"Free Appraisal Resources that Add Credibility"

Presented by Sandra K. Adomatis, SRA, LEED Green Assoc., GREEN

Session 1 of 3

RESNET
RESIDENTIAL ENERGY SERVICES NETWORK

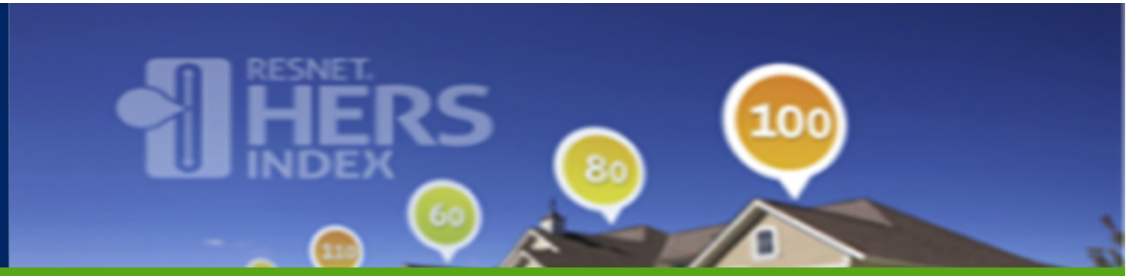
2 MILLION
HERS-Rated Homes and Counting!

The Webinars are brought to you by our sponsors.

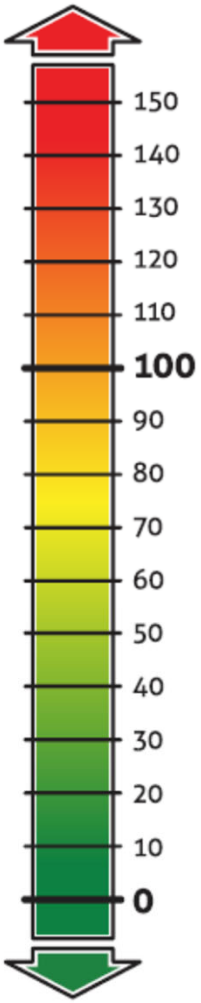
RESNET®
RESIDENTIAL ENERGY SERVICES NETWORK

- An industry-based, not for profit organization founded in 1995
- A national standards making body for building energy efficiency rating and certification systems in the USA (ANSI Accredited Standards Development Organization)
- Created and maintains the Mortgage Industry National Home Energy Rating System Standards
- Set the standards for certification of Home Energy Raters and Quality Assurance of HERS Ratings

What is the HERS Index?



- The **national standard** by which a home's energy efficiency is inspected and rated.
- A typical home built to 2006 energy efficiency standards scores 100 on the HERS Index.
- A 1-Point change in the HERS Index represents a 1% change in energy use.
- A lower Index Score means a home uses less energy.
- A home with a HERS Index Score of 0 produces as much energy annually as it uses.



- A simple, easy to understand system for prospective homebuyers, Realtors, Appraisers and utilities to compare the energy performance of homes.

RESNET® HERS® INDEX

The HERS Index accounts for a home's energy consumption of heating, cooling, water heating, lighting and some appliances.

The Concept of an Energy Rating

HERS Rating

Reference Home

- Generated by software
- Establishes baseline to compare rated home to
- Minimum requirements established in the 2006 IECC and Federal law
- Scores ~100 on HERS Index scale

Rated Home

- The “as-built” home
- Components entered by the Rater
- Component that is more efficient than the reference home will reduce energy use & Index score in the rated home.
- Less efficient components will do the opposite.

