

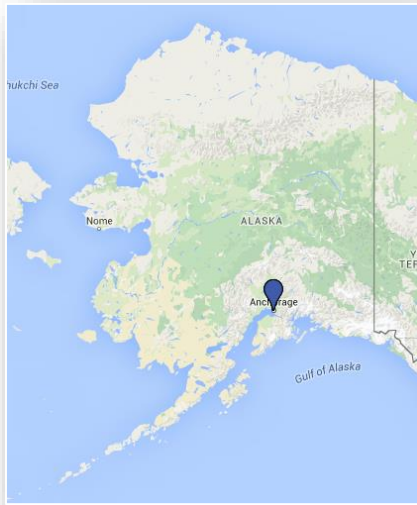


**Better Buildings Residential Network Peer
Exchange Call Series: *Advances in
Integrating Energy Efficiency into the Real
Estate Market (301)***

April 21, 2016

Call Slides and Discussion Summary

Call Registrant Locations



Call Participants – Members

- AFC First
- Alabama Energy Doctors
- Alaska Housing Finance Corporation
- American Council for an Energy-Efficient Economy (ACEEE)
- Arlington County Government
- CalCERTS, Inc.
- Cascadia Consulting Group
- Center for Sustainable Energy
- City and County of Denver
- City of Cambridge
- City of Kansas City
- City of Plano
- City of Sunnyvale
- CLEAResult
- Conservation Consultants, Inc.
- Davis Energy Group
- Ecolighten Energy Solutions Ltd.
- Efficiency Nova Scotia
- Efficient Windows Collaborative
- Focus on Energy
- Fort Collins Utilities
- Fujitsu General America Inc.
- Greater Cincinnati Energy Alliance
- Home Energy Analytics, Inc.
- Institute for Market Transformation (IMT)
- New York State Energy Research and Development Authority (NYSERDA)
- Renovate America
- Social, Environmental & Economic Consulting (SEEC), LLC
- The Oberlin Project
- United Way of Long Island
- Vermont Energy Investment Corporation (VEIC)

Call Participants – Non-Members (1 of 2)

- AJO
- Ballarat Consulting
- Belimo Americas
- Building Performance Contractors Association, New York
- Brand Cool
- Canadian Home Builders' Association (CHBA)
- Cascade Natural Gas Corporation
- Center for EcoTechnology
- City of Minneapolis - Sustainability Office
- CORE Energy Efficiency Programs
- CSRA
- DC Sustainable Energy Utility
- Duluth Public Works and Utilities/ComfortSystems
- EarthSTESP, LLC
- Eastern Research Group
- Energy Smart Colorado
- EnerScore Inc.
- Environmental Design / Build
- Energy Response Corps
- Essess, Inc.
- Eversource
- FMC FACILITY MANAGEMENT CONSULTORES
- Freedom Solar Energy, LLC
- Fruitfull Energy
- GDS Associates
- Go Green Home Services
- Green Button Alliance
- Hawaii Energy
- HGI
- Home Office Training & Technology
- Home Performance Strategies
- Earth Advantage

Call Participants – Non-Members (2 of 2)

- iAQ Systems
- IBM
- ICF International
- JOHNSON A/C
- LEAP
- Livable Buckhead
- La Plata Electric Association
- Department of Public Utilities, Massachusetts
- Department of Public Health and Human Services, Montana
- Nat. Assoc. of Realtors
- NR GROUP INC
- NW Energy Coalition
- Parker Interests Unlimited
- Penn State
- Passive House Institute US (PHIUS)
- Resynergy Systems
- Retrofit America, Inc.
- Rocky Mountain Institute
- Ryan Taylor Architects LLC
- Smart Green Realty
- Smith & Boucher Engineers
- Stanford University
- State of Delaware
- Sussex County Government
- Sustainable Connections
- Sustainable Real Estate Consulting Services
- TopBuild Home Services
- TRC
- UGI
- UL LLC
- US Dept of Housing and Urban Development
- V3
- Washington Department of Commerce
- WSP Canada

