6	\$0
Rochester	er	9	7	10	239	2	_	-17	0	\$4,329	\$625
Stowe	ve	4	_	_	9	0	0	0	0	\$314	\$0
Swanton	nc	42	16	14	112	2	7	0	41	\$4,635	\$0
VT Electric Coop		170	146	125	2,172	23	15	-162	151	\$38,879	\$663
VT Marble	<u>e</u>	9	0	0	4	0	0	0	0	\$299	\$0
Washington Electric	ڔ	96	54	46	581	∞	2	-15	38	\$19,813	\$0
Totals	, ʻć	3,136	2,262	1,934	35,444	366	215	-2,692	2,169	\$680,544	\$9,324

		3.8.5. Lo	w Incom	e Single F	-amily - (	Sounty B	3.8.5. Low Income Single Family - County Breakdown			
County Partic	# 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	Incentives Paid	Participant Costs
Addison	160	129	110	1,802	20	16	9/-	337	\$33,332	\$819
Bennington	230	137	117	2,003	23	12	-171	0	\$54,050	\$409
Caledonia	251	163	139	2,840	26	17	-222	255	\$48,977	\$612
Chittenden	211	160	137	2,541	22	13	-193	165	\$43,632	\$288
Essex	72	49	42	764	80	2	-67	36	\$14,871	\$467
Franklin	287	253	217	4,231	41	25	-361	267	\$68,984	\$1,286
Grand Isle	43	28	24	459	2	က	-32	20	\$7,081	\$0
Lamoille	140	127	109	2,026	21	11	-138	51	\$39,768	\$109
Orange	182	86	8	821	14	10	-14	94	\$28,646	\$0
Orleans	328	320	274	2,960	22	29	-559	231	\$90,322	\$2,408
Rutland	435	270	231	4,182	40	27	-275	322	\$95,206	\$1,457
Washington	297	170	145	2,102	25	17	-115	9/	\$55,909	\$845
Windham	232	182	156	3,132	36	13	-258	154	\$51,417	\$0
Windsor	269	177	151	2,582	27	16	-212	129	\$48,351	\$625
Totals	3,137	2,262	1,934	35,444	366	215	-2,692	2,169	\$680,544	\$9,324

# 3.9.2. Residential Emerging Markets Program Summary

	Ac	tual Year	<b>Projected</b>	Program to
	<u>Prior Year</u>	<u>2002</u>	<u>Year 2002</u>	<u>Date</u>
# participants with installations	88	537	540	617
# participants with audit/analysis	98	517	nap	615
# of audits/analyses with pending action	nap	nap	nap	nap
# of audits/analyses with installations	88	468	nap	547

Program Costs				
Administration				
Implementation	\$61,726	\$145,940	\$140,520	\$207,665
Program Planning	7,685	14,089	22,333	25,263
Marketing	<u>8,083</u>	40,596	40,737	<u>48,679</u>
Subtotal Administration	\$77,493	\$200,624	\$203,590	\$281,607
Implementation Costs				
Services to Participants	\$32,613	\$170,875	\$125,511	\$203,488
Services to Trade Allies	<u>0</u>	0	<u>0</u>	<u>0</u>
Subtotal Implementation Costs	\$32,613	\$170,875	\$125,511	\$203,488
Incentive Costs				
Incentives to Participants	\$34,237	\$230,934	\$301,613	\$265,171
Incentives to Trade Allies	<u>0</u>	0	0	<u>0</u>
Subtotal Incentive Costs	\$34,237	\$230,934	<u>\$301,613</u>	<u>\$265,171</u>
Total Efficiency Vermont Costs	\$144,343	\$602,434	\$630,714	\$750,266
Total Participant Costs	\$48,987	\$400,709	nav	\$449,936
Total Third Party Costs	\$6,060	\$13,990	nav	\$20,050
Evaluation Costs	<u>\$0</u>	<u>\$0</u>	nav	<u>\$0</u>
Total Program Costs	<u>\$199,391</u>	<u>\$1,017,133</u>	<u>\$630,714</u>	<u>\$1,220,253</u>

