

Efficiency Vermont

2008 Highlights

Helping Vermont Families and Businesses Save Money and Save Energy

- More savings than ever before. Electric energy savings achieved in 2008 were 150,000 MWh, a 45% increase over 2007.
- Reducing the load. For the second year in a row, savings from efficiency measures more than offset the average underlying rate of electricity load growth.
- More savings in targeted areas. Between July 2007 and the end of 2008, in the state's four areas targeted for accelerated savings, Winter Peak electricity savings were increased by 360%, and Summer Peak savings were increased by 750%.
- A good buy for Vermont. At a cost of only 2.9¢ / kWh, efficiency remains Vermont's least-cost resource to meet the electricity needs of homes and businesses.



Energy savings for 2008 are subject to verification by the Vermont Department of Public Service. See page 3 for more information.

Helping Vermont become energy independent

Efficiency helps Vermonters be more energy independent. Energy saved through efficiency is energy that does not have to be generated, or imported at high cost from outside the state.

In 2008, Efficiency Vermont

and its partners lowered annual statewide electrical demand requirements by 2.5%, reducing the need for expensive new generation and transmission infrastructure to meet that demand.

Energy Efficiency the Green Mountain Way

"Vermont is the only state where gains in energy efficiency ... more than offset the state's projected growth in demand for electricity."

New York Times - October 8, 2008



Saving Vermonters money

Efficiency Vermont is helping Vermonters save more money on their energy bills at a time when every dollar counts. In 2008, 55,600 homes and businesses participated in direct services and initiatives from Efficiency Vermont, approximately 25% more participants than in 2007.

Not only did these homes and businesses lower their energy costs, but they also benefited from \$14.6



Efficiency Vermont's approximate cost of electric efficiency 2.9¢ / kWh

Approximate cost of comparable electric supply 14¢ / kWh

Efficiency Vermont.

our electric

system.

Efficiency continues to be a good deal for Vermont ratepayers. In 2008, Efficiency Vermont's cost of saving electricity was 2.9¢ / kWh, compared to an average of 14¢ / kWh for comparable electric supply. If you add in customer costs and savings, the actual cost of efficiency was only 2.5¢ / kWh.

million in incentives and \$6.6 million in technical services provided by

Most of the dollars we invest in energy efficiency stay in the local economy, whereas most of the dollars we spend on energy in homes and businesses flow out of the state. In addition, reducing peak demand increases the reliability of

> **Reducing Energy Costs for Vermont Businesses and Families** Efficiency Vermont helped businesses throughout the state reduce their energy bills by \$8.9 million in 2008.

Residential customers who participated in Efficiency Vermont initiatives, such as purchasing qualifying light bulbs and appliances and making large-scale efficiency improvements, saved \$7.7 million in 2008.

Saving energy is good for the environment

Reducing energy use is one way for Vermonters to slow global climate change. Using less electricity means lower emissions from power plants that burn fossil fuels, and allows renewable energy resources to go further.

Electrical efficiency measures installed in 2008 by Efficiency Vermont and its partners will result in the following overall lifetime emissions reductions:

Carbon dioxide: 920,000 tons Nitrogen oxides: 400 tons Sulfur dioxides: 1,300 tons



Energy Efficiency – It's Not Just about Electricity Anymore In late 2008, Efficiency Vermont was authorized to begin initiatives for energy efficiency opportunities that go beyond electrical savings, such as insulation, air-sealing, and other efficiency measures to reduce Vermonters' heating fuel costs. These comprehensive new services will help in achieving Vermont's aggressive energy efficiency goals for buildings, while also reducing greenhouse gas emissions related to home and business energy use.

Geographic Targeting: Deeper savings where they are needed most



Efficiency Vermont continued throughout 2008 to intensively target energy efficiency efforts in areas where costly upgrades to the electric power distribution system might be avoided or deferred by reducing peak electric load.

Since the inception of Efficiency Vermont's Geographic Targeting initiative in July 2007, the effort to attain accelerated savings has reached more than 21,700 customers. Overall, this broad strategy has produced a 360% increase in savings in the electricity load for the Winter Peak, and a 750% increase in savings for the Summer Peak.

