

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.

Hanson Project Summary

Total Project Cost	(\$11,635)
Efficiency Vermont Incentive	\$2,500
Total Customer Cost	(\$9,135)
Energy Savings	\$1,307/yr.*

PERSONAL SAVINGS	
Personal Savings Used	\$9,135
Annual Interest Rate	1.00%
Annual Interest	\$91
Annual Cash Flow	\$1,216

Instead of earning \$91 in interest by keeping the money in their savings account, The Hansons would save \$1,307 on their energy bills, coming out \$1,216 ahead the first year, and every year after that.

	FINANCING SCENARIOS		
	7 yr. Personal Loan	15 yr. Home Equity Loan	30 yr. Mortgage
Total Amount Borrowed	(\$9,135)	(\$9,135)	(\$9,135)
Annual Interest Rate	7.50%	5.25%	4.125%
Monthly payments	(\$140)	(\$73)	(\$44)
Total Interest	(\$2,635)	(\$4,083)	(\$6,803)
Total Cost	(\$11,770)	(\$13,218)	(\$15,938)
Total Energy Savings During Repayment Period	\$9,149	\$19,605	\$39,210
Cash Flow**			
Monthly	(\$31)	\$35	\$65
Annual	(\$374)	\$426	\$776
Total Cash Flow During Repayment Period	(\$2,621)	\$6,387	\$23,272
	If the Hansons decided to use a personal loan, they would need \$2,621 over the term of the loan, in addition to the money from energy savings. The Hansons would continue to save \$1,307* a year after the loan payments were complete.	If the Hansons decided to use a home equity loan or 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 Hansons would continue to save \$1,307* 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 estimated by the Home Performance with ENERGY STAR contractor based on an energy audit. Actual results may vary, depending on various factors such as heating degree day and number of people living in the home.

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