Published White Paper- October 2019

New White Paper by Freddie Mac

Summary of Findings

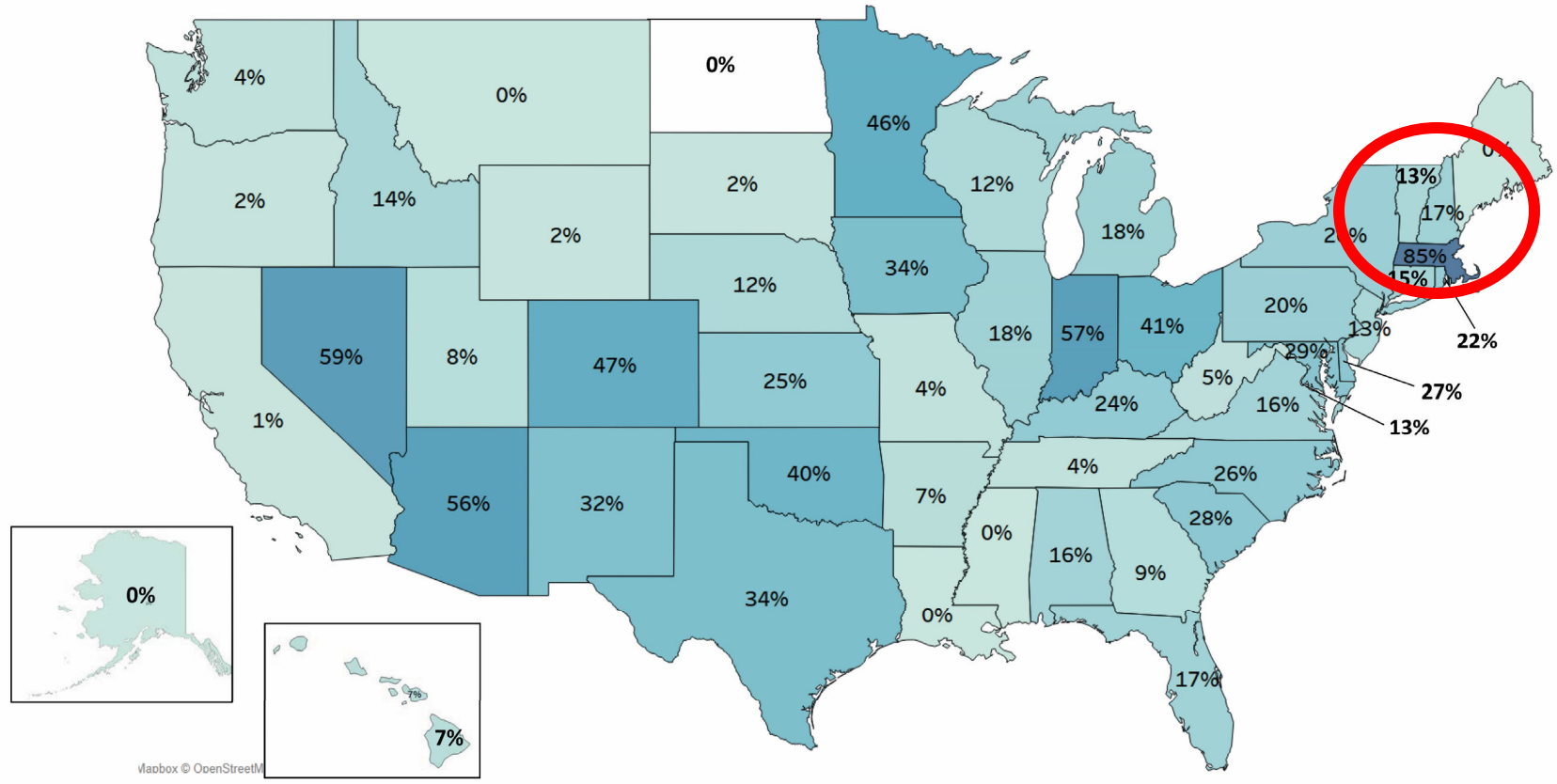
Using a national random sample, we conducted an analysis of energy-efficient homes rated between 2013 and 2017 and found:

- From the property value analysis, rated homes are sold for, on average, 2.7% more than comparable unrated homes
- Better-rated homes are sold for 3-5% more than lesser-rated homes.
- From the loan performance analysis, the default risk of rated homes is not, on average, different from unrated homes, once borrower and underwriting characteristics are considered.
- Loans in the high debt-to-income (DTI) bucket (45% and above) that have ratings, however, appear to have a lower delinquency rate than unrated homes.