Total Measure Costs	\$89,285	\$645,633	\$301,613	\$735,158
Total Cost of Services	\$32,613	\$170,875	\$125,511	\$203,488
Annualized MWh Savings	265	1,784	1,300	2,049
Lifetime MWh Savings	6611	48,286	nav	54,897
Winter Coincident Peak KW Savings	59	403	nav	462
Summer Coincident Peak KW Savings	12	98	nav	110
Annualized MWh Savings/Participant	3.010	3.322	2.408	3.321
Weighted Lifetime	25	27	nav	27
Loan Activity	\$0	\$0	\$0	\$0

3.9.3. Residential Emerging Markets Initiatives - End Use Breakdown

End Use	# of Participants	# of pants	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	Incentives Paid	Participant Costs
Hot Water Efficiency	iency	72	20	19	131	3	2	7	87	\$1,815	0\$
Hot Water Fuel Switch	witch	171	736	269	22,078	126	80	-2,788	0	\$70,388	\$118,992
Lig	Lighting	417	176	167	1,034	27	14	0	0	\$39,926	\$0
Refrigeration	ation	7	o	6	45	_	_	0	0	\$1,233	\$3,648
Space Heat Efficiency	iency	_	4	4	26	~	0	0	0	\$101	\$2,291
Space Heat Fuel Switch	witch	83	840	794	24,943	245	0	-2,925	0	\$112,838	\$275,778
Totals	als		1,784	1,689	48,286	403	86	-5,706	87	\$226,301	\$400,709

\$55,884 \$3,556 \$33,943 \$1,756 \$3,905 \$720 \$323 \$914 \$910 \$400,709 **Participant** \$144,138 \$104,405 \$20,845 \$18,613 \$10,797 Incentives \$3,519 \$30,989 \$21,709 \$1,625 \$6,207 \$934 \$9,803 \$718 \$10,502 \$6,590 \$69,961 \$911 \$60,371 \$1,881 \$226,301 \$377 Water CCF Saved 7 87 3.9.4. Residential Emerging Markets Initiatives - Utility Breakdown Net Other Fuel MMBTU -458 -1,219 -36 -1,686 -205 -166 -5,706 -31 Net Summer Saved 86 Saved 403 Winter 9 1,770 Lifetime MWH M Saved 3,948 305 14,408 783 216 220 ,497 10,967 46 131 48,286 MWH Saved 1,689 Gross 497 417 137 Net MWH 145 440 525 1,784 Saved 12 9 # of 167 144 10 537 **Participants** Stowe Citizens CVPS Lyndonville Morrisville Orleans VT Electric Coop Burlington **Enosburg Falls** Northfield Swanton Barton **Green Mountain** Hardwick **Hyde Park** Ludlow **Totals** Utility

	3.9.5.	Residenti	al Emerg	3.9.5. Residential Emerging Markets Initiatives - County Breakdown	ets Initia	tives - Co	unty Brea	ıkdown		
County Partic	# 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	Incentives Paid	Participant Costs
Addison	80	14	14	329	4	0	-35	0	\$1,510	\$1,624
Bennington	21	134	127	3,556	34	ო	-434	0	\$16,616	\$45,932
Caledonia	99	98	82	1,623	16	7	-170	25	\$13,501	\$12,315
Chittenden	209	846	801	24,296	188	51	-3,002	80	\$86,276	\$140,562
Essex	15	80	80	49	_	_	0	0	\$1,952	\$0
Franklin	49	112	106	2,896	25	_	-315	12	\$18,373	\$27,909
Grand Isle	4	13	12	351	က	<b>~</b>	-35	0	\$2,071	\$2,562
Lamoille	16	23	22	202	4	7	-57	4	\$3,283	\$1,953
Orange	2	_	_	9	0	0	0	0	\$229	\$0
Orleans	20	163	154	4,344	36	1	-514	16	\$26,326	\$39,213
Rutland	30	74	20	1,837	15	2	-190	0	\$11,087	\$10,998
Washington	12	22	54	1,545	6	က	-184	9	\$8,688	\$14,176
Windham	33	109	103	2,829	30	က	-308	4	\$16,735	\$65,874
Windsor	22	144	136	4,117	39	4	-463	12	\$19,653	\$37,590
Totals	537	1,784	1,689	48,286	403	86	-5,706	87	\$226,301	\$400,709

# **Appendices**

## 4.2. CUSTOMER CREDIT PROGRAM

#### **4.2.1. NARRATIVE**

The Customer Credit program (CCP) provides an alternative program path for large businesses that meet program eligibility criteria. The program enables customers with the capability and resources to identify, analyze, and undertake efficiency projects to self-implement energy efficiency measures with financial assistance from Efficiency Vermont (EVT). CCP customers can apply for financial incentives for any retrofit or market-driven project that saves electrical energy and passes the Vermont societal cost-effectiveness test. Once a customer elects to participate in CCP, it is no longer eligible to participate in other EVT programs.

