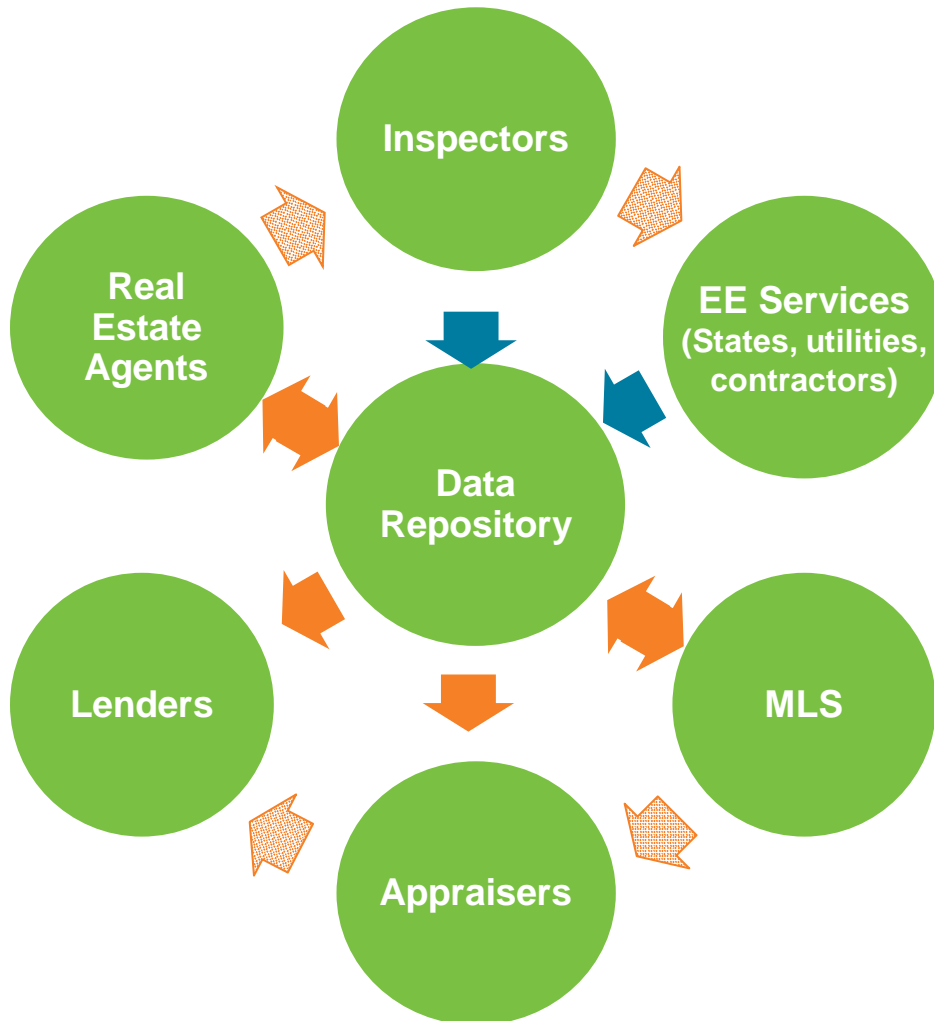




# Uncover the Hidden: Making Home Energy Data Accessible in the Real Estate Market

**May 11, 2016**

# Closing the Loop – Why Does It Matter???



To Capture the Value of EE in Homes

- ❖ Maintain energy information in a central repository (or make it part of public record)
- ❖ Automate information flow to MLS
- ❖ Make energy information non-threatening and useful to homebuyers
  - ✓ Buyers generally want to know what their monthly costs are going to be as a homeowner (e.g., utility costs)
  - ✓ Inspectors can point out opportunities for greater efficiency and as well as incentives, retailer or utility offers (e.g., lead generation)
- ❖ Design policies that encourage lenders and appraisers to seek out the information
  - ✓ Greater training and outreach to lenders & appraisers
  - ✓ New products emerging to encourage investment in EE

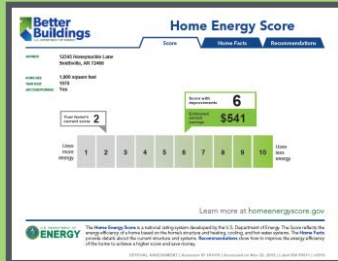
# Engaging Key Players

Key Players	Motivation	Key Challenges	National Progress
<b>Realtors</b>	<ul style="list-style-type: none"> <li>• Differentiation</li> <li>• Customer service</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness/training</li> <li>• Fear of negative information</li> </ul>	 Gaining traction
<b>Inspectors</b>	<ul style="list-style-type: none"> <li>• Differentiation</li> <li>• Additional revenue</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness</li> </ul>	 Gaining traction
<b>Appraisers</b>	<ul style="list-style-type: none"> <li>• Required to analyze all characteristics of the house</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness/Training</li> <li>• Additional effort</li> <li>• Lack of comps</li> </ul>	 Slow progress
<b>Lenders</b>	<ul style="list-style-type: none"> <li>• Minimize risk</li> </ul>	<ul style="list-style-type: none"> <li>• Quantifiable impact on foreclosures</li> <li>• Favor “comp” appraisals</li> </ul>	 Slow progress
<b>MLS Boards</b>	<ul style="list-style-type: none"> <li>• Keeping up with market</li> <li>• Delivering information of interest</li> </ul>	<ul style="list-style-type: none"> <li>• Data transfer protocols</li> <li>• Privacy</li> </ul>	 Gaining traction
<b>EE &amp; RE Services</b>	<ul style="list-style-type: none"> <li>• Increased program participation</li> <li>• Capture value of investments</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness</li> <li>• Consistent metrics &amp; information</li> </ul>	 On board & growing