https://sf.freddiemac.com/articles/insights/energy-efficient-home-improvements-can-increase-home-value

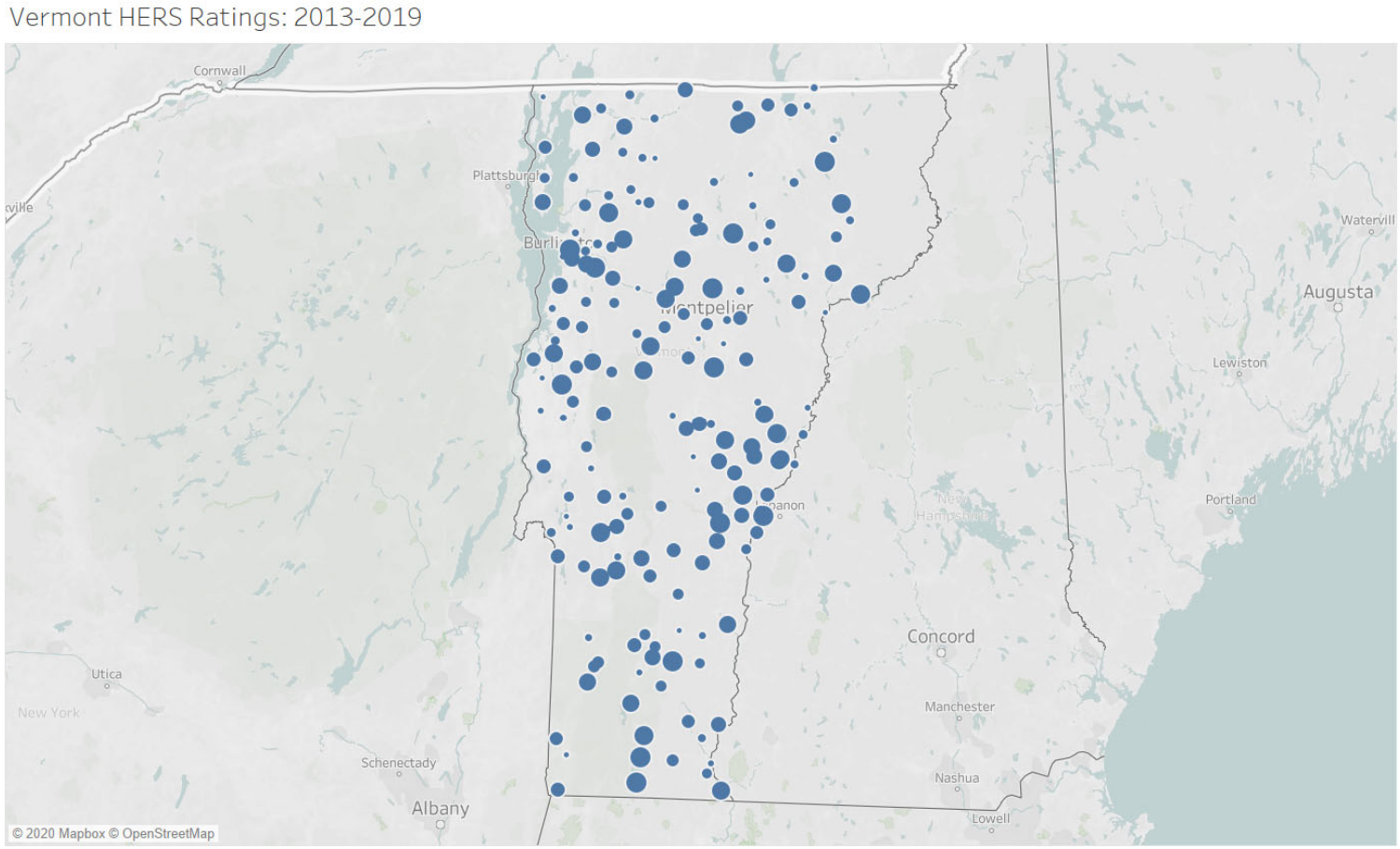
- Source: ***Energy Efficiency: Valued Added to Properties and Loan Performance***, Freddie Mac, Dated October 2019

