



Efficiency Vermont

2011
annual highlights

6
efficiency success stories





Since 2000, Efficiency Vermont has developed programs and energy solutions that deliver results.

In 2011, we continued to help reduce energy costs for all Vermonters, strengthening our state and local economy, and protecting the environment by making homes and businesses more energy efficient.

Examples of Efficiency Vermont initiatives in 2011 include:

- Helping small business owners reduce operating costs through energy efficiency;
- Developing partnerships with Vermont's large employers;
- Engaging with homeowners to help reduce their energy bills;
- Creating innovative tools to finance energy efficiency projects in Vermont's schools;
- Working with local farmers to reduce their operating costs.

The following stories are typical examples of the value Efficiency Vermont brings to Vermonters every day.

Efficiency Vermont
2011 at-a-glance:

1

the ranking by ACEEE for state utility energy efficiency programs

1.91

percent reduction in Vermont's electricity supply requirements

4

years in a row of recognition for sustained excellence from ENERGY STAR®

61

Vermont businesses committed to the Energy Leadership Challenge

340

Vermonters received emergency efficiency assistance
from Tropical Storm Irene

1,100

small businesses served

3,450

low income households served

30,400

total households served

108,000

MWh of total energy savings

790,000

tons of CO2 emissions avoided



“We’re constantly looking for ways to improve. Efficient technology means less waste and more money to spend on other areas of our business.”

JOE KAMUDA,
KAMUDA’S COUNTRY STORE
AND MARKET



AN HISTORIC COUNTRY STORE SAVES ENERGY, MONEY AND IMPROVES PRODUCT DISPLAYS

Kamuda’s Country Store and Market, Pittsford

Joe Kamuda first used Efficiency Vermont to benefit his small business in 2009 when he started selling compact fluorescent light bulbs in his historic country store, Kamuda’s Country Store and Market, in Pittsford. He decided to upgrade the store’s overhead lighting that year and reports that the upgrade improved the overall appearance inside the store dramatically. Kamuda came back to Efficiency Vermont in 2010 to retrofit the fan motors in his walk-in coolers to a more efficient model. The next project, in 2011, was an upgrade to LED lighting in his refrigerated cases. This change not only improved the display of products, it also reduced spoilage by minimizing the heat generated by the lights. These three projects resulted in a cumulative annual savings of \$1,450; \$200 of which came from the 2011 lighting upgrade.

Project Partners:

- Associated Lease Corporation,
Refrigeration Supplier
- Fred S Refrigeration

\$200

saved per year

1,550

kWh saved per year



“Energizer is fortunate to have [Efficiency Vermont] taking such a proactive role to help us attain a world class energy management program.”

RICK ANDERSEN, STAFF ELECTRICAL ENGINEER, ENERGIZER HOLDINGS, INC.



VERMONT'S LARGE EMPLOYERS PARTNER WITH EFFICIENCY VERMONT
Energizer Holdings, Inc., St. Albans and Bennington

Over the last 125 years Energizer Holdings, Inc. has grown into a diverse consumer goods company with global reach. They maintain manufacturing plants in eight states and 11 foreign countries, and have operated continuously in Vermont for the last 70 years, currently employing more than 400 people at facilities in Bennington and St. Albans. Energizer has actively partnered with Efficiency Vermont to undertake major improvements in lighting, process, HVAC, and compressed air efficiency over the last 11 years, with annual savings of \$53,000 attributed to the work completed in 2011 alone. In the process, they have ensured that their Bennington and St. Albans facilities remain at the leading edge of energy efficient manufacturing, setting an example that is being emulated at other Energizer plants across the country.

Project Partners:

- Compressor Energy Services, LLC

Energizer is one of more than 61 large Vermont businesses enrolled in Efficiency Vermont's Energy Leadership Challenge, a two-year effort to reduce energy use of participating companies by 7.5%.

\$53,000
saved per year

654,000
kWh saved per year



“The savings were almost immediate. But, milk production improved over time as well.”

JOHN LAGGIS, LAGGIS BROTHERS FARM



EFFICIENCY IMPROVES DAIRY FARMERS' BOTTOM LINE AND HERD COMFORT

Laggis Brothers Farm, East Hardwick

John Laggis and his brother, Chris, operate a dairy farm on about 600 acres in East Hardwick with 440 jerseys and 400 heifers. They came to Efficiency Vermont for the second time in 2011 seeking to invest in energy efficiency in order to reduce operating costs and improve the comfort of their herd. They completed three efficiency projects in 2011: improving barn ventilation, upgrading lighting, and installing a variable frequency drive milk vacuum pump which regulates the pump motor, reducing its operating costs by 50%. The Laggis brothers took advantage of an Efficiency Vermont partnership with Opportunities Credit Union to obtain a low-interest agricultural efficiency loan.

Project Partners:

- Opportunities Credit Union
- Nudd Electric
- Berco Dairy Equipment
- DeLaval Direct — NE

\$21,000
saved per year

165,000
kWh saved per year



“It’s challenging to find the time to do this type of detailed work. Our partners provided us with the knowledge we needed to get the project off the ground.”