Pictured on the front cover are some of the many Vermonters Efficiency Vermont has worked with since its From left to right are a

start in 2000. From left to right are: a farmer in Bridport; a Wattson fan in St. Albans; a qualified Home Performance with ENERGY STAR® contractor of Williston; a couple in front of their home energy retrofit project in Northfield; and the Master Electrician at Mack Molding in Arlington. The 2008 data presented herein are based on Efficiency Vermont's estimates of preliminary savings as claimed by the Vermont Energy Investment Corporation, the implementer of the Efficiency Vermont contract. Each spring, the savings are subject to an in-depth verification process conducted by the Vermont Department of Public Service. A written report and recommendation go to the Vermont Public Service Board, which makes a final certification of the savings that can be claimed.

The 2007 comparison numbers provided throughout this flyer were drawn from the final, verified 2007 Efficiency Vermont Annual Report.

Across eight years, the average adjustment between the preliminary energy savings claimed by Efficiency Vermont and the final certified savings amount has been a reduction of 5.6%.

Partnerships with Vermont's businesses and communities



Projected annual kWh savings: Approximately 792,000 Projected annual cost savings: Approximately \$59,000

Barry Callebaut, St. Albans

Some of the world's highest-quality cocoa and chocolate is made in Vermont at the Barry Callebaut facility in St. Albans. Making chocolate is a sweet but serious business, requiring a lot of energy for manufacturing, lighting, and cooling. Efficiency Vermont worked with Barry Callebaut facilities managers to identify savings opportunities that included installing motor controls on existing equipment, upgrading facility lighting, replacing air conditioners, and switching a process hot water system from electrical energy to natural gas in the 150,000 square feet of manufacturing space.

"We are very proud of the innovative cost saving projects we completed with Efficiency Vermont. We look forward to finding more creative solutions for our business in the future." – Marc Ladd, Maintenance Manager, Barry Callebaut



Projected annual kWh savings: Approximately 74,000

Projected annual cost savings: Approximately \$9,000

The Orvis Company, Manchester

Efficiency Vermont worked with the Orvis Company on a comprehensive pilot project to replace its retail outlet store lighting with energy-efficient LED (light-emitting diode) lighting fixtures. The Orvis outlet store is one of the first retail locations in Vermont to switch all their lighting to all-LED lighting.

Switching to LEDs means not just better lighting in the retail space, but also less stress on the store's air conditioners. Before the cooler LEDs were installed, the Orvis Company's summertime electricity use included cooling down the waste heat from the halogen and incandescent lighting.

After this successful pilot project, the Orvis Company is considering installing LED lighting at their flagship store in Manchester in 2009. As LED lighting evolves in the years to come it is expected to transform the commercial lighting market, and Efficiency Vermont is helping the Orvis Company lead the way.

"Our partnership with Efficiency Vermont has allowed us to invest in an LED solution that exceeded the estimates, and will save us nearly \$1,000 a month in electricity at our Manchester, Vermont, outlet store."

- James Hathaway, Manager, Communications and Conservation, the Orvis Company



Projected annual kWh savings: Approximately 69,000

Projected annual cost savings: Approximately \$15,000

Proctorsville Green Housing Project, Proctorsville

Efficiency Vermont, the Rockingham Area Community Land Trust (RACLT), Housing Vermont, Northern Architects of Burlington, the Quinn Company, and Southeastern Vermont Community Action partnered to bring affordable and energy-efficient housing to Proctorsville. The Proctorsville Green Housing Project included a complete renovation of eight apartments in the historic Pollard Block building, construction of a new rental duplex, and the construction of four single-family townhomes that will be put up for sale to qualified low- to moderate-income buyers.

Of interest in the larger Proctorsville Green Housing Project: RACLT and the Quinn Company are the winners of Efficiency Vermont's Better Buildings by Design Conference 2009 *Best of the Best Award* for Single-Family Attached Homes. Each unit in the winning project includes a high-efficiency propane boiler with an indirect-fired water heater, ENERGY STAR[®] appliances, ENERGY STAR lighting and ventilation, water conservation devices, and a high-efficiency insulation and window package combined with air-sealing detailing.

"With the buildings' energy performance, the tenants will no longer have to worry about either heating or personal comfort, and we as owners have far more cost-effective buildings to operate."

- Ray Brewster, Project Manager, RACLT

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