All projects must be customer initiated. In addition, the customer or its contractors must complete all technical analysis. Customers can receive cash incentives capped at 70% of their projected two-year contribution to the statewide energy efficiency fund at any time. Customers can draw on contributions from the current year and either the previous or ensuing year. 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 18 months.

## Eligible Market

To be eligible for CCP, customers must:

- never have accepted cash incentives from any Vermont utility Demand Side Management (DSM) program;
- show a corporate commitment to energy efficiency by participation in the United States Environmental Protection Agency's Climate Wise program, or currently active similar program as determined by the PSB; and
- have ISO 14001 certification.

# 4.2.2. Customer Credit Program Summary

Program Planning Marketing         11,406         8,500         7,405         29,2 Marketing           sub-Total Administration         \$38,620         \$61,709         \$78,140         \$133,2           Implementation Costs         \$0         \$0         \$78,140         \$133,2           Implementation Costs         \$0         \$0         \$0         \$0           Services to Participants         \$0         \$0         \$0         \$0           Sub-Total Implementation Costs         \$0         \$0         \$0         \$0           Incentive Costs         \$0		Prior Year	Actual Year 2002	Projected Year 2002	Program to Date
Administration	Program Costs				
Program Planning         11,406         8,500         7,405         29,2           Marketing         0         0         0         0           sub-Total Administration         \$38,620         \$61,709         \$78,140         \$133,2           Implementation Costs         \$0         \$61,709         \$78,140         \$133,2           Implementation Costs         \$0         \$0         \$0         \$0           Services to Participants         \$0         \$0         \$0         \$0           Sub-Total Implementation Costs         \$0         \$0         \$0         \$0           Incentive Costs         \$10         \$0 <th></th> <th></th> <th></th> <th></th> <th></th>					
Marketing sub-Total Administration         0         0         0         0           sub-Total Administration         \$38,620         \$61,709         \$78,140         \$133,2           Implementation Costs         \$0         \$61,709         \$78,140         \$133,2           Implementation Costs         \$0         \$0         \$0         \$0           Services to Participants         \$0         \$0         \$0         \$0           sub-Total Implementation Costs         \$0         \$0         \$0         \$0           Incentive Costs         \$0         \$0         \$0         \$0         \$0           Incentives to Participants         \$256,009         \$426,893         \$556,503         \$851,8           Incentives to Trade Allies         \$0         \$0         \$0         \$0           sub-Total Incentive Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Efficiency Vermont Costs         \$0         \$0         nav           Total Participant Costs         \$0         \$0         nav           Total Third Party Costs         \$0         \$0         nav           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1	Implementation	\$27,214	\$53,209	\$70,735	\$104,075
sub-Total Administration         \$38,620         \$61,709         \$78,140         \$133,2           Implementation Costs         Services to Participants         \$0         \$0         \$0         \$0           Services to Trade Allies         \$0         \$0         \$0         \$0         \$0           sub-Total Implementation Costs         \$0         \$0         \$0         \$0         \$0           Incentive Costs         Incentives to Participants         \$256,009         \$426,893         \$556,503         \$851,8           Incentives to Trade Allies         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$0         \$1,8	Program Planning	11,406	8,500	7,405	29,217
Implementation Costs   Services to Participants   \$0	Marketing	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Services to Participants   \$0	sub-Total Administration	\$38,620	\$61,709	\$78,140	\$133,292
Services to Trade Allies         0         0         0           sub-Total Implementation Costs         \$0         \$0         \$0           Incentive Costs         Incentives to Participants         \$256,009         \$426,893         \$556,503         \$851,8           Incentives to Trade Allies         0         0         0         0         0         0         0         0         0         0         0         \$851,8					
sub-Total Implementation Costs         \$0         \$0         \$0           Incentive Costs         Incentives to Participants         \$256,009         \$426,893         \$556,503         \$851,8           Incentives to Trade Allies         \$0         \$0         \$0         \$0         \$0         \$851,8         \$1,8	•	\$0	\$0	\$0	\$0
Incentive Costs	Services to Trade Allies			<u>0</u>	<u>0</u>
Incentives to Participants   \$256,009	sub-Total Implementation Costs	\$0	\$0	\$0	\$0
Incentives to Trade Allies	Incentive Costs				
sub-Total Incentive Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Efficiency Vermont Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total Participant Costs         \$0         \$0         nav           Total Third Party Costs         \$0         \$0         nav           Evaluation Costs         \$0         \$0         nav           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	Incentives to Participants	\$256,009	\$426,893	\$556,503	\$851,883
Total Efficiency Vermont Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total Participant Costs         \$0         \$0         nav           Total Third Party Costs         \$0         \$0         nav           Evaluation Costs         \$0         \$0         nav           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total # Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	Incentives to Trade Allies	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Participant Costs         \$0         \$0         nav           Total Third Party Costs         \$0         \$0         nav           Evaluation Costs         \$0         \$0         nav           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total # Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	sub-Total Incentive Costs	<u>\$256,009</u>	<u>\$426,893</u>	<u>\$556,503</u>	<u>\$851,883</u>
Total Third Party Costs         \$0         \$0         nav           Evaluation Costs         \$0         \$0         nav           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total # Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	otal Efficiency Vermont Costs	\$294,629	\$488,602	\$634,643	\$985,174
Evaluation Costs         \$0         \$0         nav           Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total # Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	otal Participant Costs	\$0	\$0	nav	\$0
Total Program Costs         \$294,629         \$488,602         \$634,643         \$985,1           Total # Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	Total Third Party Costs	\$0	\$0	nav	\$0
Total # Participants         1         1         nav           Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	Evaluation Costs	<u>\$0</u>	<u>\$0</u>		<u>\$0</u>
Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	otal Program Costs	<u>\$294,629</u>	<u>\$488,602</u>	<u>\$634,643</u>	<u>\$985,174</u>
Total Measure Costs         \$256,009         \$426,893         \$556,503         \$851,8           Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5					
Total Cost of Services         \$0         \$0         \$0           Annualized MWh Savings         595         2,194         2,016         3,5	-		•	_	1
<b>Annualized MWh Savings</b> 595 2,194 2,016 3,5					\$851,883
	otal Cost of Services	\$0	\$0	\$0	\$0
1	Annualized MWh Savings	595	2,194	2,016	3,536
	ifetime MWh Savings	8,923	28,603	nav	48,721
				nav	511
l				nav	509
Annualized MWh Savings/Participant 595 2,194 nav 3,5	Annualized MWh Savings/Participant	595	2,194	nav	3,536

