Residential Labeling – Where Are We Now? What’s on the Horizon?

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Where Are We?

Tremendous interest in ratings – at least among efficiency advocates

Growing recognition that market transformative approaches are needed

Can be difficult deciding where to focus

Lots of Different Players
- Utilities
- Home Inspectors
- Contractors
- REALTORS
- Lenders
- Multiple Listing Services
- Appraisers
- Retailers
- Manufacturers
- Buyers, Sellers, Current Owners

Lots of Opportunities
- Training
- Financing
- Policy
- Public Information
- And much more…

Traditional programs & incentives will NOT get us to where we need to be in terms of energy or carbon reductions
Why Do Homeowners & Buyers Care About Energy Efficiency?

- **U.S. Census**: Energy costs are higher than property tax & insurance for average U.S. homes.

- **NARI Report**: Energy improvements are good investments that bring financial relief and “joy”
  
  - Insulation Upgrade: 61% say greater desire to be home, 95% same or increased sense of enjoyment, and 66% major sense of accomplishment.
  
  - HVAC Replacement: 57% say greater desire to be home, 59% say increased sense of enjoyment, 55% major sense of accomplishment.

Studies Nationwide Show Energy Efficient Homes Sell for More, Faster

Certified homes sell for 9.6% more

Certified homes sell for 4.2% more & 18 days faster

Certified homes sell for 2.1 to 5.3% more

PACE homes delivered $199 to $8,882 above cost of improvements

Homes that disclose energy costs sold 20 days faster

Homes that use “green” fields consistently perform better on market indicators

ENERGY STAR homes sold at $5,566 premium at $2.99 per ft² more, & 89 days faster

New certified homes sold for 12.9% more, $13.82 per ft² more, & 42 days faster

Homes designated relatively energy efficient sold for an average $3,416 premium

Houses with one or more green element sell for 5.9% more

Certified homes sold for a higher percentage of their asking price & 31 days faster

Natural gas homes command $11 more per square foot

The Research Says: Homebuyers Value Energy Efficiency

Studies Show a Sales Premium of:

- **2% to 12.9%** for designated energy efficient homes 1, 2, 3, 7, 12

- **$2.99 to $13.82 per square foot** for every dollar saved on annual electricity bills from efficiency investments 1, 5, 10, 15

- **$3,416 to $8,882** for designated energy efficient homes 4, 8, 9, 12, 13, 14, 15

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- **$2.99 to $13.82 per square foot** for every dollar saved on annual electricity bills from efficiency investments ¹, ⁵, ¹⁰, ¹⁵
- **$3,416 to $8,882** for designated energy efficient homes ⁴, ⁸, ⁹, ¹², ¹³, ¹⁴, ¹⁵

SOLD 18 TO 89 DAYS FASTER ¹, ², ⁶, ⁷, ¹¹, ¹⁵

Designated energy efficient VS. Comparable home

Sources:

More Evidence from Around the World


- 2013 study of nine EU jurisdictions
  - Found between 2% and 6% appreciation in home value attributed to one-letter rating improvement

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<tbody>
<tr>
<td>Austin, TX</td>
<td>12% (first year of program) (ACEEE 2011)</td>
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<tr>
<td>Australia (ACT)</td>
<td>15% (Energy Consult 2006)</td>
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<tr>
<td>France</td>
<td>37% (ADEME 2012)</td>
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<td>Portugal</td>
<td>17.5% (ADENE 2015)</td>
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<tr>
<td>The Netherlands</td>
<td>22% (Murphy 2014)</td>
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So How Do We Get This Info Into the Hands of Home Buyers & Others Who Can Use It?
Home Energy Information Accelerator

Vision of widespread use of reliable home energy information in real estate transactions, enabling fair value at time of sale for energy efficient and high performing homes.

1. Expand Pipeline
2. Develop Tools & Systems
3. Demonstrate Use
4. Recognize Champions

Success Metric: Expand availability and use of reliable home energy information to demonstrate replicable models of automated, linked systems influencing home sales.
# The Home Energy Information Accelerator Partners

## National Partners
- Appraisal Institute
- CoreLogic
- Council of Multiple Listing Services
- Green Button Alliance
- Homes.com
- Home Innovation Research Labs
- Home Performance Coalition
- National Association of Realtors® Center for Realtor® Technology
- National Association of State Energy Officials
- PicketFence.com
- Real Estate Standards Organization
- Realtors Property Resource LLC
- U.S. Green Building Council

## Five Pilot Locations
- **California** – Build it Green, CRMLS
- **Chicago Metro** – Elevate Energy; Illinois Department of Commerce & Economic Opportunity, MRED
- **Colorado** – Colorado Energy Office, IRES
- **Northeast/VT** - Northeast Energy Efficiency Partnerships, Vermont Energy Investment Corporation
- **Oregon** - Earth Advantage, Oregon Department of Energy, Enhabit
Building the Pipeline of Ratings: Growing Activity by State and Local Governments

The following use Home Energy Score:

- CO
- CT
- VT
- NH
- AL
- AR
- MO
- OR
- CITY OF BERKELEY, CA

Other cities and states exploring residential energy labeling policies:
Portland, OR; Fort Collins, CO; Rhode Island; New York; Massachusetts
3D Sim Training & Testing Opened the Market