## 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

### 1 Expand Pipeline



### 2 Develop Tools & Systems



### 3 Demonstrate Use



### 4 Recognize Champions



## 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, CRMLS
- **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

- 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



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

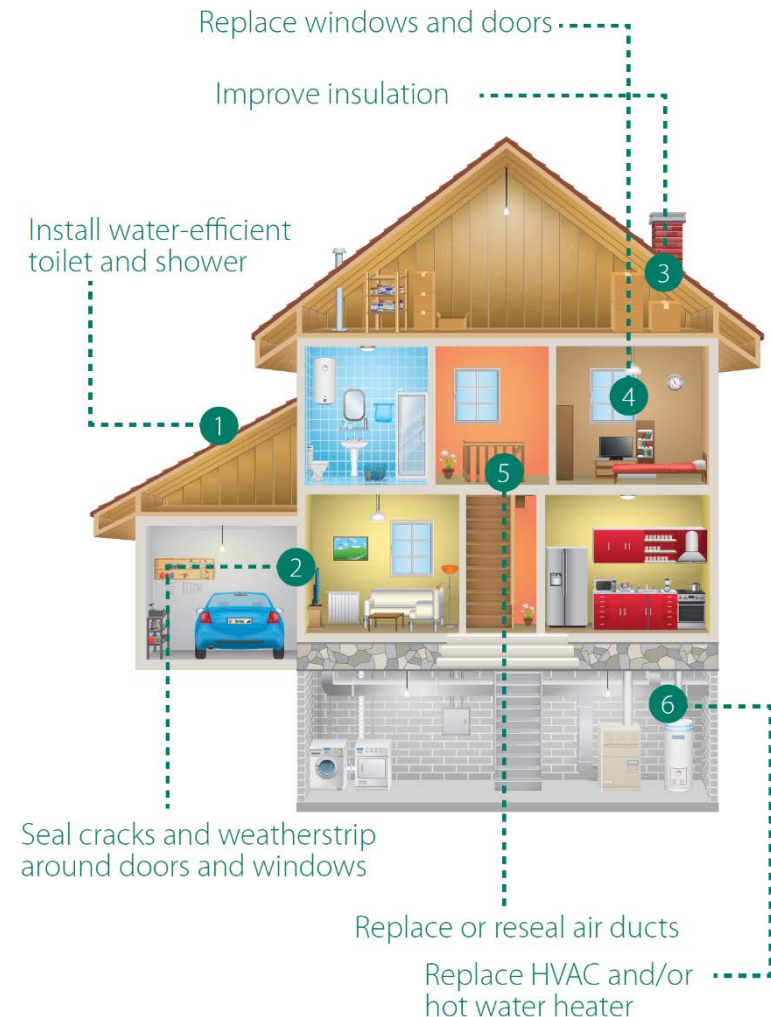


Local/Regional Systems Ramping Up

# Fannie Mae's HomeStyle® Energy Mortgage Loan - Announced March 29, 2016

- ✓ 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
- ✓ With home purchase or refinance
- ✓ Additional loan opportunities:
  - ✓ Matches FHA's stretch policy for high scoring homes
  - ✓ \$3500 for weatherization improvements

7





NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

# Uncover the Hidden: Making Home Energy Data Accessible in the Real Estate Market

Carolyn Sarno Goldthwaite



# NORTHEAST ENERGY EFFICIENCY PARTNERSHIPS

*“Accelerating Energy Efficiency”*



## Mission

Accelerate energy efficiency as an essential part of demand-side solutions that enable a sustainable regional energy system

## Vision

Region embraces **next generation energy efficiency** as a core strategy to meet energy needs in a carbon-constrained world

## Approach

Overcome barriers and transform markets via *Collaboration, Education and Enterprise*



***One of six regional energy efficiency organizations (REEOs) funded by the US Department of Energy (US DOE) to link regions to US DOE guidance, products and programs***

# CHALLENGES-MINDSET



It's a  
scarlet  
letter

It's creepy  
white vans  
doing drive by  
scans of houses  
at night

Cost too  
much

We're lemming falling off the cliff

I won't be  
able to sell  
these  
homes

It's complex energy audits,  
which will then be 'scored'  
by government regulators