15

13

Weighted Lifetime

14

nav

			4.2.3	3. Custor	4.2.3. Customer Credit - End Use Breakdown	t - End U	se Break	down			
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	Incentives Paid	Participant Costs
	Motors	~	2,194	1,884	28,603	252	251	0	0	0 \$426,893	\$0
	Totals		2,194	1,884	28,603	252	251	0	0	\$426,893	\$0

# 4.2.4. Customer Credit Total Resource Benefits

		Lifetime
	2002	(Present Value)
Avoided Cost of Electricity	nap	\$1,024,714
Fossil Fuel Savings (Costs)	\$0	\$0
Water Savings (Costs)	<u>\$0</u>	<u>\$0</u>
Total	\$0	\$1,024,714

	Savings at mo	eter eter	Savings at Generation
	Gross	Net	Net
Annualized Energy Savings (MWh): Total	1,884	1,884	2,194
Winter on peak	415	415	497
Winter off peak	208	208	239
Summer on peak	601	601	709
Summer off peak	660	660	750
Coincident Demand Savings (kW)			
Winter	221	221	252
Shoulder	221	221	249
Summer	221	221	251

	Gross	Net	Net Lifetime Savings
Annualized Water Savings (ccf)	0	0	0
Annualized fuel savings (increase) MMBtu	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