Agenda

- Agenda Review and Ground Rules
- Opening Poll
- Brief Residential Network Overview
- Featured Speakers
 - **Pamela Brookstein**, Market Transformation Specialist, Elevate Energy (***Network Member***)
 - **Peter Rusin**, Residential Buildings Program Manager, Colorado Energy Office
 - **David Myers**, Regional Director, Southern California Programs, Build It Green (***Network Member***)
- Discussion
 - What are examples of how programs are interacting and connecting with the real estate market?
 - What are the benefits of integrating home energy information into the real estate market?
 - What challenges have programs encountered to working with the real estate sector?
 - What strategies have you used to engage real estate agents, appraisers, utilities and others in promoting energy efficiency as a home feature?
 - What other residential scoring/rating systems are in the real estate market? Are multiple scoring/rating systems creating challenges?
 - Other questions or issues related to integrating energy efficiency and real estate?
- Closing Poll and Upcoming Call Schedule

Opening Poll

- Which of the following best describes your organization's experience connecting with the real estate market?
 - Some experience/familiarity – **46%**
 - Limited experience/familiarity – **28%**
 - Very experienced/familiar – **17%**
 - No experience/familiarity – **5%**
 - Not applicable – **5%**

Better Buildings Residential Network

Better Buildings Residential Network: Connects energy efficiency programs and partners to share best practices and learn from one another to increase the number of homes that are energy efficient.

Membership: Open to organizations committed to accelerating the pace of home energy upgrades.

Benefits:

- Peer Exchange Calls 4x/month
- Tools, templates, & resources
- Recognition in media, materials
- Speaking opportunities
- Updates on latest trends
- Voluntary member initiatives
- Residential Program Solution Center guided tours

Commitment: Provide DOE with annual number of residential upgrades, and information about associated benefits.

For more information or to join, energy.gov/eere/better-buildings-residential-network/join

