

HOME ENERGY LABELING AND ENERGY RATER CERTIFICATION IN THE U.S.

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ABSTRACT

This session will provide an overview of how homes are labeled and energy raters are certified in the U.S.

The Residential Energy Services Network (RESNET) is a private non-profit organization. RESNET's activities include:

- Maintains the national home energy rating standards
- Accredits rating providers, rating software programs, and rater training providers
- Work with the U.S. mortgage industry in developing and promoting residential energy financing products

Home energy ratings in the U.S. involve the labeling of a home on its energy performance by a certified building performance professional. Home energy ratings were introduced in America in 1984. Ratings are used for:

- Incorporating energy efficiency into the mortgage loan (energy mortgages)
- ENERGY STAR Homes labeling
- Verification of a homes compliance to energy codes
- Verification of federal tax credits

The ENERGY STAR Homes Program is a federal sponsored voluntary program to reduce carbon dioxide production in new homes. In 2004 over 130,000 homes were rated through the RESNET standards. Energy mortgages increases the home buying power of consumers by financing the energy upgrades in the mortgage loan and using the ensuing energy savings in qualifying for a home loan.

The RESNET standards address:

- Rating program administration
- Technical guidelines
- Rater training and qualification

KEYWORDS

Home energy performance, home energy ratings, financing energy improvements

Tables

TABLE 1
U.S. Rating Label

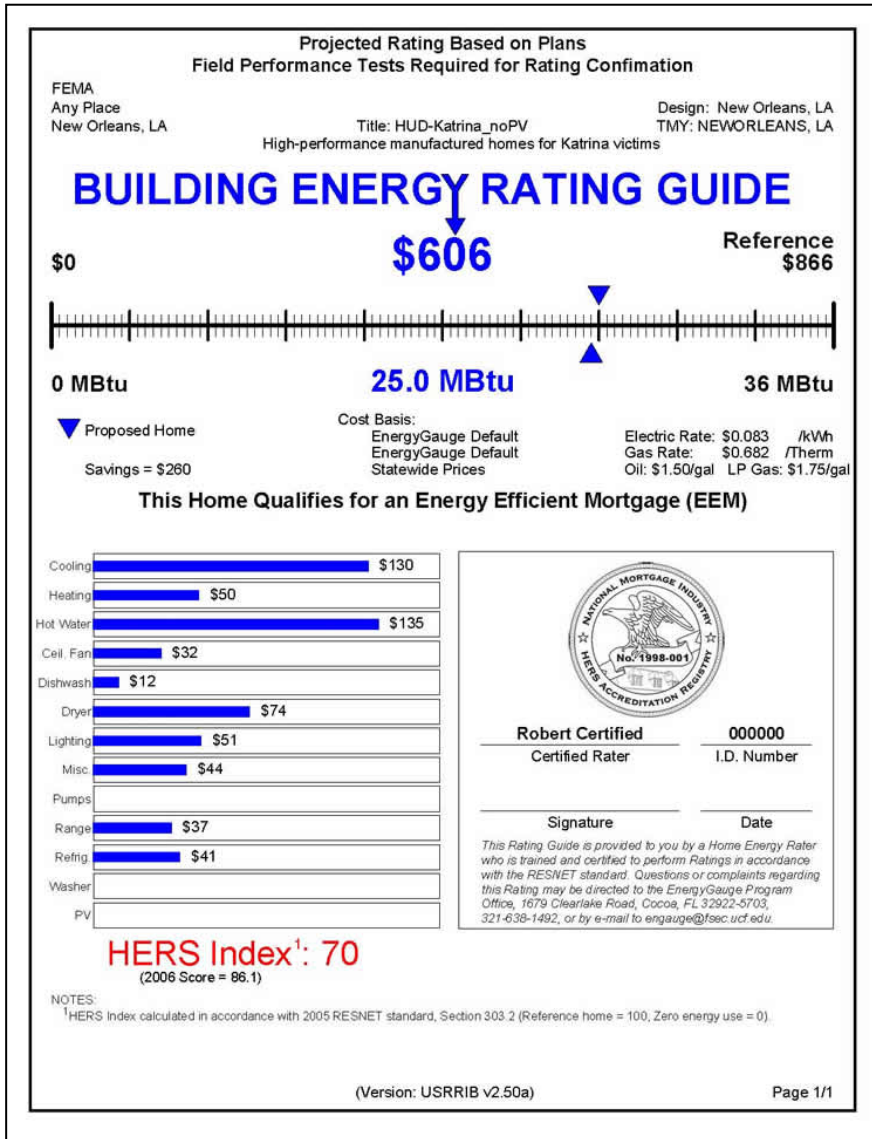


TABLE 2
Rating Improvement Report

The Energy Efficiency Investment Advantage

Original Building: Example - Baltimore Code
I. B. Satisfied
14 Every Place
Baltimore, MD
TMY:MD_BALTIMORE

Improved Building: Example - Baltimore Code(A: All)
I. B. Satisfied
14 Every Place
Baltimore, MD
TMY:MD_BALTIMORE 2/3/2005

This is a comment load test

Improvements

Measure	Original	Improved
Roof/Attic (Attic Insulation)	R-value(34.00)	R-value(48.00)
Window (Vinyl Low-E Triple wof stor	U-Value(0.47) SHGC(0.68)	U-Value(0.32)SHGC(0.68)
Window (Vinyl Low-E Triple wof stor	U-Value(0.47) SHGC(0.68)	U-Value(0.32)SHGC(0.68)
Window (Vinyl Low-E Triple wof stor	U-Value(0.47) SHGC(0.68)	U-Value(0.32)SHGC(0.68)
Others	* See Package Report	



Efficiency Pays

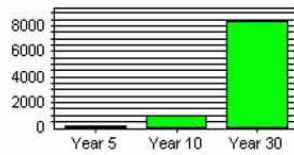
Analysis with Mortgaged Improvements



Monthly Cash Flow (\$)

Money In The Bank

Compounding At 5.00% Interest



Cumulative Savings (\$)



Your Investment for 30 years

Total Upgrade Cost = \$4847
Estimated Annual Savings = \$434
Present Value of Costs = \$7558
Present Value of Savings = \$9513
Net Present Value = \$3248
Rate of Return = 19.74%

Good for the Earth

Reduced Annual Pollutants:

NOX 27.5 lbs.
SO2 64.7 lbs.
CO2 5.9 Tons

Annual Energy Bill

