



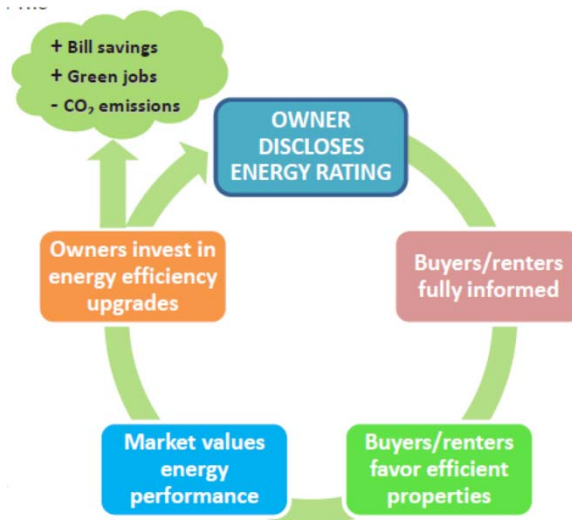
Development of Vermont's Voluntary Residential Building Energy Label

Vermont Energy Labeling Working Group
Report to the Vermont Legislature
As Called for in Act 89 of 2013
February 11, 2014

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Why Label Homes?



From NEEP'S
VALUING BUILDING
ENERGY EFFICIENCY
THROUGH DISCLOSURE
AND UPGRADE
POLICIES A ROADMAP
FOR THE NORTHEAST
U.S.

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Vermont's Rating & Labeling History

- HERS since 1987
 - Energy Rated Homes of Vermont
 - Rating primarily new construction
- 2011 Building Energy Disclosure Working Group
 - Focus on mandatory disclosure at time of sale
- 2011 Comprehensive Energy Plan
- 2012 Thermal Efficiency Taskforce
 - Recommendation: *"Make efficiency visible. Begin delivering a [voluntary energy performance score or label](#) to existing buildings in Vermont, then [reevaluate after 3 years](#) to determine whether labeling and disclosure should be phased in as a requirement at time of sale."*
- Act 89 of 2013
 - "Voluntary Building Energy Disclosure Working Group"
 - Develop or select one or more tools that can be used to generate the energy rating" that would be used "to disclose the energy performance of the building or a unit within the building ..."
 - Reports:
 - Dec. 2013: Residential
 - Dec. 2014: Commercial (and Multifamily)
 - Dec. 2016: Mandatory?

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Working Group Members

- Emily Levin, Efficiency Vermont (chair)
- Richard Faesy, Energy Futures Group (co-chair)
- Central Vermont Community Action Council
- Building Performance Professionals Association
- Efficiency Vermont
- NeighborWorks of Western Vermont
- Sustainable Energy Resources Group
- Vermont Gas Systems
- Vermont Green Homes Alliance
- Vermont Office of Economic Opportunity
- Vermont Public Service Department

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Working Group Focus

1. To enable homeowners who have invested in energy efficiency to, on a voluntary basis, make that investment visible when selling or appraising the home.
2. Recommended a multi-pronged approach:
 - Voluntary energy score and label;
 - Describe the energy features in the MLS system;
 - Include utility bills as attachments to MLS listing; and
 - Recognize achievement with certifications.

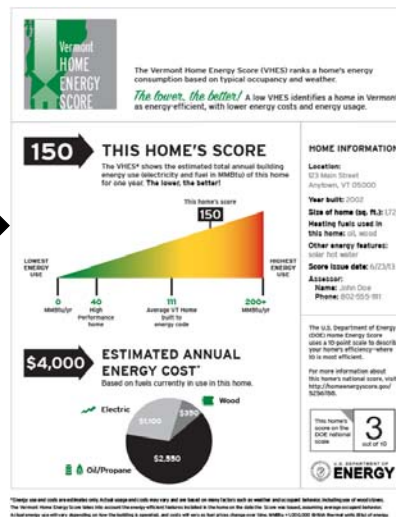


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Score & Label Elements

Wedge graphic (MMBtu/yr)

Estimated energy costs (\$/yr)



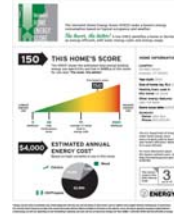
General home information

U.S. DOE Home Energy Score

Score basis (references)

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Benefits of the Vermont Home Energy Score



- MMBtu score...
 - Durable over time
 - Granular to reflect house improvements
 - Aligns with Vermont's energy goals - less energy is better
 - Corresponds with actual energy use/carbon impacts
 - Common denominator for HERS, DOE's Home Energy Score, other tools
 - Potential for regionally & nationally consistent score
- Cost
 - Can be delivered for "free" (when added to an audit) or
 - for less than \$250 (when stand-alone)
- Aligns with Building Energy Disclosure Working Group Core Principles