**The Opportunity:
Home Energy Information Accelerator**

Pamela Brookstein

Market Transformation Specialist

Elevate Energy



Advances in Integrating Energy Efficiency into the Real Estate Market

**Better Buildings
Residential Peer Exchange
April 21, 2016**

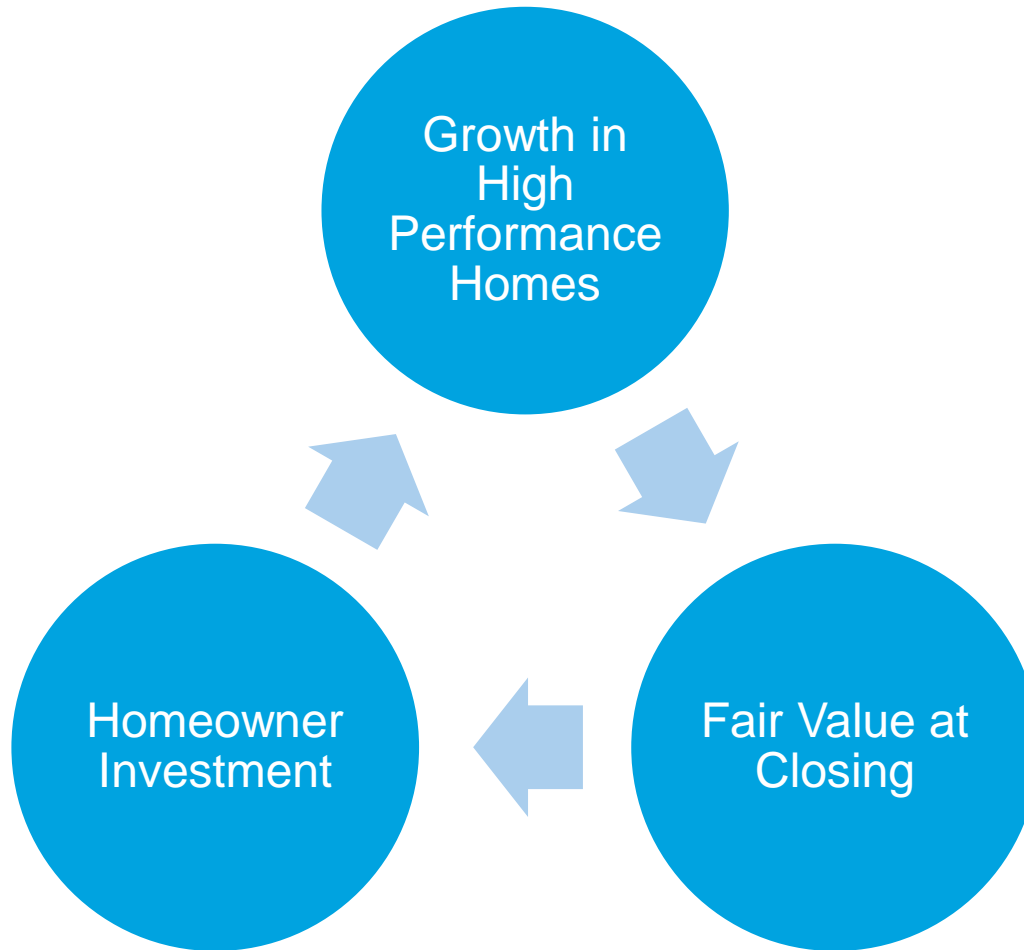
Energy Efficiency Drowning in Data



Real Estate Thirsty for Data



The Virtuous Cycle

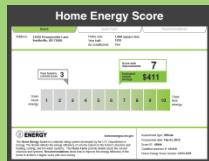


Vision

Widespread use of reliable home energy information at all relevant points in the real estate transaction, enabling fair value at sale for energy efficient / high performing homes

Expand Pipeline

- Of homes with verified energy information (e.g., Home Energy Score, Zero Energy Ready Homes, ENERGY STAR)



Develop Tools & Systems

- That facilitate the standardized and automated flow of home energy information from credible sources to relevant users

Demonstrate Use

- Of home energy information in MLS listings, appraisal forms, and other relevant applications



Recognize Champions

- In relevant fields, highlight their successes, and encourage adoption of best practices



Success Metric

Significantly expand availability and use of reliable home energy information in five or more pilot markets to demonstrate replicable models of automated, linked systems influencing home sales

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

Seven Pilot Locations

- **California** – Build it Green
- **Chicago Metro**– Elevate Energy; Illinois Department of Commerce & Economic Opportunity, MRED
- **Colorado** – Colorado Energy Office, IRES
- **DC Metro** – District of Columbia Sustainable Energy Utility, Institute for Market Transformation \
- **Oregon** - Earth Advantage, Oregon Department of Energy, Enhabit
- **Northeast** - Northeast Energy Efficiency Partnerships
- **Vermont** - Vermont Energy Investment Corporation

- MLS partners implementing efficiency program data feeds to consumer sites (*MRED complete, others in queue*)



- RESO's Acceleration of Green Fields

Year	2015-2016	2017	2018	2019	2020+
Effective	1/1/2015	1/1/2017	1/1/2018	1/1/2019	1/1/2020
Level	Core	Bronze	Silver	Gold	Platinum



HEIA Presentation Highlights: Opportunities in the Real Estate Sector

- The real estate market has already begun to incorporate energy efficiency into the decision making process; if a home is correctly identified as having a green third party certificate, it **sells more quickly and for a higher price.**
- Before green energy information can be tailored to appeal to each stakeholder (appraisers, homeowners, homebuyers) the **home energy data needs to flow easily into the multiple listing service (MLS).**
- The data dictionary, RESO, re-categorized green energy data fields from “creative” fields, added as desired by the various MLS systems, to **standardized fields.** Realtors are now more likely to populate these fields with home energy data
- Green energy data is **now being displayed on two of the most visited real estate sites in the country.** Realtors, homeowners, and homebuyers can now easily access green energy data for potential sales.

Lessons Learned: Colorado Energy Office

Peter Rusin

Residential Buildings Program Manager



Home Energy Labeling and Stakeholders in Colorado

Peter Rusin



COLORADO
Energy Office

Working with Appraisers

- In August of 2012, the CEO signed a Memorandum of Understanding (MOU) with the Colorado Coalition of Appraisers (CCA) and the Colorado Chapter of the Appraisal Institute (AI) that formalized a process to develop valuation studies and promote continuing education
- We learned that appraisers are more than interested in building data and willing to provide their time when you ask for their help not state a problem with valuation.