# 4.2.5. Efficiency Vermont Annual Summary 2002 plus Customer Credit

	Prior Year	Actual Year 2002	Projected Year 2002	Estimated Year 2003	Program to Date
# participants with installations	30,972	32,307	nav	nap	67,841
# participants with audit/analysis	3,482	3,555	nav	nap	11,022
# of audits/analyses with pending action	2,250	2,004	nav	nap	2,084
# of audits/analyses with installations	3,139	3,678	nav	nap	8,487
Program Costs					
Administration	<b>CO1 O11</b>	<b>CO4 754</b>	<b>#205.000</b>	£426.002	<b>CO75</b> 440
General	\$91,044	\$94,751	\$205,080	\$136,902	\$275,412
Implementation	1,849,728	2,324,184	2,570,618	nap	5,568,232
Program Planning	368,585	324,156	338,217	nap	1,006,327
Marketing	949,524	1,367,073	1,736,534	nap	2,842,028
IT Development	<u>256,431</u>	<u>300,327</u>	<u>370,076</u>	<u>397,082</u>	<u>695,248</u>
Subtotal Administration	\$3,515,312	\$4,410,491	\$5,220,526	\$533,984	\$10,387,246
Implementation Costs					
Services to Participants	\$1,199,898	\$1,682,223	\$1,965,608	nap	\$3,606,623
Services to Trade Allies	250,072	<u>255,827</u>	<u>219,623</u>	<u>nap</u>	700,909
Subtotal Implementation Costs	\$1,449,971	\$1,938,050	\$2,185,231	nap	\$4,307,533
Incentive Costs					
Incentives to Participants	\$3,837,371	\$4,633,232	\$5,187,506	nap	\$10,688,108

0

<u>\$0</u>

\$8,802,654 \$10,982,382

\$3,837,371

\$5,122,443

\$14.308.754

\$383,656

609

\$4,633,841

\$5,831,679

\$17.327.291

\$513,229

<u>\$0</u>

41,595

nav

nav

nav

\$5,229,100

\$12,634,857

\$12,634,857

nap

nap

<u>nap</u>

\$13,310,461 \$25,383,495

nap \$10,688,717

nap \$14,495,202

nap \$40,834,516

\$955,819

609

<u>\$0</u>

Total Measure Costs	\$9,343,470	\$10,978,749	\$5,229,100	nap	\$26,139,738
Total Cost of Services	\$1,449,971	\$1,938,050	\$2,185,231	nap	\$4,307,533
Annualized MWh Savings	37,489	40,557	26,094	nap	101,586
Lifetime MWh Savings	539,965	581,308	nav	nap	1,462,686
Winter Coincident Peak KW Savings	6,489	7,467	nav	nap	19,403
Summer Coincident Peak KW Savings	4,278	4,996	nav	nap	11,435
Annualized MWh Savings/Participant	1.210	1.255	nav	nap	1.497
Weighted Lifetime	14	14	nav	nap	14
Loan Activity	\$0	\$0	\$0	nap	\$0

Budget and MWh Savings projections for 2003 include MultiFamily in Commercial & Industrial Energy Services. Costs and MWh Savings for 2000, 2001 and 2002 include Multifamily in Residential Energy Services.

**Incentives to Trade Allies** 

Total Efficiency Vermont Costs [a]

**Subtotal Incentive Costs** 

Total Participant Costs

**Total Third Party Costs** 

**Evaluation Costs** 

**Total Program Costs** 

## 4.3. DEFINITIONS AND END NOTES

#### 4.3.1. ANNUAL REPORT TABLES OVERVIEW

Definitions for items in the Annual Report tables are provided in section 4.3.2. below. End notes for specific items in the tables are provided by table in section 4.3.3. below.

Data items in which the data is not available is indicated by "nav". Data items in which the data is not applicable is indicted by "nap".

Efficiency Vermont (EVT) expenditure, budget and savings values provided in Section 3 do not include the Customer Credit program, which is discussed separately in Section 4.2.

Except where noted, EVT expenditure data in this report were incurred during the period January 1, 2002 through December 31, 2002. Measures savings data is primarily for measures installed during the same period.

The count of cumulative participants is not the sum of participants in 2000, 2001 and 2002. This is because the count of participants is the count of unique premises. If the same customer participates in all three years or in more than one program, this customer is only counted once.

In the Annual Report 2002 tables, total Efficiency Vermont costs include a non-performance-based fee of 1.45% as specified by the EVT contract.