Percent Homes HERS Rated by State, 2019



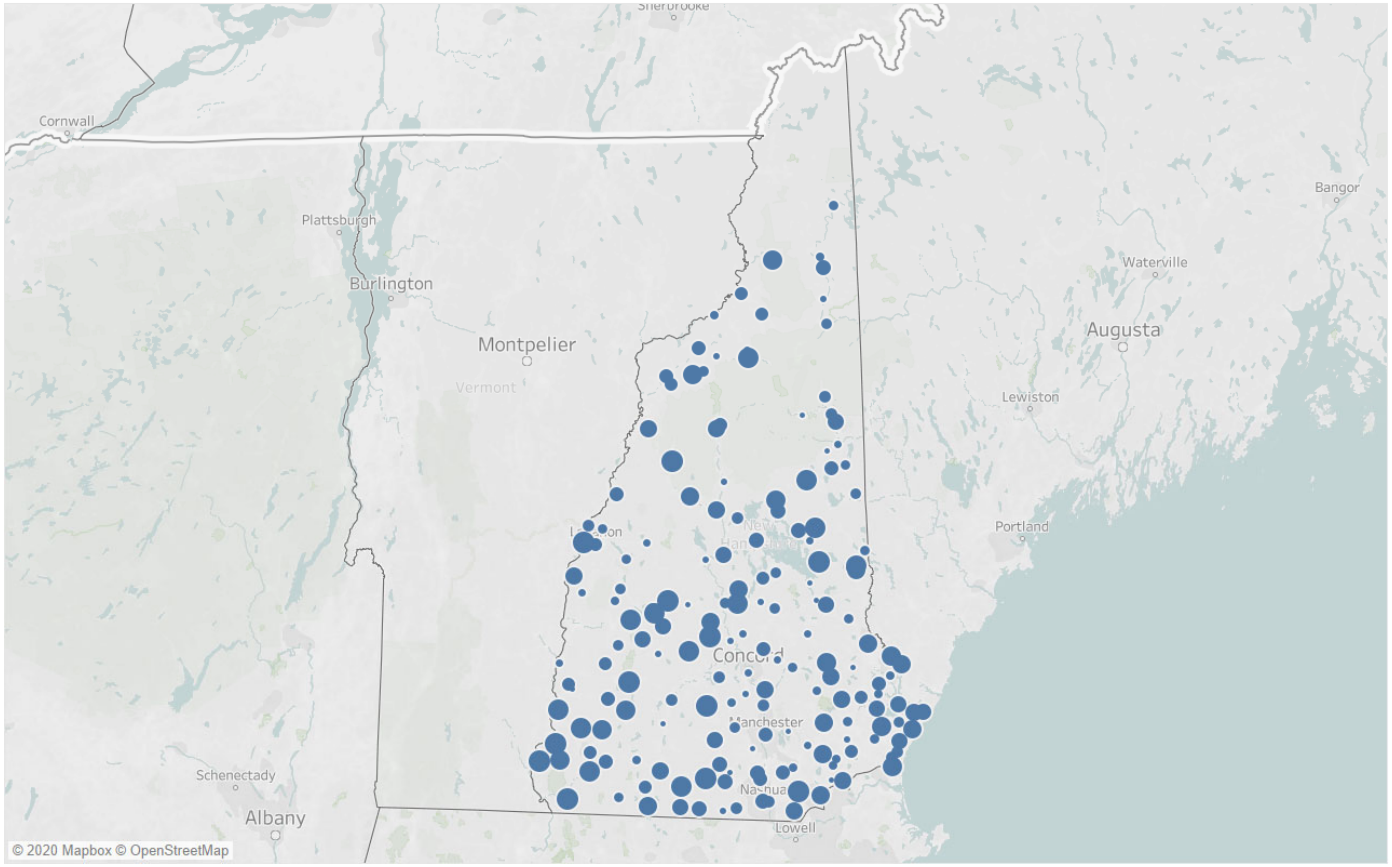
Single Family and Duplex Homes
Based on Data from the RESNET National Buildings Registry and U.S. Census Bureau

