"We're definitely glad we did it. Not a single ice dam this past winter!"

—Dan Mellinger

The Mellinger Home: An Energy Investment

The Mellinger's 20-year-old Cape was pretty typical for a house of that era and build. Their energy bills weren't outrageous, and the family was comfortable. Still, they knew there was room for improvement. In winter, ice dams and icicles were sometimes a problem and the Mellingers worried about long-term damage to the roof. A Home Performance with ENERGY STAR® contractor conducted an energy audit, and infrared photos revealed a "glowing red ring" around the house, indicating pervasive heat seepage from the basement.

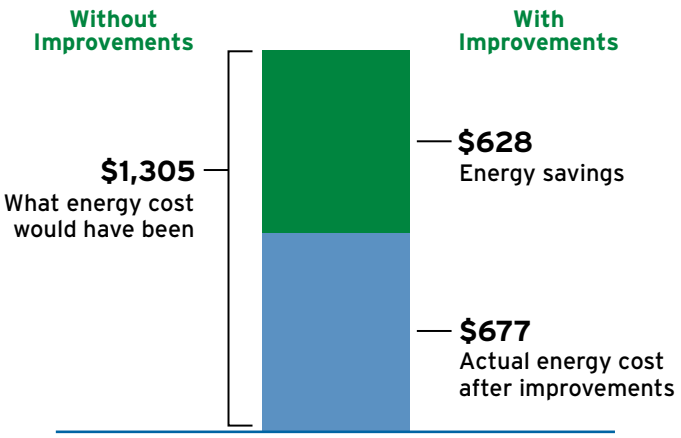
The contractor presented the Mellingers a list of recommended efficiency improvements and an energy savings estimate, and they considered incentive information from Efficiency Vermont and Vermont Gas as well as available tax credits. The Mellingers decided on the following measures:

- Air sealing throughout the home, especially the basement
- Blown-in insulation, particularly in knee-wall and attic areas
- Boiler replacement

The total cost of the project was $11,150. The Mellingers received $1,647 in incentives from Efficiency Vermont and $2,200 in other incentives.

The Mellingers are now more comfortable and tests show that they've reduced air leakage by 40% — that's 10% above their contractor's projection. This past winter, several neighbors experienced serious ice dam issues, resulting in roof leaks and extensive damage. The Mellingers were happy to report: "Not a single ice dam."

A Summary of Annual Heating Energy Savings and Cost



Efficiency Vermont

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Paying for Energy Efficiency Home Improvements

The least expensive way to pay for energy improvements is with cash. Given the typical size of these projects, however, few homeowners have this option available. For Vermonters who are interested in making significant energy efficiency home improvements, appropriate financing can make the investment not only possible, but affordable.

Energy savings can offset fixed monthly loan payments, and the money that would have been spent on energy bills becomes available to make most or all of the loan payments. Although the total cost of a longer loan is higher, increasing the number of payments can reduce the monthly cost and more closely match energy savings.

The Mellinger's Project Summary

Total Project Cost	($11,505)
Efficiency Vermont Incentive	$1,647
Other Incentives	$2,200
Total Customer Cost	($7,658)
Energy Savings	$628/yr.*

	PERSONAL SAVINGS	
Personal Savings Used	$7,658	Instead of earning $77 in interest by keeping the money in their savings account, the Mellingers would save $628 on their energy bills, coming out $551 ahead the first year, and every year after that.
Annual Interest Rate	1.00%	
Annual Interest	$77	
Annual Cash Flow	$551	

	FINANCING SCENARIOS		
	7 yr. Personal Loan	15 yr. Home Equity Loan	30 yr. Mortgage
Total Amount Borrowed	($7,658)	($7,658)	($7,658)
Annual Interest Rate	7.50%	5.25%	4.75%
Monthly payments	($117)	($62)	($40)
Total Interest	($2,209)	($3,423)	($6,723)
Total Cost	($9,867)	($11,081)	($14,381)
Total Energy Savings During Repayment Period	$4,393	$9,414	$18,827
Cash Flow**			
Monthly	($65)	($9)	$12
Annual	($782)	($111)	$148
Total Cash Flow During Repayment Period	($5,474)	($1,667)	$4,446
	If the Mellingers decided to use a personal loan, they would need $5,474 over the term of the loan, in addition to the money from energy savings. The Mellingers would continue to save $628* a year after the loan payments were complete.	If the Mellingers decided to use a home equity loan, they would need $1,667 over the term of the loan, in addition to the money from energy savings. The Mellingers would continue to save $628* a year after the loan payments were complete.	If the Mellingers decided to use a mortgage, they could use the money that would otherwise have been spent on energy bills to make their loan payments, and still have money left over. The Mellingers would continue to save $628* a year after the loan payments were complete.

*Assumptions: Energy prices do not change during the life of the loan. All loans are fixed rate. Energy Savings are calculated based on Normal Season Heating Degree Days.

**Cash Flow equals Total Energy Savings during repayment period minus Total Cost.