Where "Incentives to Participants" appears in program summary Tables 2.3.1., 3.0.1., 3.1.2., 3.2.2., 3.3.2., 3.4.2., 3.5.2., 3.6.2., 3.7.2., 3.8.2., 3.9.2., and 4.2.2., it is based on financial data from Vermont Energy Investment Corporation's accounting system, MAS90. "Incentives Paid", as it appears in all other tables, is based on data entered into EVT's FastTrack tracking system and adjusted for the non-performance-based fee cited above. Where there are differences, they are due to year-end timing differences.

## 4.3.2. DEFINITIONS

The tables that appear in EVT Annual Report 2002 were developed as a collaborative effort between EVT, the Vermont Department of Public Service, the Energy Efficiency Utility Contract Administrator and Burlington Electric Department. Two major table formats, program summary and breakdown tables are used throughout the report. The definitions of the data reported in these tables are provided on the pages that follow. Data items identified with a number and parenthesis are identified in the narrative that follows.

		Prior Year	<b>Actual 2002</b> (1)	<b>Projected 2002</b> (2)	<b>Estimated 2003</b> (3)	Program to Date (4
# participants with installations	(5)		(1)	(2)	(0)	(-
# participants with audit/analysis	(6)					
# of audits/analyses with pending action	(7)					
# of audits/analyses with installations	(8)					
Program Costs						
Administration						
General	(11)					
Implementation	(12)					
Program Planning	(13)					
Marketing	(14)					
IT Development	(15)					
sub-Total Administration	(10)					
Implementation Costs						
Services to Participants	(17)					
Services to Trade Allies	(18)					
sub-Total Implementation Costs	(16)					
Incentive Costs						
Incentives to Participants	(20)					
Incentives to Trade Allies	(21)					
sub-Total Incentive Costs	(19)					
Total Efficiency Vermont Costs	(9)					
Total Participant Costs	(22)					
Total Third Party Costs	(23)					
Evaluation Costs	(24)					
Total Program Costs	(25)					
Total Measure Costs	(26)					
Total Cost of Services	(27)					
Annualized MWh Savings	(28)					
Lifetime MWn Savings	(29)					
Winter Coincident Peak KW Savings	(30)					
Summer Coincident Peak KW Savings	(31)					
Annualized MWh Savings/Participant	(32)					
Weighted Lifetime	(33)					
Loan Activity	(44)					

Figure 4.3.2.1. – Template for Program Summary Report

# X.X.X. Breakdown Template

			Niet		Net Other	Nat		
			Net		Net Other	Net		
	Net	Gross	Lifetime	Net	Fuel	Water	Participant	
# of	MWH	MWH	MWH Net Winter	Summer	MMBTU	CCF	Incentives	Participant
Participants	Saved	Saved	Saved KW Saved	KW Saved	Saved	Saved	Paid	Costs
(34)	(35)	(36)	(37) (38)	(39)	(40)	(41)	(42)	(43)

Figure 4.3.2.2. – Breakdown Report Template

#### Footnotes for the report table templates:

- (1) Activity for the current reporting year. For savings this figure will be the estimated savings for measures actually implemented and verified for the current report period. Savings are reported in MWh, at generation and net of all approved adjustment factors, except as otherwise noted.
- (2) Estimated portion of the three year savings and costs projected for the current report year. Projections for categories identified as (5) to (8), (22) to (27) and (29) to (33) will be provided if available.
- (3) Estimated Year 2003 data is presented for informational purposes only. The 2003-2005 Efficiency Vermont contract is based on three-year cumulative budget and savings goals, therefore EVT does not have annual budget or annual contract goals.

Estimated Year 2003 data is available only on the following reports: Program Summary plus CC; Program Summary, overall (no CC); Program Summary, C&I (no CC); Program Summary, Residential. Estimated Year 2003 is not available on individual program summary reports. Since EVT Services under the 2003-2005 Contract do not correspond with EVT Programs under the 2000-2002 Contract, 2003 estimates at the program level will not be provided in the 2002 Annual Report.