Vermont HERS Ratings 2013-2019



New Hampshire HERS Ratings 2013-2019

New Hampshire HERS Ratings: 2013-2019



New Hampshire & Vermont HERS Statistics

Vermont Average HERS Ratings Annually

Year Registered	Number of Ratings	HERS Index (Average)
2017	311	43
2018	197	42
2019	126	34

New Hampshire Average Ratings Annually

Year Registered	Number of Ratings	HERS Index (Average)
2017	561	60
2018	873	58
2019	742	55

HERS Trending Information

The states with the lowest average HERS Index Scores were:

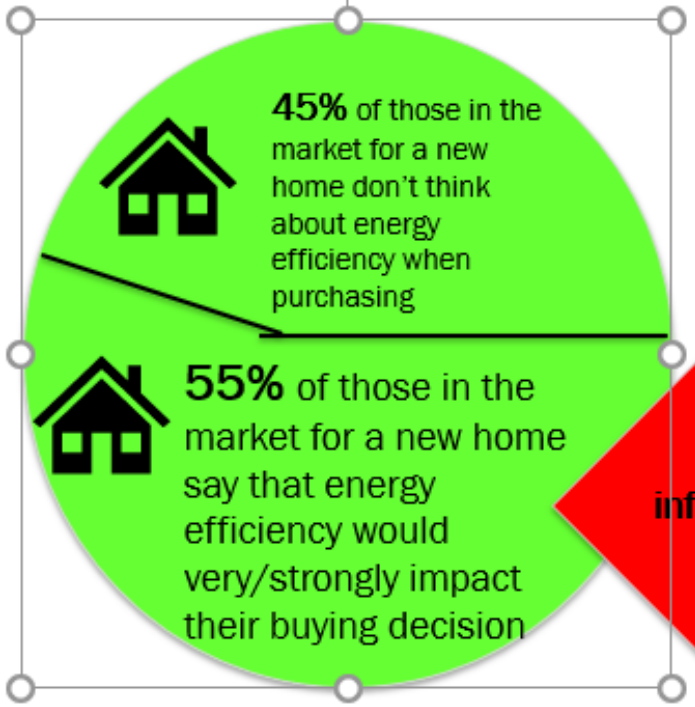
- Vermont – 34
- Hawaii – 42
- South Dakota – 43
- Minnesota – 50
- California – 51
- Connecticut – 51
- New York – 51
- Oregon – 51

https://www.resnet.us/articles/over-241000-homes-hers-rated-in-2019/

Market Reaction – Buyer's Preferences

energypulse ™ Special Report by the Shelton Group - 2019

20% of Americans say they are planning to buy a home in the next 2 years



Over half say EE influences their buying decision

Survey is based on national sample of 100% of Americans.

Highest and Best Use?

- Do buyers prefer a house in good condition or a house in good condition that will cost them less per month? (Lower Energy Costs-Better Indoor Air Quality)

How do I find homes that have HERS Ratings?

