

Case Study: Rector Family Saves Energy Use and Costs

With rising energy prices, Alison and Eric Rector of Monroe, Maine, decided that it was time to make weatherization improvements on their 100-year-old home. They turned to Charlie Holly at Kennebec Home Performance in Waterville for a home energy audit. Charlie assessed for the Rectors where and how they should make improvements, and they hired Richard Burbank at Evergreen Home Performance in Rockland to make them. Now, the Rectors are much more comfortable in their home and are expecting to save at least \$1,500 on their heating bill each year. Here's the Rectors' story.

Their Goals

- Improve year-round comfort
- Use less energy for heating
- Reduce global warming pollution
- Save money

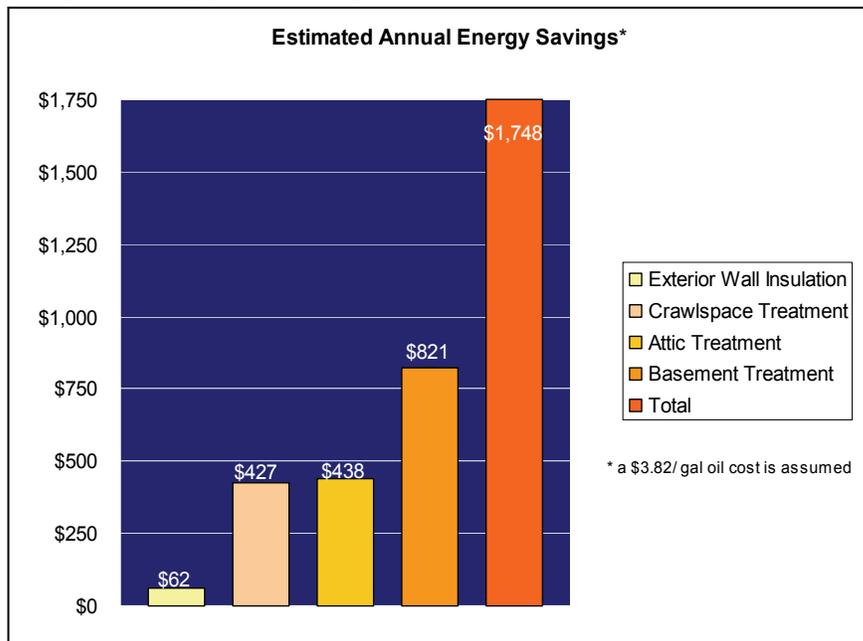
Their Issues

- Air leakage between the house and the attic
- Air leakage in the foundation walls, sills, band joists
- Air leakage around top molding, window trim, and mop boards
- Forced air furnace with efficiency of less than 80%

Energy-saving Measures

- Double attic insulation
- Spray foam in cellar walls (2" thick)
- Reduce air leakage by 58-63%

Big Energy Savings



Improvements to the Rectors' home helped save them energy and money while reducing their carbon footprint.

Improved Year-round Comfort

"One January morning, we had a **70°** spread (-9° outside to 61° inside), thanks to our re-insulated house! And the furnace hadn't been on all night!"

– Alison and Eric Rector, Monroe

Energy Efficiency: Top Priority for NRCM

Advocating for strong energy efficiency and weatherization programs and resources is a top priority for NRCM's Clean Energy Project. Every kilowatt hour of electricity used generates a pound of global warming pollution. Maine's electricity comes from coal, oil, gas, and nuclear-fueled power plants that produce smog, haze, acid rain, and nuclear waste. Every gallon of heating oil burned generates about 20 pounds of global warming pollution—plus sulfur and other pollutants. Reducing global warming emissions and other pollutants through reducing electricity and oil consumption is good for Maine's families, environment, and economy.

Learn how you can start saving money on your home, too.

www.nrcm.org/home_energy_savings.asp

Saving energy and keeping money in the Maine economy: good Maine jobs in efficiency and weatherization



Biff and Charlie of Kennebec Home Performance get ready to measure airflow through the Rectors' house to locate any air leaks.

"We benefitted from the good work of Charlie Holly at Kennebec Home Performance (energy auditor) and Richard Burbank and the contractors at Evergreen Home Performance who insulated our home. We have already noticed a big difference in our comfort level, since the house is now much warmer and using much less fuel. We estimate a 33% reduction in our heating fuel consumption, with a warmer temperature in our home. The final energy audit also measured a 58% reduction in air leakage in our home."

– Alison Rector, Monroe

How can we bring these benefits to more Mainers?

"Incentives encouraged us to do the work sooner rather than later. And the incentives encouraged us to do an energy audit, quantifying the work to be done. I think we did more weatherization with the incentives than we could have done on our own."

–Eric Rector, Monroe

Check out available incentives that might help you save energy and money, like the Rectors did, at:

www.nrcm.org/home_energy_savings.asp



Evergreen Home Performance's cellulose blower truck arrived to install a cellulose "blanket" in the attic and upper crawl spaces.



"Maine faces some pretty significant energy problems because of our old, inefficient homes, most of which are still burning oil. But this is also a golden opportunity. Instead of sending their money out of the state or the country to buy oil, my customers are helping me employ workers right here in Maine, making their homes more comfortable and efficient while keeping money in Maine's economy where it belongs."

– Richard Burbank, Evergreen Home Performance owner and certified building performance specialist