

### Home Energy Efficiency for Real Estate Professionals



### **This Presentation Covers:**

- The importance of energy efficiency to homebuyers
- Work being done to help you meet clients' desires for home energy information
- How to keep up-to-date with home energy certifications, labels, and ratings for your clients
- Links to resources for learning more







### Why Care About Residential Energy Efficiency?

#### Improving residential energy efficiency helps to:

- Improve in-home comfort for home owners, buyers, renters
- Save families money on energy bills
- Reduce wasted energy resources
- Foster growth of energy efficiency jobs in local economy
- Stabilize monthly home costs as energy prices change
- Mitigate health impacts of homes, including mold, allergens, and pests





### Why Do Homeowners & Buyers Care About Energy Efficiency?

#### Helps Reduce Costs:

U.S. Census: On average, energy costs are higher than either property tax or insurance for U.S. homes at \$2,506 per year

#### Smart Investment:

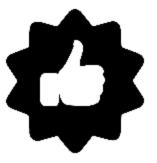
- <u>Remodeling Report</u>: Attic insulation achieves highest return on investment of all home improvement projects studied at 116.9%
  - Attic Insulation averaged the cheapest upgrade at \$1,268

#### Improves Quality of Life:

- 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
- DOE's Home Rx Report: Energy efficient homes can improve occupant health outcomes related to asthma, hypertension, and allergies.











# Buyers need access to energy efficiency information that is credible and easy to understand.



Sellers need tools that can accurately appraise the value of improved energy performance.

As a real estate professional, you can be the bridge between your clients and the energy information they want.

### Studies Nationwide Show Energy Efficient Homes Sell for More, Faster



<sup>6</sup>Griffin, 2009; <sup>7</sup>Goodman & Zhu, 2016; <sup>8</sup>Institute for Market Transformation, 2015; <sup>9</sup>Kahn & Kok, 2013; <sup>10</sup>Pfleger et al., 2011.





### The Research Says: Homebuyers Value Energy Efficiency

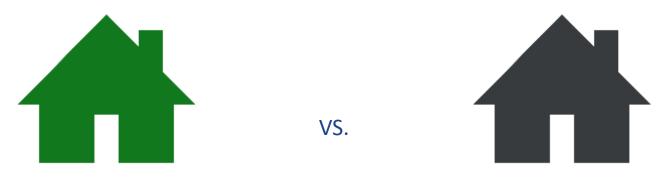
Studies Show a Sales Premium of:



2% to 6% 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



#### Designated energy efficient

Comparable home

Sources: <sup>1</sup>Argeris, 2010; <sup>2</sup>Brown & Watkins, 2016; <sup>3</sup>Cadena & Thomson, 2015; <sup>4</sup>Carson Matthews, 2009; <sup>5</sup>Dinan & Miranowski, 1989; <sup>6</sup>Elevate Energy, 2015; <sup>7</sup>Griffin, 2009; <sup>8</sup>Goodman & Zhu, 2016; <sup>9</sup>Halvorsen & Pollakowski 1981; <sup>10</sup>Horowitz & Haeri, 1990; <sup>11</sup>Institute for Market Transformation, 2015; <sup>12</sup>Kahn & Kok, 2013; <sup>13</sup>Laquatra, 1986; <sup>14</sup>Longstreth, 1986; <sup>15</sup>Pfleger et al., 2011.







### The Research Says: Homebuyers Value Energy Efficiency

Studies Show a Sales Premium of:



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Comparable home

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### Providing Energy Information Can Help Reduce Uncertainty

#### <u>Elevate Energy, 2015</u>: Chicago Homes that Disclose Energy Costs Spend Less Time on Real Estate Market

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

Hill et al., 2016: In EU, Canada, Australia, homebuyers appreciate having more information rather than less; poor ratings don't discourage home purchases, but do inform energy upgrades

- 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 homebuyers do not use ratings to discourage home purchase, rather simply to inform sale (p. 11)
- 2013 EU Study: 2% 6% appreciation in home value attributed to one-letter rating improvement

Voluntary disclosure may be a good option for your clients selling their homes





### If it Doesn't Impact Home Purchases, Why Do We Like Energy Information?

#### Knowledge is power!

Energy information with recommendations influences new home owners into making energy renovations

#### **Assessments of Home Energy Ratings on Conversion Rates**

Jurisdiction	Portion of Buyers Influenced by Rating / Disclosure Report Recommendations When Making Renovations
Austin, TX	12% in first year of program (ACEEE, 2011)
Australia (ACT)	15% (Energy Consult, 2006)
France	37% (ADEME, 2012)
Portugal	17.5% (ADENE, 2015)
The Netherlands	22% (Murphy, 2014)

Source: Hill et al., 2016. Predicting Home Energy Rating and Disclosure Program Impacts for North American Jurisdictions. ACEEE Summer Study Paper.