- (4) Program to date activity. For participation [(5) to (8)], the program-to-date column counts each customer (premise) only once, regardless of participation in previous years. The executive summary counts each customer (premise) only once, even if a customer was served by more than one program.
- (5) Number of customers with verified installations during the current report period. "Customer" is defined as a unique premise as defined by the utility, with one exception. For master-metered, multifamily buildings, "customer" is defined as a dwelling unit.
- (6) Number of customers who had analyses or audits completed during the current report period.
- (7) Number of customers who had analyses or audits during the current report period and are actively involved in the process of selecting and installing efficiency measures, but have not actually completed any installations. The number of customers reported in this category should be a subset of the customers counted in (6) above. The "program to date" column should reflect activity related to all participants with analyses/audits, regardless of when the analysis was conducted.
- (8) Number of customers who had analyses or audits during the current report period and have completed one or more installations during the current report period. The number of customers reported in this category should be a subset of the customers counted in (6) above. The "program to date" column should reflect activity related to all participants with analyses/audits, regardless of when the analysis was conducted.
- (9) Total costs incurred by Efficiency Vermont during the current report period. All costs in nominal dollars, (10) + (16) + (19).

- (10) Subtotal of all administrative costs detailed in the categories below, (11) + (12) + (13) + (14) + (15).
- (11) Costs include general management, budgeting, financial management and management of the requirements of the EVT contract.
- (12) Implementation management and administrative costs include program management and administrative costs directly related to implementation.
- (13) Costs related to program design and planning, program screening and other similar functions.
- (14) Costs related to marketing, outreach and business development.
- (15) IT development and maintenance costs are not broken out by program. This category will be included only in Table 2.3.1.
- (16) Subtotal reflecting total implementation costs, (17) + (18).
- (17) Costs related to conducting audits or analyses, preparing the package of efficiency measures, contract management and post-project follow-up.
- (18) Costs related to educational or other support services provided to entities other than individual program participants, such as trade allies, manufacturers, wholesalers, builders, and architects.
- (19) Subtotal reflecting total incentive costs, (20) + (21).
- (20) Direct payments made to participants to defray the costs of specific efficiency measures. If a program employs a shared savings mechanism or loan system, this category should include the utility share of the measure and carrying costs projected over the payment period, net of all projected participant payments.
- (21) Incentives paid to manufacturers, wholesalers, builders, or other stakeholders.
- (22) Total costs incurred by participants related to EVT or utility activities during the current report period. This category includes the participant contribution to the capital costs of installed measures and to specific DSM-related services, such as technical assistance or energy ratings.
- (23) Total costs incurred by third parties, i.e., entities other than EVT, utilities and participants, directly related to EVT or utility DSM activities during the current report period. 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. Note: The costs reflected in footnotes (16), (19), (22), (23) are equal to the costs in footnotes (26) and (27), i.e., implementation (services) costs plus EVT incentives plus participant costs plus third party costs will be equal to total cost of services plus total cost of measures.
- (24) Evaluation costs, excluding tracking and reporting expenditures.
- (25) Total program costs, (9) + (22) + (23) + (24).
- (26) Total capital expenditures incurred by the installation of DSM measures, including all EVT, utility, participant and third party costs.
- (27) Total expenditures associated with the delivery of direct services to participants and trade allies, including all EVT, utility, participant and third party costs.
- (28) Annualized MWh savings at generation and net of all approved adjustment factors (e.g., free riders, spill over) for measures installed and verified during the current report period.

- (29) The lifetime estimated MWh savings for measures installed and verified during the current reporting year, at generation and net of all approved factors. (Estimated annualized savings times the life of the measure).
- (30) Estimated impact of measures at time of winter system peak, at generation, net of adjustment factors.
- (31) Estimated impact of measures at time of summer system peak, at generation, net of adjustment factors.
- (32) Annualized MWh savings per participant, net at generation, i.e, (28) / (5).
- (33) Average lifetime, in years, of measures in the program weighted by savings, i.e., (29)/(28).
- (34) Number of customers with verified installations of measures within the end use, utility or county grouping.
- (35) The total annualized MWh saved, at generation, net of adjustment factors. This will add up to the savings reported in the line item identified as (28).
- (36) The total annualized MWh saved, gross at the customer meter.
- (37) The total lifetime MWh saved, at generation, net of adjustment factors, adds up to the savings reported in the line item identified as (29).
- (38) The total winter coincident KW, at generation, net of adjustment factors, adds up to the savings reported in the line item identified as (30).
- (39) The total summer coincident KW, at generation, net of adjustment factors, adds up to the savings reported in the line item identified as (31).
- (40) Total MMBtu estimated to be saved (positive) or used (negative) for alternative fuels as a result of measures installed in the end use.
- (41) Total water saved (positive) or used (negative) due to measures installed in the end use.
- (42) Total incentive costs for measures installed, are approximately the same as those reported in the line item identified as (20). See paragraph 7 of 4.3.1 for explanation.
- (43) Total participant costs for measures installed, should add up to the costs reported in the line item identified as (22).
- (44) Utility or EVT loans provided to customers. When there are loans, EVT will provide a Utility Loan Activity Summary (a-e) for customer loan (shared savings) activity including:
  - a. utility loans made during the current reporting year (dollars).
  - b. utility loans repaid during the current reporting year including interest (dollars).
  - c. (a-b) net cash flow for/from loans during the current reporting year (dollars).
  - d. loans written off during the current reporting year (dollars).
  - e. net loans outstanding as of December 31 of the current reporting year (dollars).