Public Database is available without login or password

https://www.hersindex.com/hers-rated-home-search/

Appraisal Institute Members have secured RESNET Appraiser

Portal URL: https://portal.resnet.us/

Public Database is available without login or password

https://www.hersindex.com/hers-rated-home-search/

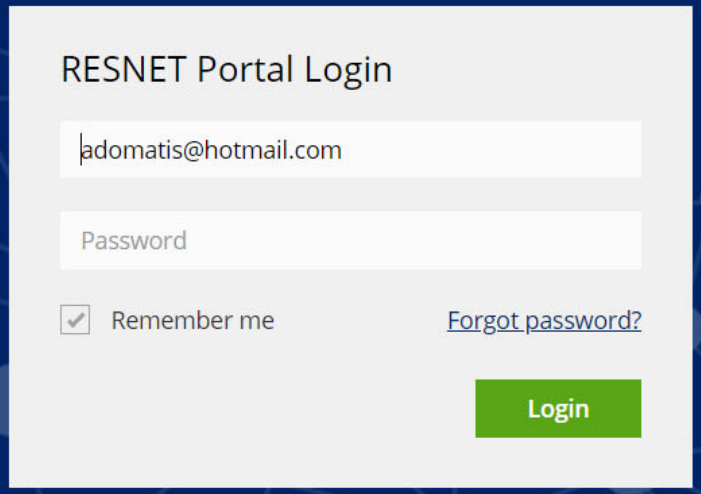
RESNET Public Access Information is Limited.

https://www.hersindex.com/hers-rated-home-search/

RESNET

Its Free! An AI member benefit!

AI Members must register a username and password.



https://portal.resnet.us/

RESNET Appraiser Portal – Appraisal Institute Members, Candidates, Practicing Affiliates

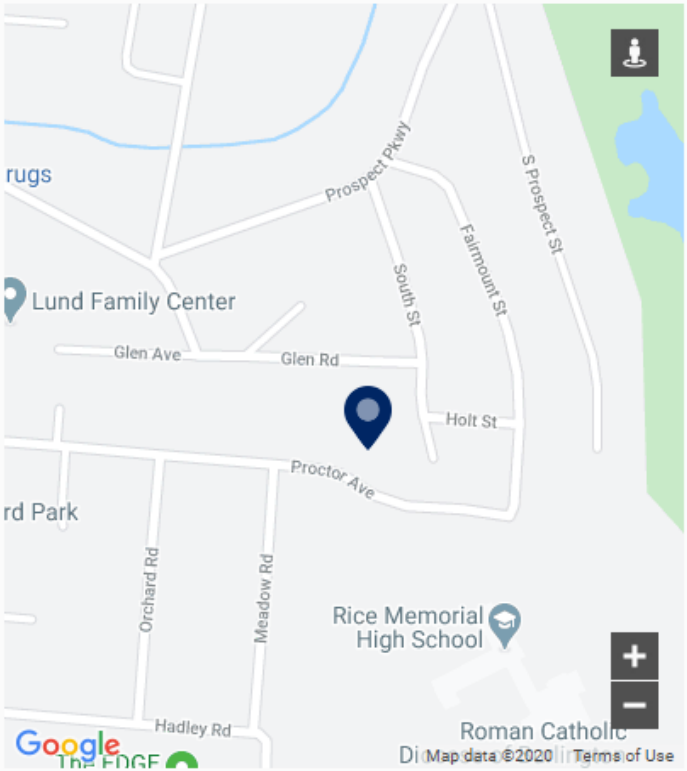
RESNET

Home > RESNET HERS Index Search Tool > **105 Glen Rd**

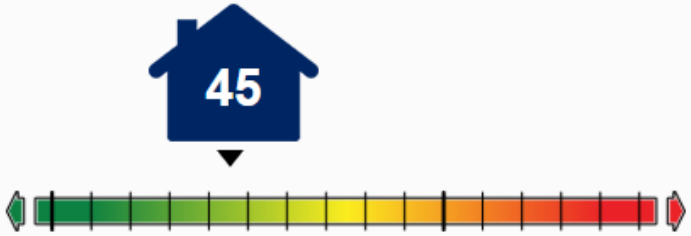
- Dashboard
- HERS Index Search
- My Profile
- Logout

105 Glen Rd, Burlington, VT 05401

https://portal.resnet.us/APS/HERSIndexSearch#



HERS Index Score



Builder's Name:	Scott Gardner
HERS Rating Company:	Vermont Energy Investment Corp
Year of Construction:	2016
Date submitted to Registry:	2016
Annual Energy Costs:	$2209
Annual Energy Savings:	$1920
Energy Star Certified:	No

