



Financing Energy Improvements in Existing Homes

Richard Faesy
Energy Rated Homes of VT /
Vermont Energy Investment Corporation

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Overview



Vermont's Energy Improvement Mortgage Service

-  Background

-  Current Status

Lessons Learned

Opportunities for the HERS Industry



Definitions



 Energy Mortgage ("EM"):

- Energy Efficient Mortgage ("EEM")
- Energy Improvement Mortgage ("EIM")



Elements of Successful EIM Programs

- ✎ No mortgage closing delays
- ✎ No significant increases in workloads or stress levels
- ✎ Create positive working relationships with participants
- ✎ Provide opportunities for lenders and real estate agents to close more deals (and make more commissions)



Elements of Successful EIM Programs (con't)

- ✎ Take full responsibility to manage and complete each job successfully (on time, on budget, savings as projected)
- ✎ Identify and foster successful contractors
- ✎ Incorporate mortgage product(s) with some sort of interest rate or cash-back incentive to entice participants











ERH-VT's EIM Service

- ✎ ERH-VT desired to remain independent, working for customer, not to install
- ✎ “Turn-key” service necessary for success
- ✎ Challenges:
 - ▢ How to cover 15-20 hours (plus travel and marketing expenses) (\$800)
 - ▢ Secondary mortgage market approval for financing this fee
 - ▢ Can the package still be cost-effective?



EIM Service Elements

-  Sales
-  Site visit
-  Preliminary rating
-  Bids
-  Rating package
-  Closing
-  Contracts
-  Completion



YESS Program

- ✎ Vermont Housing Finance Agency
- ✎ Affordable/ first-time home buyers
- ✎ Reduced/stepped interest rate:
 - ☐ Year 1: **5.45%**
 - ☐ Year 2: 5.95%
 - ☐ Year 3: 6.45%
 - ☐ Years 4-30: **6.95%**
- ✎ 100% financing



Customer Motivations

- 👉 House has obvious energy deficiencies and/or is old
- 👉 The home inspector identifies a problem and lender requires they resolve
- 👉 Electric heat
- 👉 They really want or need the lower interest rate available through VHFA's YESS Mortgage Program.



EIMS Results (11/97 - 5/00)

Metric	Results
Number of completed EIM jobs	41
Average initial rating score	56.4 points (2 Stars +)
Average post-improvement rating score	73.8 points (3 Stars +)
Average rating score increase	17.4 points
Average annual energy savings	67.4 MMBtu
Average annual energy cost savings	\$1,075
Average financed investment in energy improvements (and fees)	\$7,194
- Mechanical systems financed investment	\$4,356
- Weatherization financed investment	\$2,596
Average annual mortgage increase	\$586
Average cash flow generated	\$489 (\$41/month)



NE HERS Alliance Brochure

**Buying a home
is a smart investment.
Paying high utility bills
isn't.**



**You've got
more important
things to spend
your money on.**

Thanks to special programs
available from lenders,
you can actually *save money*
by making your home
more energy efficient
when you buy!

**Energy Rated Homes of Connecticut &
Energy Mortgage Program of Western Mass**

To build an effective path to energy-efficient,
affordable homes in the 21st
Century, Energy Rated Homes of
Connecticut (ERH-CT) and
Energy Mortgage Program of
Western Mass were launched by
Conservation Services Group, a regional nonprofit
energy-efficiency service provider and a chief
promoter of *Energy Star* Homes. Both programs
use a state-of-the-art system recognized through-
out the U.S. for rating a home's energy efficiency.

- ✓ We will help you obtain your Home Energy
Rating from a certified HERS rater who will
thoroughly evaluate your home and recom-
mend cost-effective upgrades.
- ✓ Depending on your needs, we will guide you
through the process of obtaining an Energy
Efficient Mortgage or other financing
for your energy improvements.
- ✓ Our staff will put you in touch with participat-
ing lenders and refer you to home-ownership
counselors if desired.
- ✓ Energy specialists will perform a follow-up
inspection to ensure your energy improve-
ments are installed properly and that you
receive the greatest benefits.
- ✓ Optionally, we will secure written bids from
contractors, and schedule and oversee the
completion of the energy improvements in a
timely fashion.




Energy Rated Homes of CT: 800-530-8206
E-mail: Energy@erhna@yahoo.com
Energy Mortgage Program of Western Mass:
800-238-1221

**Buying a
home?**

**Now you can
enjoy greater
comfort and
savings.**





NE HERS Alliance Brochure

Congratulations!

Purchasing a home is one of the most exciting and important investments you will ever make. We can help make sure that the home you buy is more comfortable and less expensive to heat and cool.

How It Works

Let's say you've found (or already live in) the right home, but it needs work. Incorporate the cost of energy efficiency improvements into your mortgage when you purchase or refinance your home, and we'll make sure your energy savings will exceed the additional monthly mortgage amount you pay for the improvements. Recommended improvements may include:

- ✦ Adding more insulation.
- ✦ Reducing drafts by sealing air leaks.
- ✦ Installing a new heating or hot-water system.