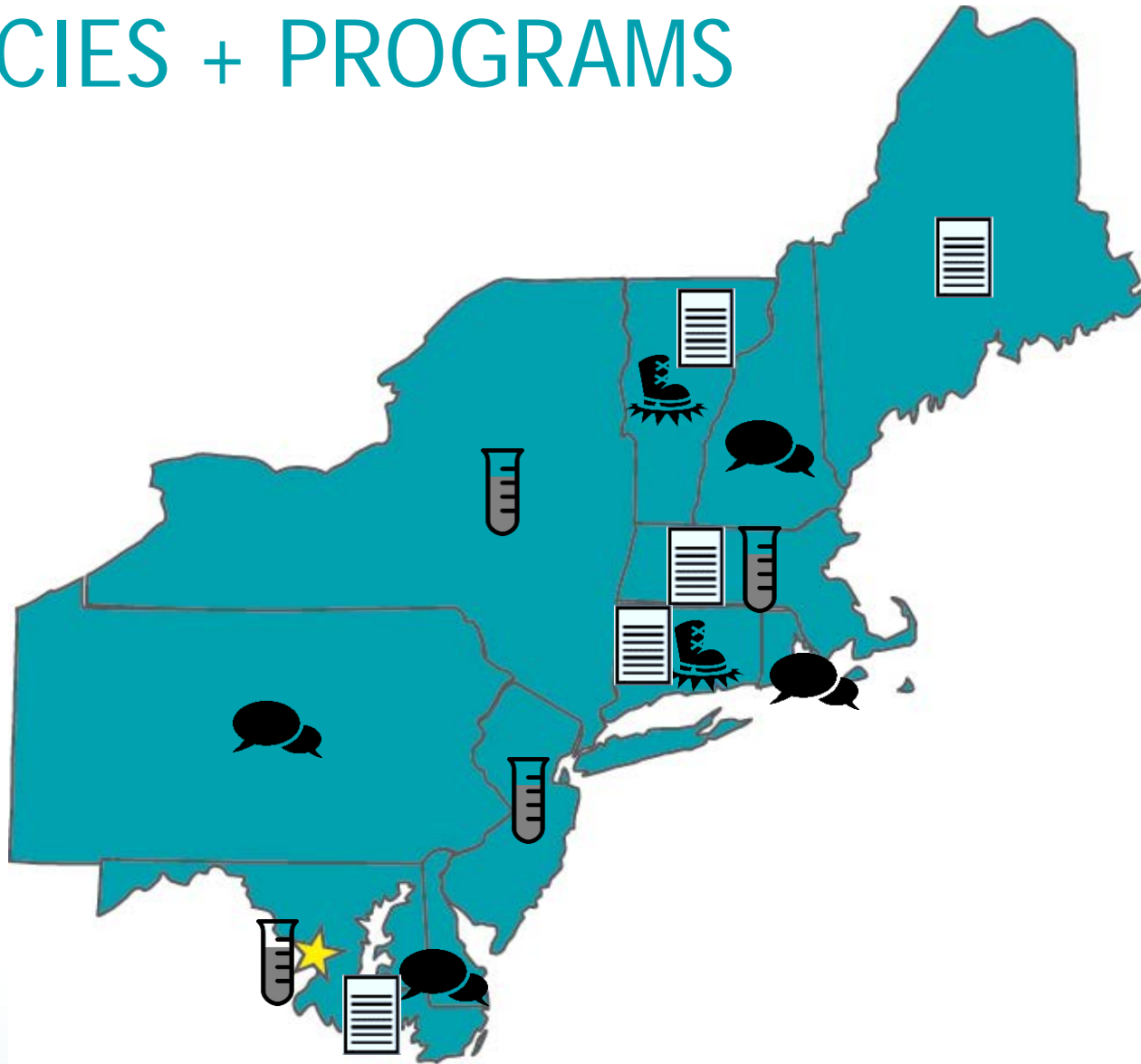
# MAKING ENERGY USE TRANSPARENT

A photograph of a two-story house with light green siding and white trim. A large white sign with the word 'SOLD' in red letters is mounted on a post in the foreground. The house has a front porch with white columns and a white picket fence in front. The background shows trees and a clear sky.

**SOLD**

Working to expedite the creation of **large-scale home energy labeling policies and programs** that support the market valuation of energy efficiency in homes.

# POLICIES + PROGRAMS



Implementation Discussion



proposed Leg.



Pilot



# RESOURCES / EDUCATION



- **Real Estate checklist**

- Understanding and selling benefits of E.E. home
- Glossary
- How to understand energy labels and ratings
- Checklist for Home Walkthrough

- **Trainings**

- **Greening MLS's**

	Types of Equipment	Efficiency Factors	✓	Worth Calling Out	Expected Savings/Benefits
Lighting	Light Fixtures	# ENERGY STAR Qualified Light fixtures _____  Replacing the five most frequently used light fixtures in a home with ENERGY STAR qualified lighting can save about \$65 each year in energy costs.	<input type="checkbox"/>	ENERGY STAR Qualified Light Fixtures	Use 1/4 the energy of traditional lighting and carry a two year warranty; double the industry standard.
			<input type="checkbox"/>	ENERGY STAR Qualified CFLs	ENERGY STAR qualified CFLs generate about 75% less heat. Meaning they are cool to the touch, help reduce home cooling costs, and keep homes more comfortable.
	Lighting controls	Occupancy sensors? How many? _____	<input type="checkbox"/>	Occupancy sensors	Occupancy sensors are used most effectively in spaces that are often unoccupied, and can reduce lighting energy consumption by 50%.
	Daylighting	Strong day lighting /natural light	<input type="checkbox"/>	Ample natural light	Electric lights generate significant heat and by turning off or dimming the lights when not needed, 10% to 20% of the energy used to cool a building can be saved.



# HELIX - OVERVIEW

## Home Energy Labeling Information eXchange

- 3 year project
  - VT, MA, VEIC, EFG, NASEO, VT Law School & DOE
- Database design and development
  - New England + New York
    - *Testing*
    - *Regional best practice exchange*
- Outreach to R.E Community



# YEAR ONE



- Stakeholder engagement
  - Regional
  - Observers
- Assessing market
- Review policies, platforms, specifications etc.
- Scope database
- Research legal & privacy issues
- HELIX governance
- **RFP**



You've got to be an observer. And you've got to take time to listen to people, talk, to watch what they do.

— Jonathan Winters —





## GREEN REAL ESTATE RESOURCES



In the modern real estate marketplace, buyers and renters can sort and filter listings of potential buildings for myriad characteristics. However, energy efficiency and other energy features are rarely among these. [The value of energy efficiency in homes](#), offices, and other buildings has historically not been effectively communicated between the property owner, real estate broker, appraiser, lender, and buyer due in large part to a lack of consistent tools to facilitate this exchange. In recent years, though, considerable advances have been made to streamline this process, enable accurate valuation of building energy efficiency in real estate transactions, and make energy efficiency visible.