RESNET's Databases Only Show Confirmed Ratings

AI Reports®
Form 820.06*

Client File #:		Appraisal File #:	

Residential Green and Energy Efficient Addendum

Client:		
Subject Property:		
City:	State:	Zip:

Additional resources to aid in the valuation of green properties and the completion of this form can be found at
http://www.appraisalinstitute.org/education/green_energy_addendum.aspx

Energy Label Labels disclose the sta… ene…	RESNET's HERS Rating (0 to 150): _____ ☐ Sampling Rating ☐ Projected Rating ☐ Confirmed Rating	Estimated energy savings for this home: $____/year ____¢kWh rate dated__/__/__ *Energy Savings includes electricity, heating & Cooling.* *Score below 100 indicates energy costs are expected to be lower than average code-built home. HERS Index Report occupancy estimates energy cost based on number of bedrooms plus one. Only a "confirmed rating" is diagnostically tested.*

Differences in HERS Ratings

	Sampling	Projected	Confirmed
Random Testing of a number of houses built by same builder.	X		
Rating based on plans and specifications – preliminary – not tested		X	
Diagnostically tested with blower door and duct blaster			X

A Sampling or Projected rating requires an extraordinary assumption in an appraisal report. Builders should provide a Projected Rating for mortgage lending work to allow appraisers to understand the energy efficiency. A Confirmed Rating cannot be done until the house is completed.

Search the RESNET Databas for each sale use as a comparable

Energy ratings give appraisers a standard to judge energy efficiency. It should not be a guess or an assumption.

Appraisal Text Addendum

- Give the link to the RESNET database you used to verify the subject and comparable sales ratings or lack thereof.

- If the subject has a HERS Rating – None of your comparables do.. Explain how you arrived at an Energy Efficient Adjustment.. 0+

- Keep in mind that houses built prior to 2000 were built during a period when the building code was not as comprehensive as current codes… that means older code-built sales are not as efficient as newer code-built homes are today.

Does the HERS Rating consider the structure being occupied?

- Yes
- Occupancy considered by HERS Rating
- 1 person per bedroom PLUS 1

Appraisers can develop a file to build confidence in the rating.

Survey of HERS Rated Homes				
Date of Survey	Address	Date of HERS Rating	Estimated Energy Cost Annually	Actual energy cost
2/4/2018	124 Zero St	2018	$1,855	$1,950
4/6/2018	34 Brown St	2017	$1,965	$1,765
8/4/2018	44 Pine St	2016	$1,875	$1,650

For educational purposes only – not real data

Causes for variance in actual vs estimated energy costs.

- Difference in actual occupancy versus rating occupancy
- Plug loads higher than envisioned in rating
- Thermostat setting higher or lower than rating standard
- Lack of maintenance
- Changes in window, door, lighting, etc.

Current Building Code

State Code Status: New Hampshire

Current Commercial Code

2009 IECC with references to ASHRAE 90.1-2007
Passed 12/11/2009, effective 4/1/2010

✓ Can use **COM*check*** to show compliance.

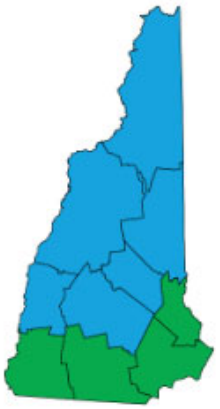
Current Residential Code

2009 IECC with **New Hampshire amendments**
Passed 12/11/2009, effective 4/1/2010

✓ Can use **RES*check*** to show compliance.

Local jurisdictions can amend the adopted state code but have no authority to adopt another code.

The New Hampshire state building codes statutes are contained in **Title XII, Chapter 155-A**.