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Building Energy Disclosure Working Group Core Principles

1. Reasonable cost to end user (\$0-300)
2. Rating can be presented as a single number or letter to allow market comparisons
3. Accurate (repeatable, predictable, realistic)
4. Makes recommendations for upgrades to focus on high-priority areas
5. Smooth process to pursue upgrades based on rating
6. Residential: Asset rating – based on features of home rather than occupant behavior
7. Commercial/Institutional: Operational rating - occupant-based
8. HERS-compatible: If different than HERS, can be translated or linked to HERS
9. Tiered on-ramp - allowing drilling deeper if desired for more accuracy
10. Ability to customize and maintain for VT

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Asset vs. Operational

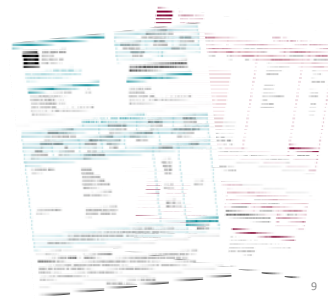


← Asset

- ▶ Modeled energy performance
- ▶ Standardized for occupancy & weather
- ▶ Fixed over time

Operational →

- ▶ Actual energy usage
- ▶ Dependent on occupancy & weather
- ▶ Changes over time



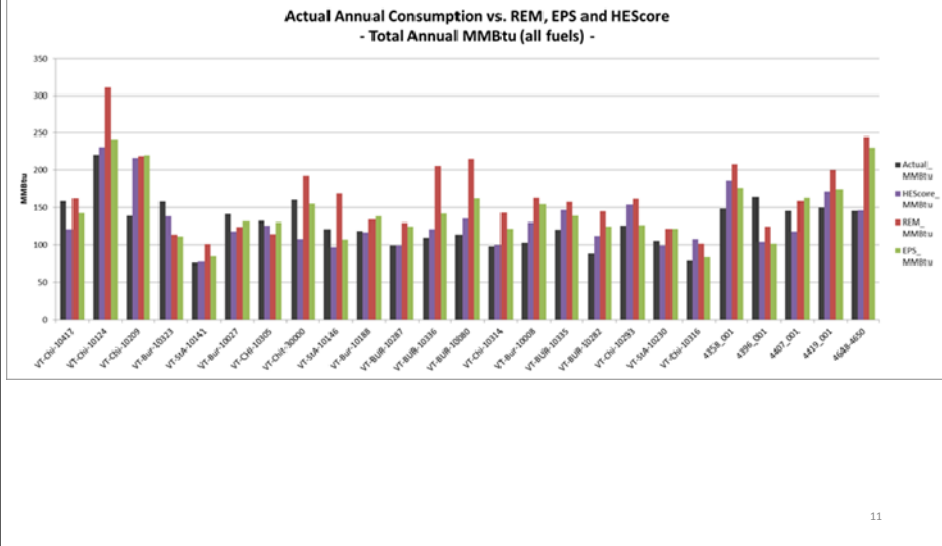
Comments & Input

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- Public comment process
- Meetings with Realtors and regional MLS (NNEREN)
- Discussions with U.S. Department of Energy
- Customer testing



Rating Tool Testing



Multi-Pronged Approach – Beyond the Label

Voluntarily include energy performance in the real estate process:

1. Energy features in the MLS system
2. Previous utility bills as attachments to MLS listing as part of home sales and purchases
3. Recognize achievements with certifications



Recommendations

1. *Support voluntary approaches*
2. *Encourage partnerships*
3. *Implement the proposed residential labeling approach*
4. *Adopt and implement the proposed governance structure and budgets*
5. *Support administration and statewide coordination*
6. *Develop multifamily, commercial and industrial labels*
7. *Create a locational efficiency working group*
8. *Plan and evaluate for the December 2016 report on mandatory approaches*



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Next Steps

- Efficiency Vermont will serve as statewide coordinator for the Vermont home energy label
- An Advisory Board comprised of the Public Service Department, Vermont Gas Systems, Burlington Electric Department, and the Weatherization Agencies will provide guidance and oversight
- In 2014, EVT and the Advisory Board are working to:
 - *Finalize label design*
 - *Set up agreements with DOE*
 - *Configure the scoring and labeling tool*
 - *Set up assessor standards and QA process*
 - *Coordinate with MLS, Realtors, and Appraisers*
 - *Coordinate efforts with New Hampshire*
 - *Develop educational materials*

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Q&A

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