### Green Real Estate Resources:

NEEP supports this "greening" of the real estate market by providing resources for on-the-ground real estate professionals tailored to the needs of the Northeast and Mid-Atlantic residential and commercial real estate markets.

[Real Estate Professionals Checklist](#)

[Renter's Guide: Creating Lower Cost, Energy Efficient Apartments and Homes](#)

### ENERGY EFFICIENT BUILDINGS

- [Energy Codes](#) -
- [Energy Rating](#) -
- [Multifamily Retrofits](#)
- [High Performance Communities](#)
- [High Performance Public Buildings](#)
- [High Performance Schools](#) -
- [Zero Energy Buildings](#)
- [Green Real Estate Resources](#)
- [High Efficiency Street Lighting](#)

[Subscribe to our Newsletter!](#)

### RELATED BLOG POSTS



[A Renter's Guide to Green Real Estate](#)



THANK YOU!

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P: 781.860.9177  
[www.neep.org](http://www.neep.org)



# Uncover the Hidden: Making Home Energy Data Accessible in the Real Estate Market

Better Buildings Summit  
May 2016



**ELEVATE** ENERGY  
Smarter energy use for all



# Auto-Pop: The Chicago Story


**MRED** Midwest Real Estate Data *REinventing MLS* Welcome **Becky R Realtor for Team Becky** [Contact](#)

[My MLS](#) [Search](#) [Listings](#) [Reports](#) [Forms](#) [Setup](#)

**Search Results - Attached Single**

[List View](#) [Refine Criteria](#) Full - Agent [Show](#) [Quick](#) [En](#)

showing 1 of 1 listings



**Detached Single**  
 Status: **NEW**  
 Area: **8021**  
 List Price: **\$399,900**  
 Orig List Price: **\$399,900**  
 Sold Price:

List Date: **06/26/2013**  
 List Dt Rec: **06/26/2013**

Directions: **Diversey West to Rockwell, North to Property**  
 Sold by:  
 Closed:  
 Off Market:  
 Year Built: **1920**  
 Dimensions: **37.5X125**  
 Ownership: **Fee Simple**  
 Corp Limits: **Chicago**  
 Coordinates: **N:2900**  
**W:2600**

Rooms: **7**  
 Bedrooms: **4**  
 Basement: **Full**

Contract:  
 Financing:  
 Blt Before 78: **Yes**  
 Subdivision:  
 Township: **North Chicago**

Model:  
 County: **Cook**  
 # Fireplaces:

Lst. Mkt. Time: **1**  
 Points:  
 Contingency:  
 Curr. Leased: **No**

Parking: **Garage**  
 # Spaces: **Gar:2**  
 Parking Incl. **Yes**  
 In Price:

Utility Costs: **Elec. - \$770.60/yr,\$64.22/mo; Gas - \$1198.00/yr,\$99.83/mo**

Remarks: **CHARMING 4 BED+DEN, 1.1 BATH SINGLE FAMILY HOME ON LOT & A HALF IN DESIRABLE LOGAN SQAURE/AVONDALE LOCATION. REMODELED APPROX 10 YEARS AGO W/ NEWER HVAC, ELECTRIC, PLUMBING, H2O HEATER & ROOF. DIAG HDWD FLRS; LARGE EAT IN KITCHN W/ SS APPLS; HIGH CEILINGS; FULL BASEMENT; HUGE FENCED YARD W/ BLUE STONE PATIO; SECURITY SYS OVERSIZED 2 CAR GARAGE. CLOSE TO 90/94 & ALL LOGAN SQAURE/BUCKTOWN SHOPPING & RESTAURANTS!**



# The REALTOR Experience in MRED


To fill-in the following fields, click the "Lookup Estimates" link and follow the instructions.

▪ Annual Estimated Electricity  Required  [Lookup Estimates](#)

Costs:

▪ Monthly Estimated Electricity  Required

Costs:

▪ Annual Estimated Gas Costs:  Required  [Lookup Estimates](#)

▪ Monthly Estimated Gas Costs:  Required





# Add Utility Account Numbers: Electric and Gas

Inbox (38) - l.reedystukel@x Social Media Managemen x Midwest Real Estate Data x connectMLS - Connecting x

connectmls6.mredllc.com/mls.jsp?module=listadmin&uniqueURL=678596026

connectMLS - Connecting Your Real Estate Community - Google Chrome

connectmls6.mredllc.com/common/HomeEQAccountLookup.jsp?dcid=E8B1AA27FC0EFEBCE040010A3C0179

Continue Cancel

Lookup utility estimates for:

**2344 W Farragut Ave, Chicago, IL**

Enter the applicable Utility Customer Account Number(s) then click "Continue." If you do not know an account number, check "Unknown." If the property does not have a utility, check "Not Applicable." MRED Rules & Regulations Department will review "Unknown" and "Not Applicable" values.

\* Electricity Customer Account #:  -or-  Unknown -or-  Not Applicable

\* Gas Customer Account #:  -or-  Unknown -or-  Not Applicable

I affirm that I am Laura Reedy-Stukel and am authorized to lookup this information.

When you click "Continue," utility estimates will be retrieved from [MyHomeEQ](#) who are providing this service in conjunction with the City of Chicago, in accordance with Chapter 5-16 of the Municipal Code of Chicago pertaining to the disclosure of utility costs.