Partnership Wins:

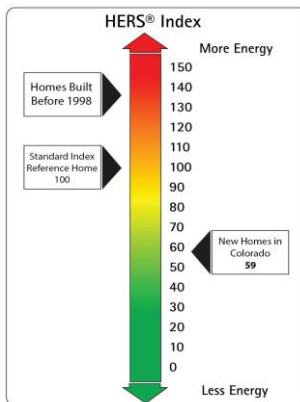
- Colorado provides yearly training for residential appraisers including the opportunity to become certified through AI's Valuation of Sustainable Buildings Program.
- The CEO has conducted three valuation studies that have been peer reviewed by the professional appraisal organizations of Colorado with key results:
 - Shows that there is a positive market reaction in specific Colorado markets to solar PV and energy efficiency.
 - While there is a market impact, appraiser's need more reliable and accessible energy efficiency information is needed



Colorado's Take on Two Rating Systems

NEW HOMES

- The HERS Index provided by HERS Raters
- Great tool for builders and code compliance that the state continues to promote.
- 47% of all new single family homes received a HERS Rating in FY15, over 8,500 ratings.

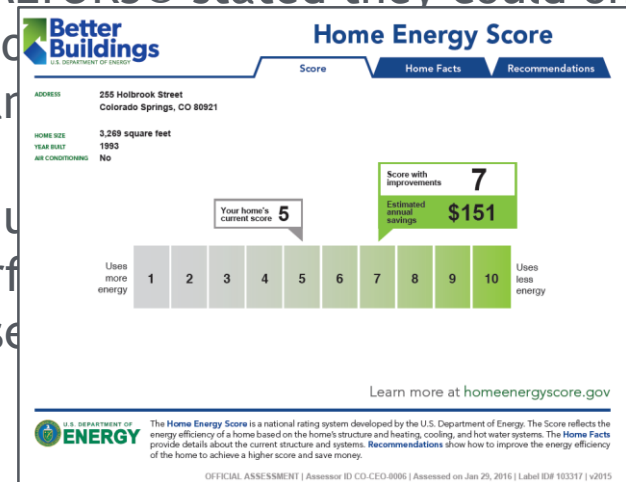


- Train Index of than a l say a HERS % better 006.

EXISTING HOMES

- The Home energy Score provided by Qualified Assessor or BPI Raters
- Appraisers can value energy efficiency, but need access to better data.

- REALTORS® stated they could only record less than a home as the base
- All u perf base



