

Marshfield/Plainfield Home Energy Challenge

Would you like to spend less on heating?

Is your house drafty and hard to heat?

Want to help reduce climate change?

Save \$500–
\$1000/year
or more

Reduce
impact of
fuel cost
increases

Marshfield and Plainfield are offering *free* Home Energy Visits to help find ways to save money and keep your house warmer. Well-trained and knowledgeable volunteers will find ways to stop drafts, save fuel and more. This 1.5 to 2.5 hour visit costs you nothing and has no strings attached.

Based on the visit, an in-depth energy audit will be recommended for some homes. During an audit a certified local energy professional will perform tests to determine the desirable improvements, their cost and their payback time, which project to do first and what financial incentives are available. See the back of this page for examples of audit and improvement results. The cost of the audit is \$100 if it is completed this year and if it is one of the limited number provided by the three local auditors listed on the last sheet. Grants to help pay for the improvements will be increased by \$500 up to a maximum of \$2,500 if the improvements are completed by December 31st

Increase the
comfort of
your home

Protect
future
generations

The visit and audit are more fully described on the following pages. Also included is a pledge card for those ready to commit themselves to certain energy-reducing actions. These are your commitments. No one will hold you to them. Experience has shown people that commit in writing are more likely to follow through. The card is self-addressed.

Sign up for a free Energy Home Visit today

Marshfield residents contact Rich Phillips 454-7702
richphillips363@gmail.com
Plainfield residents contact Bob Atchinson 479-4326
bobat2@yahoo.com

Reduce
climate
change

Weatherization Case Summaries

Dina and Rich Baker, 372 Upper Depot Rd, Marshfield, Done in 2009

- Air sealed and insulated the attic including the sloped ceiling cavity by Contractor
- Removed fiberglass insulation on basement sills and replaced with rigid foam by homeowner

Cost of Job:	\$4,785
Vt Rebate:	\$2,108
Federal Tax Credit:	\$814
Net Cost to Homeowner:	\$1,863
Annual Fuel Savings (if only oil was used):	\$525
Years to Pay Back Through Savings:	3.6
Return on Investment	28%

- Our 1870s house is warmer and less drafty
- What investment pays you 28% these days?

Kass and Rich Phillips, 1119 Hollister Hill Road, Marshfield, Done 2010

- Air seal the attic, dense pack cellulose down the side slopes and fill the eaves to stop warm air up the outside walls, add 12 inches of cellulose to the attic floor and cover sill and foundation with spray foam.
- The improvements lowered the heat requirement so much we stopped using the oil boiler (except for the back room) and now heat with one pellet stove.

Air Leakage Reduction:	40%
Projected Energy Savings	33%
Cost of Job:	\$11,000
VT Rebate:	\$2,500
Federal Tax Credit (30% on Materials):	\$1,200
Net Cost to Homeowner:	\$7,300
Annual Fuel Savings:	\$1,600
Years to Pay Back Through Savings:	4.6
Return on Investment:	22%

- These figures show the impact of weatherization on oil use. When we then went to pellets the savings went to about 69%, the Payback period went to 3.1 years and the Return on Investment went to 32%
- The 1858 house is much less drafty and more comfortable
- What investment pays you 22% these days?

Scott Hesser, 428 Godfrey Road, East Thetford

- Air sealed attic and basement penetrations
- Insulated attic and basement

Air Leakage Reduced by:	60%
Projected Heat Energy Savings:	27.77%
Cost of Job:	\$6,375
Incentives from Efficiency VT:	\$1,634.50
Net Cost to Homeowner:	\$4,740.50
Projected Annual Dollar Savings:	\$1,059.82
Years to Payback Through Savings:	4.47
Return on Investment:	22.37%

- Before improvements the house would cool off rapidly. Now it holds the heat and is quite comfortable

Home Energy Visit (Free)