Continue Cancel

<< Prev. Page

\* Air Conditioning: A

\* Water: A (2 max)

\* Sewer: D (2 max)

Electricity: C

\* Heat/Fuel: A,F

HERS Index Score:

Green Supporting Documents:

Energy/Green Building Rating Source:

Green Features:

Equipment: A,I,L,M

To fill-in the following fields, click the "Lookup Estimates" link and follow the instructions.

\* Annual Estimated Electricity Costs:  Required [Lookup Estimates](#)

\* Monthly Estimated Electricity Costs:  Required

\* Annual Estimated Gas Costs:  Required [Lookup Estimates](#)

\* Monthly Estimated Gas Costs:  Required



# Adding the Energy Report

connectMLS - Connecting Your Real Estate Community - Google Chrome

demo1.dynaconnections.com/myhomeeq/common/HomeEQAccountLookup.jsp

OK Cancel

Below are the utility estimates for your listing at:

**W Jackson St, Chicago, IL**

Electricity Customer Account Number: **Confidential**

Gas Customer Account Number: Unknown


Click "OK" to save these values for your listing. Click "Cancel" to start over

Annual Estimated Electricity Costs: \$159.60

Monthly Average Electricity Costs: \$13.30

Annual Estimated Gas Costs: Unknown

Monthly Average Gas Costs: Unknown

 [Click Here to view the full disclosure](#)

It is strongly recommended that you save this disclosure to your hard drive, then upload it as an attachment to your listing.  
[Click here](#) to watch a short video on how to upload a document to connectMLS.

OK Cancel

# EQ Customized Home Energy Performance Report

For: 1234 Sample Street, Chicago IL

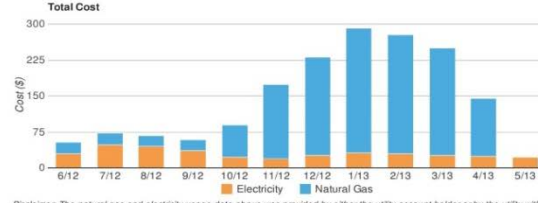
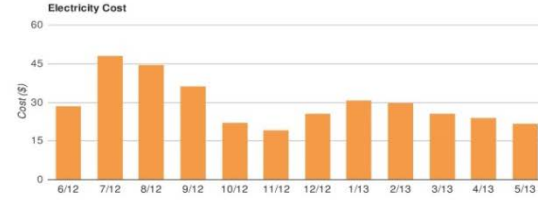
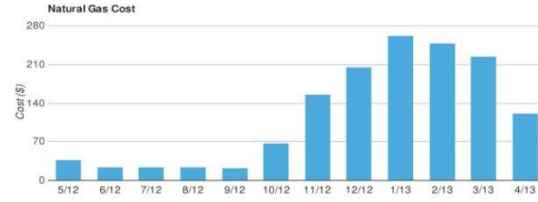


## UNDERSTANDING YOUR HOME'S ENERGY USE

**Natural Gas Use**  
 Your Home = 1,309 therms  
**Cost**  
 You spend \$1,309 per year on gas – primarily for heating your home. Gas = 79% of your energy budget

**Electricity Use**  
 Your Home = 3,574 kWh  
**Cost**  
 You spend \$357 per year on electricity. Electricity = 21% of your energy budget

**Total Energy Use**  
 Your Home = \$1,666  
 Want to learn more about reducing energy at home? Visit [MyHomeEQ.com](http://MyHomeEQ.com) for detailed recommendations and resources.



Disclaimer: The natural gas and electricity usage data above was provided by either the utility account holder or by the utility with the account holder's consent. This report should be used as a guide to understanding the probable and approximate energy usage for this home. In no way does this constitute a guarantee of future energy usage by the disclosing entities or MyHomeEQ.

I, \_\_\_\_\_ hereby acknowledge that I received a copy of this disclosure for the residential dwelling unit(s) described above. I acknowledge that the seller has stated that this property has been occupied for \_\_\_\_\_ months out of the most recent 12 months. Buyer Initial \_\_\_\_\_ Date Initialed \_\_\_\_\_

Date of Receipt: \_\_\_\_\_ Signature: \_\_\_\_\_

Seller, by providing utility account number(s), authorized MyHomeEQ to share the property's actual utility usage.

This form is designed for compliance with the Chapter 5-16 of the Municipal Code of Chicago pertaining to the disclosure of utility costs.