COLORADO
Energy Office

Source: DOE

Home Energy Score: Lesson Learned

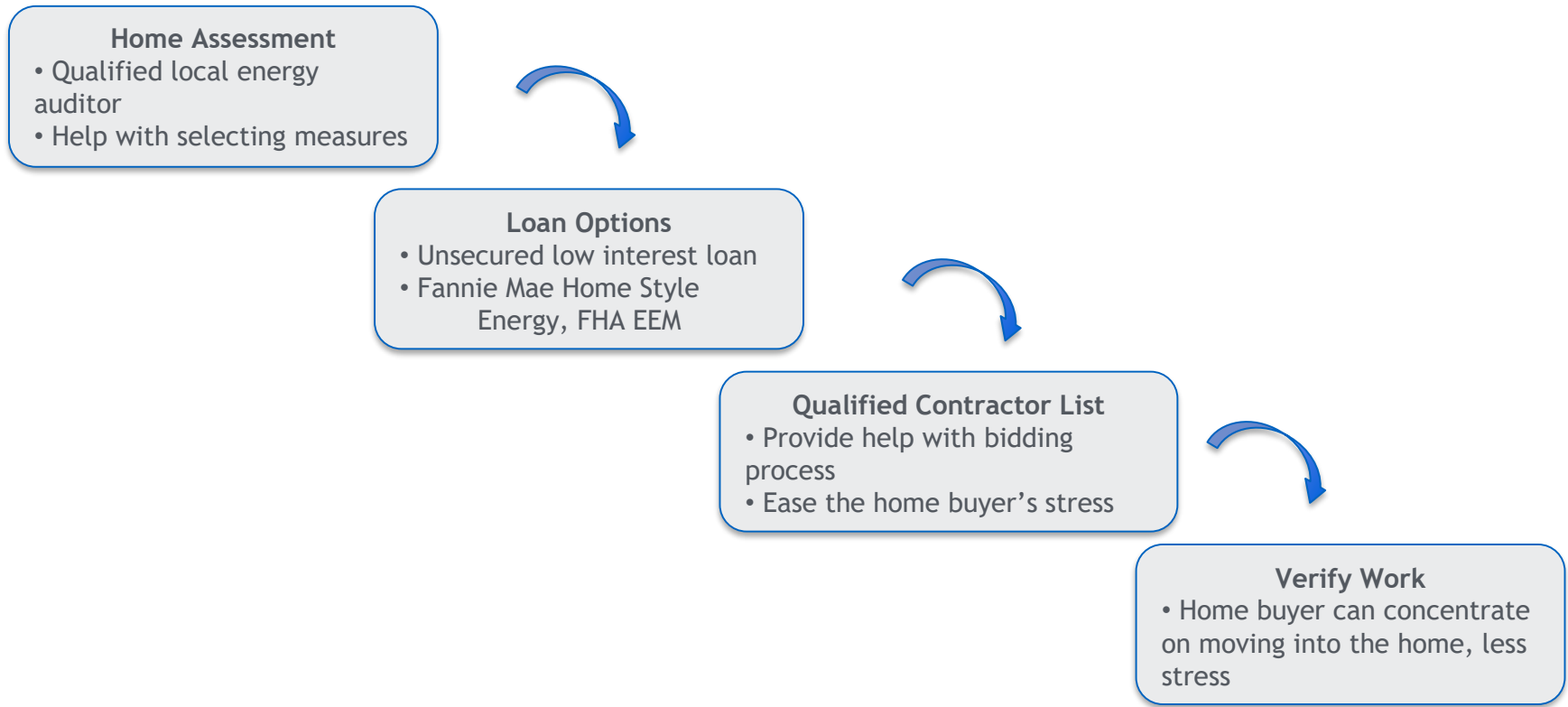
- The Home Energy Score is not a comprehensive audit, but a number to give consumers a 1st level look at their home or potential purchase.
- The Home Energy Score is a feature to current clip board and comprehensive energy audits.
 - The CEO is not trying to replace current audits but provide an added feature.
- Unlike a basic or comprehensive energy audit, the Home Energy Score as a number can:
 - Provide the asset rating appraisers need in developing their opinion of value.
 - Open the door to more housing options:
 - FHA buyers that purchase a house with a Score of 6 or higher receive a stretch ratio of 2% or for the median household income in Colorado afford a house that cost \$15,000 more than their current ceiling.
 - Fannie Mae Home Style Energy Loan
 - Etc, etc, sell how it fits and opens doors