Energy Committee members with considerable experience in weatherization issues perform the free Home Energy Visit. The visit lasts from 1.5 to 2.5 hours and is quite thorough. Nearly all visits identify some simple improvements that can reduce fuel expense at a low cost. The visit may lead to a recommendation for an audit by a professional. An outline of the visit coverage:

Review prior weatherization efforts

Review and Identify Weatherization Opportunities from Attic to Basement

Identify Immediate Homeowner Improvements

Review Electricity and Fuel Records

Prepare Heating Efficiency Calculations and Comparisons

Discuss Electricity Use Comparisons and Savings Opportunities

Discuss Home Energy Audit Recommendation, If Appropriate

Discuss Electric Meter, Foam Gun and Set-Back Thermostat

Make Out Pledge Card and Visit Form and Order Free Efficiency Kit

Optional: Self Assessment of Home Energy Use Form

What/Why of Home Energy Audits

(Home Energy Visit may lead to Home Energy Audit)

- 1) The audit provides a detailed professional review of the air leakage and insulation of your home, identifies desired improvements, estimates the cost of the improvements and the annual savings and estimates the years for the savings to pay back the costs. The air leakage tests will accurately determine leaks. An order of priority for the different improvements will be suggested.
- 2) Rebates, tax credits and loans available to finance the work would be identified. Income-qualified homeowners can get free weatherization services through the CV Community Action Council.
- 3) There is no obligation to perform any of the improvements. You might be able to perform some of the work yourself, preferably after you have had some training under the supervision of an energy contractor so you do not make mistakes that waste your money or cause moisture or other problems. See Do-it-Yourself workshop below.

- 4) Many people think, “What is the sense of doing the audit because I do not think I can afford to make any improvements anyway.” Actually, the less money you have, the more important it is to have an audit done (particularly at \$100) and correct the least costly items that provide the best return for your money.
- 5) Many people think, “I know what improvements to make and how to do it, I do not need to spend money on a professional audit” Some limited number of homeowners know the basics of how buildings lose heat and how to correctly make the improvements. Most homeowners do not have that knowledge. These homeowners can easily make costly mistakes by failing to identify all the areas of heat loss, failing to identify the improvements that have the best return on investment and selecting less efficient materials for the improvements.

One common mistake is continuing to use fiberglass insulation after it has been proven inferior to cellulose or other materials. In certain instances fiberglass may have little insulating effect. Wouldn't it be better to pay a few bucks for a professional audit. You do this with the car, the dentist, the doctor etc. You will likely save more money in the long run

- 6) The audit report is not generic. It tells you exactly what needs to be done in your house, what it will cost after incentives are applied and what should be done first to make the best use of your money. It is very likely that one or more low-cost items will be found that have the potential to reduce fuel use significantly.**

Having all this information, you can decide which parts of the work you can afford to do and when. Without this audit you will never know what weatherization improvements might cost and how you might finance them. You will continue to pay for fuel year after year to heat the outside as the price of fuel continues to rise.

Do-it Yourself Workshops

Efficiency Vermont will hold a workshop in Barre on October 12th from 9:00 AM to 6:00 PM to train homeowners how to perform various weatherization improvements. Homeowners willing to do some of the work themselves will be able to save money.

The program involves having an energy audit done to define the improvements needed followed by a breakout of work to be done by the homeowner and, where necessary, by the weatherization contractor. The homeowner work is done under the oversight of the contractor. Visit www.weatherizationskillshop.com to find out more about the workshop and register. The cost is \$25/person.

Local Audit/Weatherization Contractors Supporting the Marsh/Plain Program

Shelter Construction, Will Fitzpatrick, 272-8107, shelterconstruction@gmail.com montpelier

Construction, Chris Miksic, 479-1868, chris@montpelierconstruction.com DuPont

Construction and Insulation, Kevin DuPont, 426-3640, DUPONTCSTR@aol.com

These auditors have discounted five audits each to \$100 for you