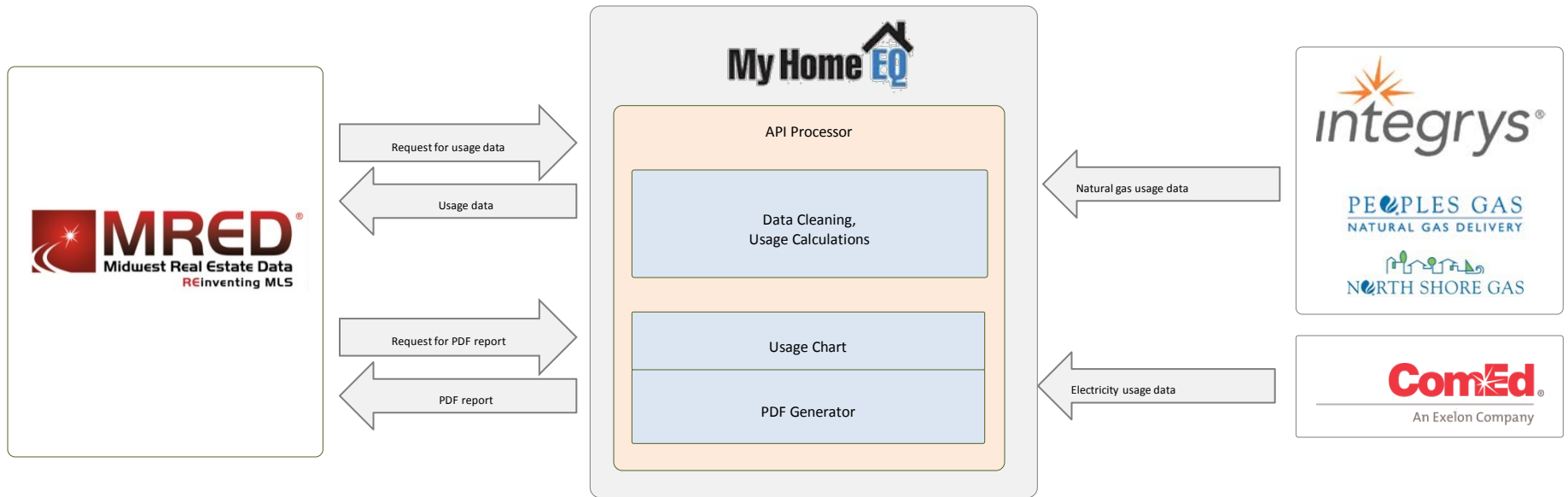
MyHomeEQ 2125 W North Avenue Chicago, IL 60647 (773) 269-2228 MyHomeEQ.com







# Behind the Scenes: MyHomeEQ MRED API





# Research & Success: Usage Study Findings (April 2015)

## Better Market Performance

Sample: Chicago Attached Single Family

Higher percentage of the asking price:



Less time on the market:



Source: Elevate Energy, "Energy Cost Disclosure in Chicago Residential Listings: Eighteen Months Out", 2015



## Research & Success: Usage Study Findings (April 2015)

---

- Low vs High Energy Costs
- 13% usage (2015) up from 10% (2014)



# Big Takeaways

---

- Updated an existing ordinance
  - Moved from manual to automatic process
- Had a strong relationship with our MLS

Pamela Brookstein  
Market Transformation Specialist  
[Pamela.Brookstein@elevateenergy.org](mailto:Pamela.Brookstein@elevateenergy.org)  
773-269-2220

ElevateEnergy.org



# Better Buildings Summit

May 11, 2016 - Washington, DC

**“Making Home Energy Data Accessible  
in the Real Estate Market”**

**Lauren Hansen, CEO  
IRES MLS**



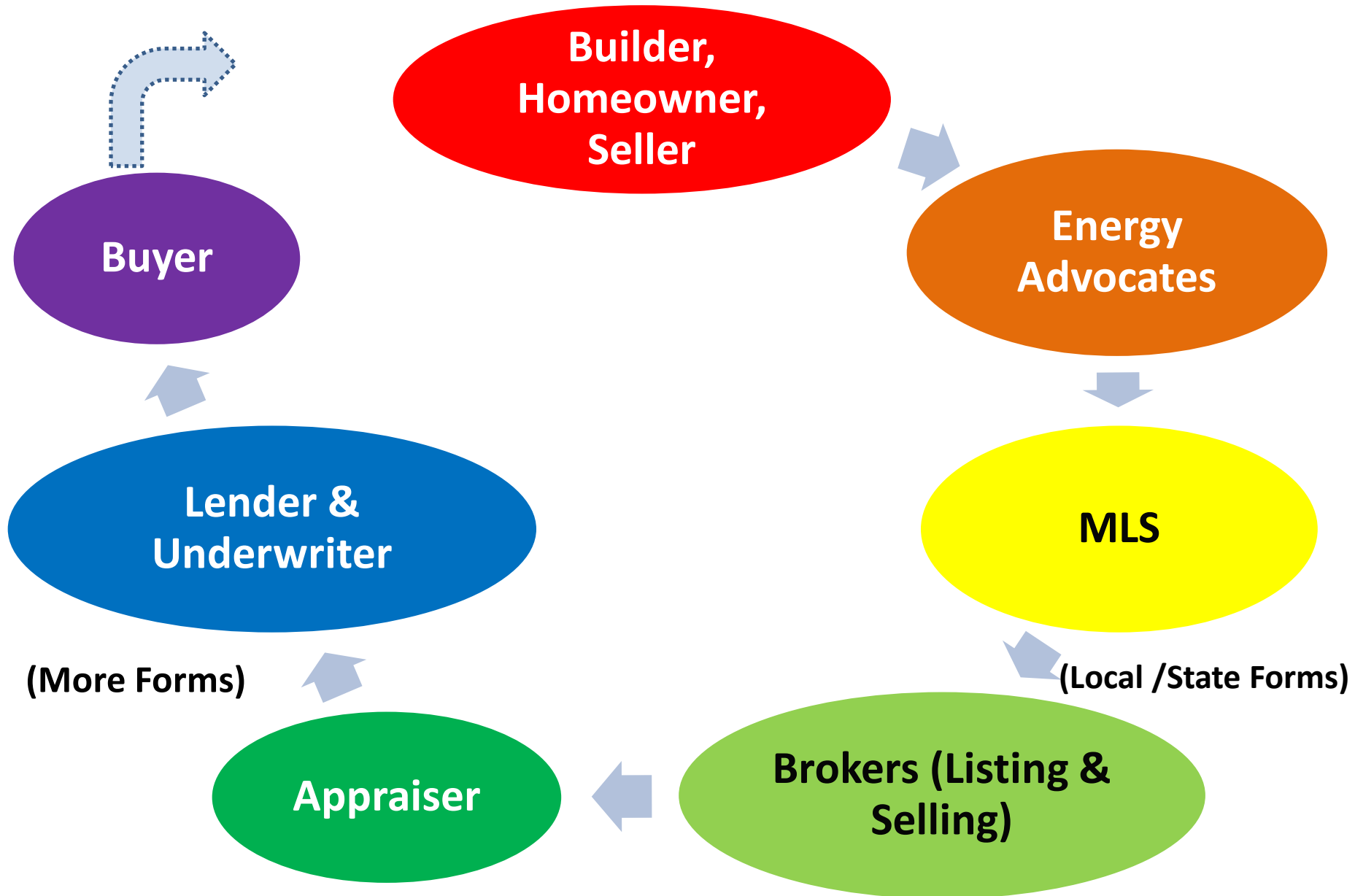
## Visible Value Blueprint, Step 4:

**“Work with the real estate community to reflect these improvements in local for-sale listings”**

**Unlocking the Value of  
an Energy Efficient Home**

A Blueprint to Make Energy Efficiency  
Improvements Visible in the Real Estate Market

# Stakeholders





# The MLS World, an Oddity

- Over 700 MLSs in the US
- Many different systems/databases
- Customers = Brokers, Appraisers, Staff
- Public listing site(s) for Consumers
- Green MLS Tool Kit
  - > Input (Consistent data entry)
  - > Output (Search, Report)
- RESO = Real Estate Standards Organization



# MLS Input form

**\*=Required field**



# Local Data Input

## ENERGY/GREEN FIELDS

**Certifications:**  
HERS Rating: \_\_\_\_\_  
ENERGY STAR® Qualified New Home : \_\_\_\_\_  
LEED for Homes: \_\_\_\_\_  
NAHB/NGBS-ICC 700: \_\_\_\_\_  
Solar PV: \_\_\_\_\_

Y/N   
 Y/N   
 Y/N   
 Y/N   
 Y/N   
 Y/N   
 Y/N

**\*Year Certified:** \_\_\_\_\_ **\*Score:** \_\_\_\_\_ (0-240)  
**\*Year Certified:** \_\_\_\_\_  
**\*Year Certified:** \_\_\_\_\_  
**\*Year Certified:** \_\_\_\_\_  
**\*Year Installed:** \_\_\_\_\_ **\* Kilowatts** \_\_\_\_\_  
**\*Year Installed:** \_\_\_\_\_ **\* Type** \_\_\_\_\_ (e.g. "Water")

**THIS FORM HAS IMPORTANT LEGAL CONSEQUENCES AND THE PARTIES SHOULD CONSULT LEGAL AND TAX OR OTHER COUNSEL BEFORE SIGNING.**

## GREEN DISCLOSURE (Energy)

**THIS DISCLOSURE SHOULD BE COMPLETED BY SELLER, NOT BY BROKER.**

Seller states that the information contained in this Disclosure is correct to Seller's CURRENT ACTUAL KN this Date. Seller hereby receipts for a copy of this Disclosure. Broker may deliver a copy of this Disclosure to j

**Note:** If an item is not present at the Property, the Seller does not know the answer or if an item is n the sale, the applicable check box is not checked. The Contract to Buy and Sell Real Estate form, determines whether an item is included or excluded; if there is an inconsistency betwe Contract, the Contract controls.

Date: \_\_\_\_\_  
Property Address: \_\_\_\_\_  
Seller: \_\_\_\_\_

Property Address: \_\_\_\_\_  
Street City State Zip

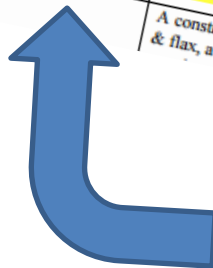
- 1. Home Performance Programs  Home Performance with ENERGY STAR
- 2. Construction Type:  SIPS  ICF  Material Efficient Framing  
 Improved Insulation  Straw Bale  Earthen Build/Rammed Earth  
 Other \_\_\_\_\_
- 3. Heating, Cooling and Ventilation: (check box for each type)  
 Ground Source Heat Pump  High Efficiency Furnace/Boiler (eg. >= 90% AFUE)  
 Tankless/On Demand Water Heater  High Efficiency Water Heater (eg. >=90%, or EF>=.82 for gas)  
 Evaporative Cooling  Whole House Fan  Ceiling Fans  
 High SEER A/C  Insulation Air Sealing Upgrades Completed  
SEER Rating: \_\_\_\_\_  Home Orientation (South Facing Overhangs)

## Colorado's Green Disclosure Form



Reclaimed Flooring	Material that is recovered for reuse or another purpose, such as wood
Recycled Content	Recycled-content products are made from materials that would otherwise be discarded as waste.
Regionally Harvested	Harvested within 500 miles of home.
SEER Rating	The rating & performance standard developed by the U.S. government to produce an energy consumption rating that is easy to understand. The higher the SEER rating, the more energy required to produce the desired effect.
SIPS	Panels made from a thick layer of foam sandwiched between two layers of oriented strand board (OSB), plywood or fiber-cement. They are an alternative to the traditional method of using wood framing.
Straw Bale	A construction method that uses waste straw left over from crops, such as wheat & flax, after all the food has been extracted. Straw is gathered, baled and used as a building material.

## Glossary



# MLS to Consumers

## Public Web site: ColoProperty.com

The screenshot displays the search interface for ColoProperty.com. At the top, there is a search bar with the text "City, Zip, MLS#, or Address (Street # and Name)", a dropdown menu for "Homes for Sale", a dropdown for "Any Price", a search icon, a location pin icon, and a "More" button. Below the search bar, there are three main filter sections: "Details", "Area", and "Features".