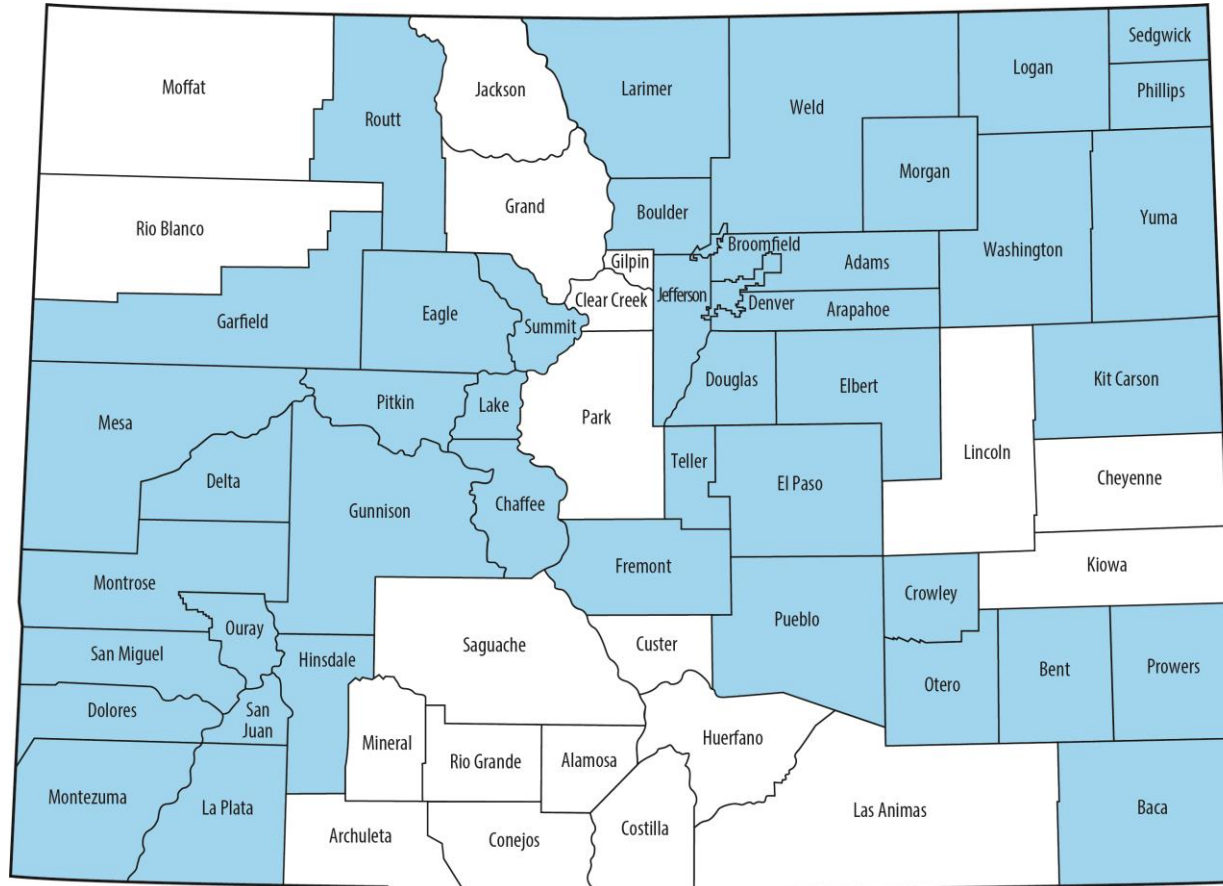
COLORADO
Energy Office

Other Lessons from REALTORS®

- The home is a good candidate for a retrofit at point of sale, but it won't happen unless... we provide the REALTOR® training and:
 - The real estate agent or home inspector provides a link to a network
 - The network provides an “energy advisor” service for most clients
 - The process must not delay mortgage closings



Energy Advising Map*



To obtain a Home Energy Score in these areas the utilities have provided subsidies which reduce the cost between \$65 - \$100.



COLORADO
Energy Office

* Some Counties shaded only have 80% coverage of homes within counties

Results from Working with the State Association of REALTORS®



Colorado Association of REALTORS®
CEO, Tyrone Adams

“Until now, a home’s energy efficiency benefits were difficult to quantify and compare. A Home Energy Score provides homebuyers a chance to evaluate a home’s efficiency features before they buy so they can make the most knowledgeable decision on one of the biggest investments in their life.”



COLORADO
Energy Office

Presentation Highlights: Colorado Energy Office

Understanding the concerns of stakeholder is crucial to the adoption of energy efficiency as a relevant metric in the real estate market.

- Real estate agents worry that bi-directional rating systems may identify a home as a poor performer: **Alleviate this concern by pairing realtors with a network of trusted energy efficiency professionals** that can provide guidance, verify bids, and perform upgrades.
- Homebuyers may not want to purchase a home that has a high energy cost. However, energy efficient upgrades at point-of-purchase can result in long-term savings: **Provide education and support for real estate agents to communicate this savings potential to homebuyers.**
- Sales may fall apart due to the cost of the home + energy efficiency upgrades: **train lenders to assist homebuyers in securing energy efficient mortgages to make upgrades feasible.**

Program Experience: Build It Green

David Myers

Regional Director, Southern California Programs

Program Highlights: Build It Green

- At present, **there is not enough data on green-labeled homes** to perform market comparisons and evaluation. An inventory of homes that have green certification would speed up the adoption of green energy upgrades as a relevant metric in the real estate market.
- Build It Green is currently designing **a database for green energy upgrades in real estate.**
 - Program design is focused on three main areas: customer privacy, data validation, and identifying competing stakeholder interests.
- **Realtors are the gatekeeper to the consumer.** To make this database a useful resource, Build It Green identified their key stakeholder: realtors.
 - Build relationships with realtors by pairing with trusted real estate associations.
 - Market green energy home data training as a professional development opportunity for realtors; Identify early adopters and provide education and networking opportunities.
- After connecting with realtors, Build it Green will **engage other stakeholders by identifying the unique value proposition for each group** (e.g., energy efficiency upgrades can help utilities meet their energy efficiency reduction goals, make seller's homes more valuable, etc.)