- Free online Assessor training & test
- 350+ Active Assessors
- Home Inspectors ramping up
45,000+ homes scored since 2012

- Growing uptake: Last 12 months, on average 1,500 homes scored/month

- 7 software tools now using our API; others expected soon

- No need to enter data in two places

New semi-customizable label

- v.2016 Scoring Tool will include PV
Real Estate Standards Organization:
Called on MLSs to Adopt Standard Green Fields by January 2018

MLSs that Currently Feature Home Energy Score

- REColorado (Denver, CO)
- Aspen Glenwood (CO)
- Cincinnati (OH)
- MRIS (DC, VA, MD)
- NEREN (VT, NH)
- & Others!
Financing Options for Energy Efficiency Improvements

- Finance up to 15% of “as completed” home value for energy improvements
  - $500 incentive to lender on each loan
  - Pay off existing energy improvement debt (including PACE)

- Requires a Home Energy Score, HERS report, or comparable locally-supported report
  - Finance up to $3,500 in weatherization or water-efficient improvements with no energy report

Source: Fannie Mae HomeStyle Energy Mortgage Loan Real Estate Fact Sheet
Additional Loan Opportunities

- FHA’s “stretch” policy
  - Allows borrowers to qualify for a 2% stretch on debt-to-income ratios for homes that score a 6 or higher, or for improving less efficient homes to that threshold
  - Aligned with Fannie Mae’s HomeStyle Energy policy

- Property Assessed Clean Energy (PACE)
  - $2.2 billion financed in California for energy efficiency, renewable energy, and water efficiency
  - Other states looking to adopt
  - Home Energy Score can be used to identify cost-effective measures, provide an objective estimate of savings, and document value after improvements are completed

- State & Local Loan and Financing Options
Making Sure Efficiency Information Makes Sense -- When & Where It Counts

- Opportunity to Harmonize Ratings
- Use Common Calculation Engine
- Generate Common Metrics
  - Estimated Utility Costs
  - Other
- Allow Comparison of New & Existing Homes
Resources Informing This Presentation

- Capturing Energy Efficiency in Residential Real Estate Transactions: Steps that Energy Efficiency Programs Can Take
- Fannie Mae HomeStyle Energy Mortgage Loan Real Estate Fact Sheet
- Home Energy Score for Real Estate Fact Sheet
- National Association of REALTORS® 2015 Remodeling Impact Report
Thank You!

HomeEnergyScore@ee.doe.gov
Assessor@sra.com
www.HomeEnergyScore.gov
Additional Slides/Back-Up
Home Energy Score

The U.S. Department of Energy's Home Energy Score assesses the energy efficiency of a home based on its structure and heating, cooling, and hot water systems. For more information visit HomeEnergyScore.gov.
Partner Requirements

Upon Joining
✓ Sign a partnership agreement
✓ Develop an implementation plan

Annual Commitment
✓ Complete 500+ Scores per year
✓ Rescore 5% of homes (Quality Assurance)

On-going
✓ Participate in Partner webinars
✓ Receive data for all homes scored in your area

Partners oversee Assessors to implement Home Energy Score
State & Local Efforts

- **City of Berkeley, CA**: Requires Home Energy Score prior to home sale through its Building Energy Saving Ordinance.

- **Colorado Energy Office**: Statewide program focused on real estate integration. Homes scored through home inspectors and utilities. Realtor outreach/education.

- **Missouri Statewide Home Energy Certificate**: Gold certificate for Score of 8 or higher. Silver certificate for homes that make majority of recommended improvements.

- **United Illuminating and Eversource w/ Connecticut Department of Energy & Environmental Protection**: Two utilities implementing on behalf of the state through statewide Home Performance with Energy Star program.

Utilities

- **New Jersey Natural Gas**: Homes scored after install of high-efficiency furnace/boiler/water heater to drive additional EE measures.

- **Columbia Water & Light (MO)**: Integrated into Home Performance program, homes scored before & after improvements.

- **Focus on Energy (WI)**: Initially planned with a direct install program and now plans to integrate into Home Performance program.
This 3-D Tool developed with significant input from outside experts & practitioners.

- Uses computer-based simulations to recreate a range of job-site scenarios.

DOE conducted in-classroom/in-the-field validation study

- Confirmed effectiveness of simulation tool in determining a candidate’s competency to deliver the Home Energy Score.

DOE now recognizes certifications from many different building-related organizations.

As a result...Many more building professionals are now be able to offer the Score.
Energy Disclosure Can Be A Good Step

Chicago Homes that Disclose Energy Costs Spend Less Time on Real Estate Market (Elevate Energy, 2015)

- Homes that disclose energy costs: median 43 days on market; 66% closing rate
- Homes that did not disclose: median 63 days on market; 53% closing rate

Homebuyers appreciate having more information rather than less; poor ratings don’t discourage home purchases

- This helps them make the most informed decision possible, even if they will need to fix an energy feature of the home
- Analysis of European disclosure programs shows, “ratings do not likely influence home buying decisions in terms of which property to purchase” (Hill et al., 2016, p. 11)
Semi-Customizable Label
Now Available