**Details:** Includes filters for Beds, Baths, SqFt (with "to" and "SqFt" fields), Year Built (with "to" and "Year Built" fields), Acres (with "to" and "Acres" fields), Any Car, Garage, Any Style, and Max HOA Fee per year.

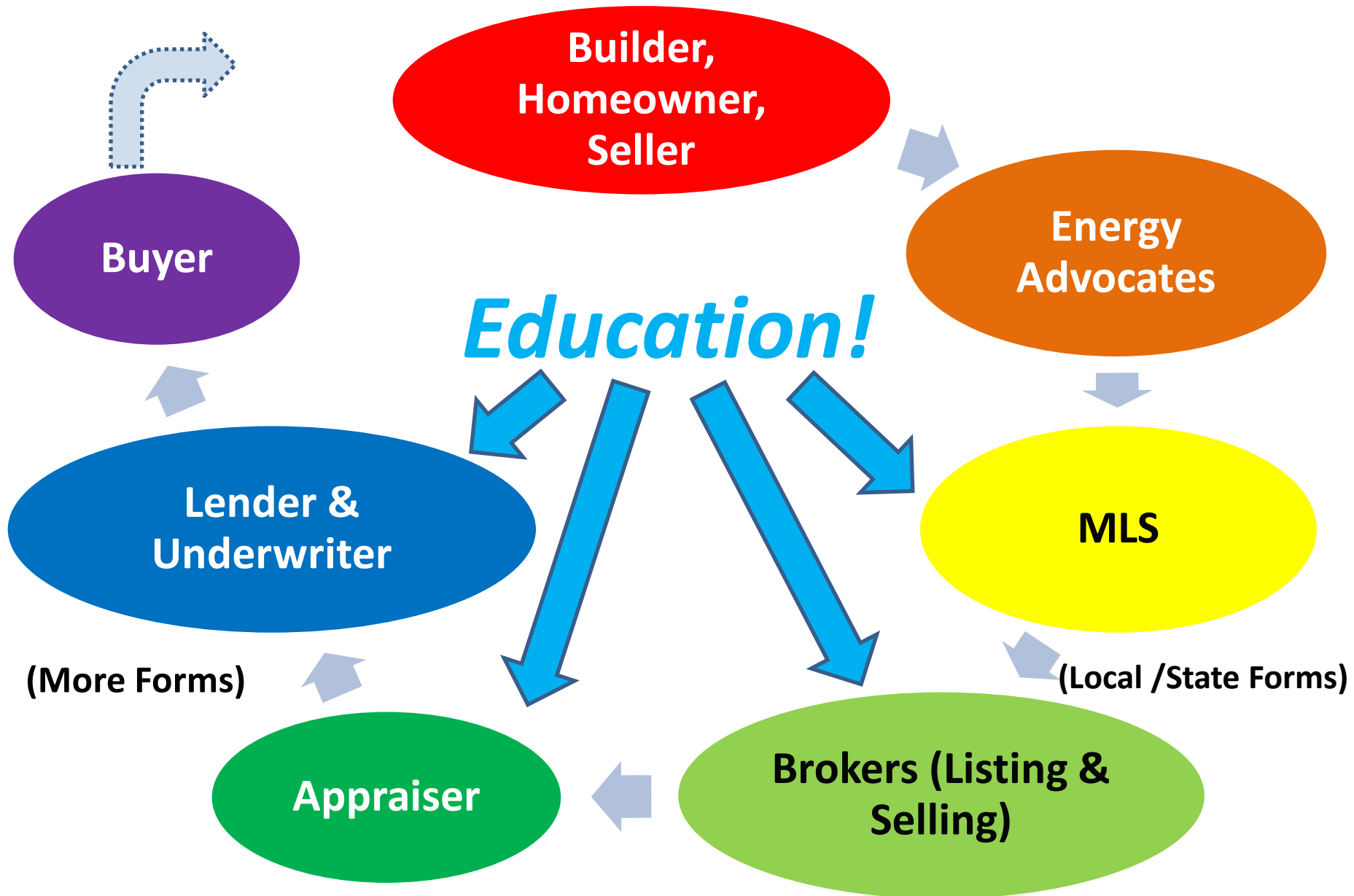
**Area:** Includes filters for Subdivision, Elementary School, Middle School, High School, and Walk Score®.

**Features:** Includes filters for General Features, Design Features, Common Amenities, Accessibility, and Green Features. The Green Features dropdown is highlighted with a red circle and contains a list of options: "Check all", "Uncheck all", "Any (at least one)", "ENERGY STAR", "Green Disclosure (Energy)", "HERS Rated", "High Efficiency Furnace", "LEED for Homes Certified", and "NAHB/NGBS - ICC 700 Certified".

Green Features are searchable

- Green Disclosure
- Certifications
- Ratings
- Solar

# Stakeholders



# Local Efforts

- Orientation sessions: Stakeholders, value of data
- Promote use of Green Addendum
- HES Training + Test
- More?



# Resources

- Green MLS Implementation Guide  
[www.GreenTheMLS.org](http://www.GreenTheMLS.org)
- Elevate Energy, Visible Value Blueprint,  
[www.ElevateEnergy.org](http://www.ElevateEnergy.org)
- Colorado Energy Office, Green Disclosure Form & more, [www.Colorado.gov/energy/](http://www.Colorado.gov/energy/)
- [www.ColoProperty.com](http://www.ColoProperty.com) with searchable Green Features
- [www.RESO.org](http://www.RESO.org) – Fields & definitions

*Thank you!*