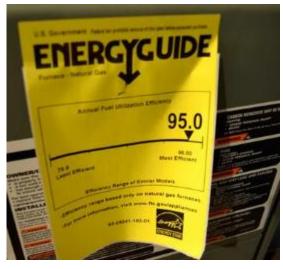




### How to Provide Energy Information: DOE's Home Energy Score

- ► A "miles-per-gallon" rating for homes
- Affordable, reliable, & easy way to understand a home's energy performance
- Third-party verified
- Any single-family or town-home can get a Home Energy Score
- Helpful for any of your clients
  - Shows seller cost-effective investments to improve their home's score before they sell
  - Lets seller showcase energy improvements they have made to their home at time of sale
  - Tells potential homebuyer information about a home's energy features

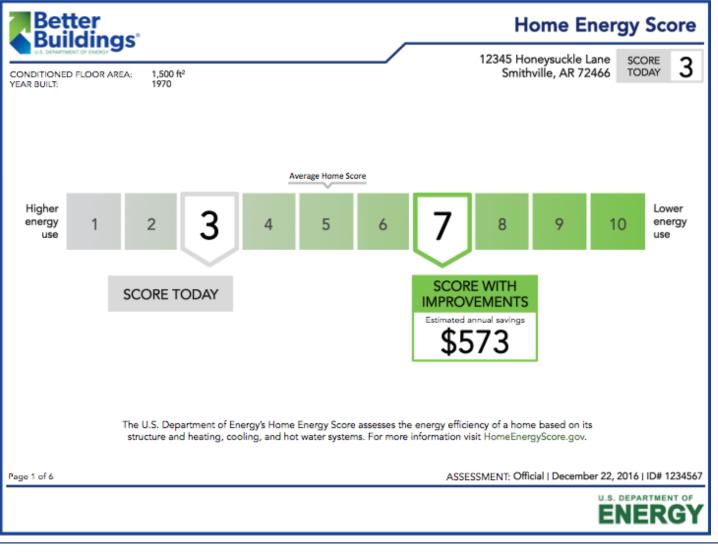








### Home Energy Score: A Tool for All Homes







### Home Energy Score: What It Means

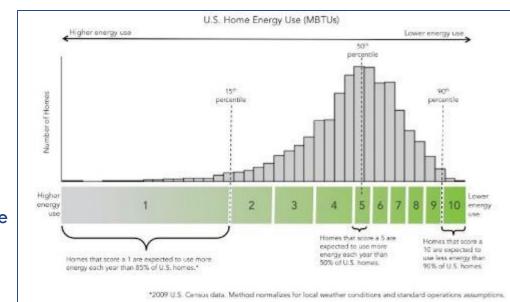
## The Score is more useful than looking at prior utility bills

- Assumes average weather for that location
- Controls for impacts due to occupant behavior by assuming "average" behavior for all homes

#### Score with Improvements:

Reflects how the home will score if cost-effective efficiency improvements are made

#### Score of 1: High energy costs



These homes are expected to use more energy each year than 85% of U.S. homes

#### Score of 5: Average energy costs

Approximately 50 percent of homes in the U.S. use less energy

#### Score of 10: Low energy costs

Homes expected to use less energy than 90% of U.S. homes; easier to keep living space comfortable





### **Other "Green Home" Designations to Know About**





NGBS GREEN VERIFIER

RESNET HERS® INDEX





ENERGY STAR





### Example: Home Performance with ENERGY STAR Certificate of Completion

- Proof home underwent energy efficiency upgrades to improve performance
  - A systematic approach to improving energy efficiency and comfort in homes
  - Reduces greenhouse gas emissions that contribute to climate change
- Improvements must be completed by participating contractors
- Third party verified by an organization separate from the contractor

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### **Green Fields with Home Energy Score Added to MLSs**



REColorado (Denver, CO)
Aspen Glenwood (CO)

Cincinnati (OH)

- MRIS (DC, VA, MD)
- NEREN (VT, NH)
- & Others!