Climate Zones: 5A, 6A

http://bcapcodes.org/code-status/state/new-hampshire/

Current Building Code

State Code Status: Vermont

Current Commercial Code

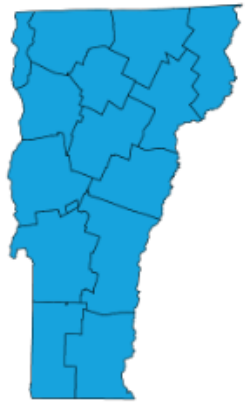
Commercial Building Energy Standards (CBES)
Based on the 2015 IECC, includes alternative compliance path of ASHRAE 90.1 2013 with some Vermont specific requirements
Effective 3/1/2015

✓ Can use **COM*check*** to show compliance.

Current Residential Code

Residential Building Energy Standards (RBES)
Based on the 2015 IECC
Effective 3/1/2015

✓ Can use **RES*check*** to show compliance.



Climate Zone: 6A

http://bcapcodes.org/code-status/state/vermont/

Building codes are key to understanding high-performance

- Appraisers that have knowledge of the building codes in their market area, will have a better perspective of truly “comparable” sales.
- Comparing new construction (less than 5 years old) to houses that are 10-20 years old with no consideration for the energy efficiency is not acceptable.
- Homeowners, agents, and builders must document the high-performance features for lenders at time of mortgage application. That should be the red flag that identifies the competency the appraiser needs.

Learn more about how to implement green into appraisal report & marketing

A Guide to the Residential Green and Energy Efficient Addendum

By Sandra K. Adomatis, SRA, LEED Green Associate, NAR GREEN
May 2018

Reviewed by Ben Hoen of Lawrence Berkeley National Laboratory

https://www.appraisalinstitute.org/assets/1/29/A_Guide_to_Res_Green_EE_Addendum.pdf

From the Guide – Best Practices

Comments Include source for information provided in this section.	If a property is built green but not formally certified, it still deserves proper description and analysis to value the features. The market analysis is of the structure's physical, economic, and locational attributes and not an analysis of its label alone. Provide additional information that illustrates how this property exceeds local building code. This document is intended for new construction or existing homes that have been retrofit to include higher energy or green features.
	"The local building code is 2009 IECC. This structure is built to a higher standard than the 2009 IECC and is 32% more energy efficient than the local building code. The HERS Rating for this same house only built to the 2009 IECC standards in this market would be 77 at this location and this structure has a HERS Rating of 45. This house has an estimated energy savings of $850 annually as a result of the upgrades. The savings is documented in the attached HERS Report."

A HERS Rater can give a HERS Rating for the same structure at the same location built to code as well as the actual HERS Rating based on the details included in the Addendum. If this information were readily available to real estate professionals and the general market, better valuation, listing, marketing, and buying decisions could be made. Knowledge is the key to better decisions.

https://www.appraisalinstitute.org/assets/1/29/A_Guide_to_Res_Green_EE_Addendum.pdf

Guide Addresses Appraiser, Listing, & Lender Relevance for each section.

- Where does it go on the 1004 (appraisal form)?
- Why is it important?
- How can it be used in marketing (MLS & other)?
- How can lender use in underwriting (Energy Savings and marginal buyer or for EEM Loan)?

AIRGEEA Myth

Only AI Members can use the Addendum (AIRGEEA)

Anyone can use the AIRGEEA!

Valuation of Sustainable Buildings

Title	Hours	State Approval
Introduction to Green Buildings	8	State Approval
Case Studies in Appraising Green Residential Buildings	8	State Approval
Residential and Commercial Valuation of Solar	15	State Approval
Case Studies in Appraising Green Commercial Buildings	15	State Approval
Practical Applications in Appraising Green Commercial Properties	15	State Approval

FAQs
Program Registry – Residential
Program Registry – Commercial

https://www.appraisalinstitute.org/education/your-career/professional-development-programs/#Valuation%20of%20Sustainable%20Buildings

Efficiency Vermont

RESNET RESIDENTIAL ENERGY SERVICES NETWORK

2 MILLION HERS-Rated Homes and Counting!

Now for Your Questions

For Further Information…

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Setting the Standards for
Home Energy Efficiency