Related Resources in the Residential Program Solution Center

Explore how to connect your program to the real estate community:

- [Capturing Energy Efficiency in Residential Real Estate Transactions](#) discusses steps that energy efficiency programs can take to transmit information about homes' energy performance to the market.
- [A Policymaker's Guide to Scaling Home Energy Upgrades](#) focuses on how to make the value of energy efficiency visible in the real estate market.
- The [Real Estate](#) quick link provides easy access to resources on real estate issues that many programs face.



- While you're there, see the latest [Proven Practices](#) post on [Helping Contractors Sell Home Upgrades](#).
- The Solution Center is continually updated to support residential energy efficiency programs—**[member ideas are wanted!](#)**

Residential Program Solution Center Navigational Example

Better Buildings Residential Program Solution Center

EERE » BTO » Better Buildings Neighborhood Program » Solution Center Home

Solution Center Home

About

Handbook Index

Quick Links

Proven Practices

Energy Data Facts

Glossary

BROWSE BY:

Program Components

Program Design
Phases

Content Types

Search Results

Enter your keywords

real estate

Search

Search results

[Capturing Energy Efficiency in Residential Real Estate Transactions: Steps That Energy Efficiency Programs Can Take](#)

Author: U.S. Department of Energy

Publication Date: 2015

Real estate professionals are increasingly aware that today's homebuyers are factoring heating and cooling costs, efficient appliances, and energy efficiency into their purchase decisions. Residential energy efficiency programs, however, agree that the home resale process does not fully reflect the value of high-performance home features. If investments were more accurately reflected in home resale prices, homebuyers would have more confidence that these investments would be recouped at the time of resale. This paper describes existing barriers to integrating energy efficiency into real estate markets, and illustrates recent efforts to address these barriers. Collaborations have resulted in standard data collection and sharing across industries. Some regions have begun including these data into multiple listing services, making them visible during real estate transactions.

[2014 ACEEE Summer Study on Energy Efficiency in the Building Sector: Home Performance Improvements in Real Estate Transactions](#)

Author: Elevate Energy

Publication Date: 2014

This paper describes existing barriers to integrating energy efficiency into real estate markets, and illustrates recent efforts to address these barriers. Collaborations have resulted in standard data collection and sharing across industries. Some regions have begun including these data into multiple listing services, making them visible during real estate transactions.



Capturing Energy Efficiency in Residential Real Estate Transactions

Steps That Energy Efficiency Programs Can Take

NOVEMBER 2015

Solution Center Resource Slide Poll

- How have you used the information from the Solution Center slides after Peer Exchange calls?
 - N/A (this is my first Peer Exchange call) – **41%**
 - I have not done anything based on the slide – **25%**
 - It caused me to explore the Solution Center – **14%**
 - I have clicked on 1+ resource URLs on the slide – **14%**
 - I have explored one of the resources in depth – **5%**

Discussion Highlights: Integrating EE into the Real Estate Sector

- Although the accelerator and program partners have taken big steps to incorporating home energy use as a relevant real estate metric, there are still barriers to adoption:
 - The **first step** is to collect and present energy use data to make this data available to the real estate sector. A discussion about standardizing green rating certifications should come second.
- The sale of a home presents a critical juncture for energy efficiency upgrades:
 - **Before sale:** realtors often emphasize improvements that will help a house sell, such as bathroom updates, granite counters, etc. Education and outreach is needed so that realtors understand the value of energy efficiency upgrades as comparable to other home upgrades.
 - **After sale:** homebuyers often do the most renovation within the first year of buying a home. Not addressing energy efficiency at this stage is a huge missed opportunity.

Peer Exchange Call Series

We hold one Peer Exchange call every Thursday from 1:00-2:30 pm ET

Calls cover a range of topics, including financing & revenue, data & evaluation, business partners, multifamily housing, and marketing & outreach for all stages of program development and implementation

Upcoming calls:

- May 12: Bullseye: Top Strategies for Targeted Marketing (101)
- May 19: Walking the Talk: Employer Assisted Programs (301)
- May 26: Spring Forward: Top Strategies for Growing and Scaling Your Program (301)

Send call topic ideas to peerexchange@rossstrategic.com

See the Better Buildings Residential Network Program [website](#) to register