### **Real Estate Professional Education**

#### Agents need resources to learn how to enter data fields correctly

- "O" HERS Rating = Perfect Score / Zero Energy Home!
- "0" Home Energy Score = Nonsensical / Terrible Score!
- ► ENERGY STAR Appliances ≠ Home ENERGY STAR Certification

Use resources provided on DOE's Home Energy Information Accelerator website







### No Green Fields in the MLS?

- Add Home Energy Score or other green label in the comments or "remarks" section
  - Simply upload the verifying document from the homeowner as an attachment
  - No need to wait for green fields to be available

Advocate for green field adoption on your MLS

Ask the MLS to achieve RESO's Silver Certification to standardize the data entry

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BROKER	AMERICAN CAPITAL REALTY INC.	ID#: 15801	PHON			
AGENT:	PARRY SINGH	ID#: 139347	PHON			
CO-LIST		AAN:				





### 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 locallysupported 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

Visit <u>www.dsire.org</u> to learn about financing and rebate options available in your area





### What Can You Do?

Ask sellers if their home has any third-party certifications, and include them on the MLS

- Clients with efficient homes can better market its value
- Homes certified as "green" sell for more, and faster!

# Encourage buyers to value energy efficiency in their home purchasing decisions

- An energy efficient home is likely to have lower and more stable energy bills, and more comfortable living spaces
- Ensure every client gets a beautiful, comfortable, and functional home

#### Encourage all clients to get a Home Energy Score

- Improving energy efficiency of homes may qualify for financing & incentives
- ► If desired, list the Home Energy Score on the MLS. Fix it before you list it!
- Team up with home inspectors that offer the Home Energy Score

#### Encourage your local MLS to include "green fields"

- This will help standardize listing inputs and engage more real estate professionals
- Advocate for the MLS to achieve RESO's Silver Certification, which includes green fields





# Learn more! Earn Continuing Education Units (CEUs)

- This presentation is just the start! Courses are available online and in person, some of which offer Continuing Ed. Units.
- Build It Green:
  - Certified Green Building Professional Courses
- Earth Advantage:
  - Demystifying the Green Home
  - Making Savvy Home Energy Upgrades
  - Accredited Green Appraiser
- InterNACHI:
  - Home Energy Score for Real Estate Professionals
- National Association of REALTORS®
  - NAR Green Day 1&2 Bundle







### **Thank You!**



HomeEnergyScore@ee.doe.gov Assessor@sra.com www.HomeEnergyScore.gov





### **Resources Informing This Presentation**

- Brown, Martin J., & Watkins, Taylor. (2016). The "green premium" for environmentally certified homes: a meta-analysis and exploration.
- Cadena, Anjelita, & Thomson, Thomas A. (2015). <u>An Empirical Assessment of the Value of Green in Residential Real Estate</u>.
- Capturing Energy Efficiency in Residential Real Estate Transactions: Steps that Energy Efficiency Programs Can Take
- Crawford, Jeremy. (2016). <u>Home Energy Efficiency Information: Coming to Your MLS by 2018.</u>
- ▶ Fannie Mae HomeStyle Energy Mortgage Loan Real Estate Fact Sheet
- Goodman, Laurie S., & Zhu, Jun. (2016). PACE Loans: Does Sale Value Reflect Improvements?

► Hill, Alex J., et al. (2016). Predicting Home Energy Rating and Disclosure Program Impacts for North American Jurisdictions. ACEEE Summer Study on Energy Efficiency in Buildings.

- ► <u>Home Energy Score for Real Estate Fact Sheet</u>
- Institute for Market Transformation (IMT). (2015). Greening the MLS: Bringing High-Performance Homes to Light in the District of Columbia.

Kahn, Matthew E., Kok, Nils. (2013). The capitalization of green labels in the California housing market. Regional Science and Urban Economics.

- National Association of REALTORS® 2015 Remodeling Impact Report
- ▶ Pfleger, W., Perry C., Hurst, N., Tiller, J. (2011). Market Impacts of ENERGY STAR® Qualification for New Homes.
- ► U.S. Green Building Council [USGBC]. (2014). LEED in Motion: Residential.
- ▶ Unlocking the Value of an Energy Efficient Home: A Blueprint to Make Energy Efficiency Improvements Visible in the Real Estate Market
- White House. (2016). FACT SHEET: Obama Administration Announces Clean Energy Savings for All Americans Initiative.
- ▶ Wilson, et al. (2016). Home Rx: The Health Benefits of Home Performance: A review of the current evidence.