Look for the Stars!

To recommend improvements, we perform an Energy Rating, a standard measure of a home's energy efficiency. The rating ranges from 1 Star (poor) to 5 Stars (excellent). It documents the energy efficiency of the home in its current condition, estimates utility bills after the improvements are made, and enables you to take advantage of special financing.

"Your program helped us replace our ancient heating system and save money."
— Ellen & Jeff Knight

Actual Size

It's a Winner!

- ✦ You qualify more easily for a loan.
- ✦ You reduce your utility bills.
- ✦ You improve your home's comfort and resale value.
- ✦ You conserve energy and help the environment.

Each year the average home upgraded to the 4 Stars level of energy efficiency prevents the release of nearly 2,872 pounds of carbon dioxide — the major cause of global warming. Upgrading only 100 homes to the 4 Star level of energy efficiency would cut CO₂ emissions by more than 143 tons every year.

We Can Help

As a member of the Northeast Home Energy Rating System Alliance, we can answer any questions you may have. Our energy professionals are qualified to:

- ✦ Perform the required Home Energy Rating and recommend cost-effective energy improvements that can save you money.
- ✦ Secure written bids from contractors.
- ✦ Prepare all necessary documentation for your loan file.
- ✦ Establish contracts, coordinate the work and help make sure the job is done correctly.
- ✦ Inspect the energy improvements and re-rate the house upon completion.



An Example of the Savings

Monthly Energy Expenses
Without Energy Improvements: \$142

Monthly Energy Expenses
With Energy Improvements: \$121

Energy: \$83 Additional Mortgage: \$38
Net Annual Savings: \$252

This example is based on the experience of a couple who found their dream home: a beautiful, 120-year-old farmhouse. The house was drafty, and the couple was prepared to pay high utility bills. Then they learned they could actually save money by rolling the cost of energy improvements into their mortgage.

Now they are saving money each month and enjoying a more comfortable home! Here are the details:

The House: 120-year old, 1½-story farmhouse; oil heat, electric hot water.

Recommended Improvements: Add attic and foundation insulation; place vapor barrier over dirt crawl space; weatherstrip and air seal throughout; seal furnace ductwork; switch to oil-fired domestic hot water heater; install energy-efficient lighting fixtures.

Total Improvement Cost: \$5,545
Net Monthly Savings: \$21 (\$59 energy savings minus \$38 mortgage increase)



EIMS Brochure



 Copy available on Northeast HERS Alliance web site:

 www.energyratings.org



Current Situation

- 👉 In 2000 I moved out of SF services
- 👉 My replacement had other responsibilities
- 👉 VEIC was selected as the statewide efficiency utility ("Efficiency Vermont")
- 👉 VHFA reduced conventional mortgage rates below YESS rate
- 👉 Costs for EIMS continued to rise >\$800
- 👉 Standards for closing times continue to shorten



Current Situation con't

Ceased promoting EIMS

-  Continue to offer as requested on hourly basis (\$60/hr)

-  One or two jobs per month





We are committed to redesigning, streamlining, and offering the service by the end of the year



Lessons Learned






 Facilitator involvement is critical for success

-  Work gets done on time, on budget and energy predictions are realized
-  Lenders won't try programs w/o a professional
-  NY/CSG are experimenting with training contractors to become facilitators
-  California's successful lessons with facilitator/contractors



Lessons Learned con't

Diversify rater capacity

-  Build rater capacity to enable at least 2 or 3 competent raters to offer the service
-  The burn-out factor can be high (high stress)
-  Mix and match with new construction



Lessons Learned con't

Ensure desirable & workable financing products

Need a demand-feature

- > Reduced interest rate
- > Reduced points
- > Cash back at closing, etc.

Reduce/eliminate appraisal/value issue

Allow lenders to sell the mortgage before improvements are complete

No/very little increase in lender work loads

Create better refinance product



Lessons Learned con't

 Partner with fewer, competent contractors

- Eliminate/reduce the time and hassle of going out to bid (unless the customer insists and pays)

- Set up pre-arranged costs



Lessons Learned con't






Create efficiencies by combining services/roles

- ☐ Raters/facilitators/contractors (conflict of interest?)
- ☐ home inspectors/raters
- ☐ raters/appraisers



Lessons Learned con't

 Create a model that causes no mortgage delays

-  Need to fit into an industry that is closing in 2 weeks or faster
-  Tap into the refinance market that does not have these deadlines





Opportunities

- ✎ Existing homes represent the greatest potential residential energy savings opportunities (especially with tax credits)
- ✎ Mortgages offer the greatest opportunity for long-term/low interest rate/tax deductible financing
- ✎ Raters are the best people and in the best position to facilitate existing home upgrades



Next Steps



-  I challenge you to figure out how to create an existing homes market for HERS
-  Report back next year with your lessons learned and success stories.