TOM PETIT, LYNDON TOWN SCHOOL BUSINESS MANAGER, THE RUTLAND HERALD, 5/1/11



VERMONT PUBLIC SCHOOLS SAVE MONEY WITH INNOVATIVE ENERGY EFFICIENCY FINANCING
Lyndon Town School, Lyndon

Lighting in the Lyndon Town School was inefficient and expensive. In an effort to save money and improve the learning environment, school leaders undertook a comprehensive lighting upgrade throughout the 105,000 square foot facility. Through the use of tax-exempt leasing, the building’s outdated lights were replaced with new fluorescent high performance lights with no upfront cost. These new light fixtures save up to 50% in energy and last up to twice as long. They also provide better quality light without “flicker” and humming noise, making classrooms better learning spaces. Overall, the lighting effort will result in 30% less energy consumed.

Project Partners:

- The Vermont Superintendents Association School Energy Management Program

\$21,000
saved per year

138,000
kWh saved per year

Tax-exempt leasing, or “municipal leasing,” enables schools to make efficiency improvements with no upfront costs.



“I couldn’t believe how much electricity my old side-by-side refrigerator was using. The new one should make my electric bill a LOT lower!”

MARS CLIENT,
BROWNINGTON



LOW-INCOME SINGLE- AND MULTI-FAMILY HOMES RECEIVE ENHANCED ASSISTANCE Throughout Vermont

The Major Appliance Retrofit Service, or MARS, was introduced in 2011 as a collaborative between Efficiency Vermont and the state’s five Weatherization Assistance Programs. The initiative replaces old, inefficient appliances with ENERGY STAR® models and installs other efficiency measures in low-income households. It was designed to expand existing low-income services to multi-family buildings, and help ensure all Vermonters can benefit from energy efficiency savings.

Since the launch of MARS in June 2011, 529 projects have resulted in 620 MWh of savings. The average savings per household was approximately 1,200 kWh, representing \$190 per year, or 15% of annual electricity usage.

529
projects

\$99,000
saved per year

620,000
kWh of savings in total

“An elderly woman in Bellows Falls was struggling to keep her insulin from freezing in an old unreliable refrigerator. [The new efficient refrigerator] greatly reduced her health risks [by keeping] her medication from freezing.”

SOUTHEASTERN VERMONT COMMUNITY ACTION,
REGARDING A MARS CLIENT



“The house is a lot more comfortable year-round, and our heating costs were cut by 43%.”

HOMEOWNER,
MOUNT HOLLY



PRE-1900 HOME BENEFITS FROM ENERGY EFFICIENCY IMPROVEMENTS
Mount Holly, Vermont

The owners of this 1831 farmhouse knew a replacement of their 42-year-old boiler was overdue, and they were tired of cold floors and drafts in the winter. The structure is completely exposed to westerly winds and, on breezy days, they could feel the gusts while inside the house.

After an energy audit with their Home Performance with ENERGY STAR® contractor the attic, stone foundation, and part of the kitchen were air sealed and insulated ensuring a steady inside temperature year-round. The old boiler was replaced with a new efficient model, along with an indirect-fired water heater.

Project Partners:

- NeighborWorks of Western Vermont H.E.A.T. Squad
- Steven Spatz, Red Barn Design and Build LLC

\$3,700
saved per year

550
kWh per year saved



From Jim Merriam

Director, Efficiency Vermont

For Efficiency Vermont, 2011 was a year of learning and of action. The stories you read in this year-end review reflect the challenges many in our state faced in 2011, as well as the dedication of our staff to pursuing energy solutions that improve the quality of life for all Vermonters.

At Efficiency Vermont, we recognize that by changing the way we use energy we are also strengthening our local economy. Efficiency investments support the work of local contractors and retailers, improve the quality of Vermont's housing stock, and make living in our state more affordable. They also make Vermont's businesses — small and large — more competitive by reducing operating costs, increasing employee comfort, and improving customer experience.

In 2011, we learned that we can truly rise to the occasion by providing emergency efficiency services to hundreds of Vermont homeowners who were impacted by Tropical Storm Irene, helping them to rebuild better and safer. We also introduced the MARS program, which is helping ensure that low income Vermonters benefit from energy efficiency. It is with gratitude that we continue to serve all Vermonters, as we strive to earn and preserve your trust.



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The 2011 data presented herein are based on Efficiency Vermont's estimates of preliminary savings as claimed by the Vermont Energy Investment Corporation, the implementer of Efficiency Vermont. Each spring, the savings are subject to an in-depth verification process conducted by the 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. In this flyer, data used from 2000 through 2010 were drawn from the final, verified Efficiency Vermont Annual Reports for those years. Across ten years, the average adjustment between the preliminary energy savings claimed by Efficiency Vermont and the final certified savings amount has been a reduction of 5.9%.