## 4.3.3. TABLE END NOTES

#### 2.2. PROGRESS REPORT

- [a] See 4.3.1. Annual Report Tables Overview above.
- [b] Total program cost does not include general Efficiency Vermont administration or information technology (IT) development costs.

#### 2.3.1. PROGRAM SUMMARY OVERALL

[a] Total Efficiency Vermont costs include a non-performance-based fee of 1.45% as specified by the EVT contract.

## 2.3.2. TOTAL RESOURCE BENEFITS, OVERALL

[a] Net lifetime water and fossil fuel savings are the sum of the product of net annual measure water or fossil fuel savings multiplied by the measure lifetime.

## 2.3.6.2. CUMULATIVE DISTRIBUTIONS BY CUSTOMER SECTOR

[a] Data in this table includes EVT program MWh savings and Total Resource Benefit savings.

#### 2.3.6.3. CUMULATIVE DISTRIBUTIONS BY COUNTY

[a] Data in this table includes EVT programs and Customer Credit MWh savings and Total Resource Benefit savings.

#### 2.3.6.4. CUMULATIVE DISTRIBUTION BY UTILITY SERVICE TERRITORY

- [a] Data in this table includes EVT programs and Customer Credit MWh savings and Total Resource Benefit savings.
- [b] The charges shown exclude direct repayment to utilities for uncollectibles, pre-Efficiency Vermont implementation costs and pre-Efficiency Vermont incentive costs.
- [c] BED administers its own programs and reports separately to the Vermont Public Service Board. The charges paid by BED in the table represent the amount of funds that BED directs to Efficiency Vermont Emerging Markets programs, the Efficient Products Program (light bulbs) and toward a portion of the Vermont Department of Public Service evaluation costs.

## 3.0.2. CEO PROGRAM SUMMARY

[a] Program budgets for the Commercial & Industrial New Construction and Commercial & Industrial Market Opportunities Programs are prepared as a single budget, under the name of Commercial Energy Opportunities (CEO).

#### 3.2.6.3. CEO PARTICIPATING VENDORS

[a] Participating CEO vendors are defined as trade allies who have received materials from EVT and who distribute prescriptive measure forms for efficient lighting, motors and HVAC equipment to prospective customers.

#### 3.3.2. DAIRY FARMS PROGRAM SUMMARY

[a] In December 2001, Dairy Farm projects that were not complete were transferred to the CEO Market Opportunities Program. Counts of participants with audits or pending action were also transferred to CEO Marketing Opportunities Program in December 2001.

## 3.3.6.1. DAIRY FARMS PROJECT COUNTS BY TRACK

[a] In December 2001, Dairy Farm projects that were not complete were transferred to the CEO Market Opportunities Program. Counts of participants with committed projects were also transferred to CEO Marketing Opportunities Program in December 2001

#### 3.5.2. RESIDENTIAL NEW CONSTRUCTION PROGRAM SUMMARY

- [a] Participants are defined as the number of completed dwelling units served under the program. Units are considered completed after a final inspection is performed.
- [b] Audits for this program are defined as the number of completed dwelling units for which home energy ratings were performed.

## 3.7.2. LOW INCOME MULTIFAMILY (REEP) PROGRAM SUMMARY

[a] Participants are defined as the number of dwelling units served under the program.

## 3.8.2. LOW INCOME SINGLE FAMILY PROGRAM SUMMARY

- [a] Audit is defined as a site visit in which a walk-through survey or high use analysis survey is conducted.
- [b] Pending jobs currently are not reported by weatherization agencies.