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

May 11, 2016
Closing the Loop – Why Does It Matter???

- 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

To Capture the Value of EE in Homes
## Engaging Key Players

<table>
<thead>
<tr>
<th>Key Players</th>
<th>Motivation</th>
<th>Key Challenges</th>
<th>National Progress</th>
</tr>
</thead>
</table>
| Realtors           | • Differentiation  
                    • Customer service                               | • Awareness/training  
                    • Fear of negative information                    | Gaining traction        |
| Inspectors         | • Differentiation  
                    • Additional revenue                               | • Awareness                                                | Gaining traction        |
| Appraisers         | • Required to analyze all characteristics of the house | • Awareness/Training  
                    • Additional effort  
                    • Lack of comps                                       | Slow progress           |
| Lenders            | • Minimize risk                                     | • Quantifiable impact on foreclosures  
                    • Favor “comp” appraisals                           | Slow progress           |
| MLS Boards         | • Keeping up with market  
                    • Delivering information of interest                 | • Data transfer protocols  
                    • Privacy                                            | Gaining traction        |
| EE & RE Services   | • Increased program participation  
                    • Capture value of investments                        | • Awareness  
                    • Consistent metrics & information                      | On board & growing      |
Home Energy Information Accelerator

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

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
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

**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
National Highlights

- RESO’s Acceleration of Green Fields

<table>
<thead>
<tr>
<th>Year</th>
<th>2015-2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective</td>
<td>1/1/2015</td>
<td>1/1/2017</td>
<td>1/1/2018</td>
<td>1/1/2019</td>
<td>1/1/2020</td>
</tr>
<tr>
<td>Level</td>
<td>Core</td>
<td>Bronze</td>
<td>Silver</td>
<td>Gold</td>
<td>Platinum</td>
</tr>
</tbody>
</table>

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

Local/Regional Systems Ramping Up

Coming Soon!
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
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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

Cost too much

We’re lemming falling off the cliff

I won’t be able to sell these homes

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

It’s complex energy audits, which will then be ‘scored’ by government regulators
Working to expedite the creation of large-scale home energy labeling policies and programs that support the market valuation of energy efficiency in homes.
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**

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<table>
<thead>
<tr>
<th>Types of Equipment</th>
<th>Efficiency Factors</th>
<th>Worth Calling Out</th>
<th>Expected Savings/Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light Fixtures</td>
<td># ENERGY STAR Qualified Light fixtures ______</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Replacing the five most frequently used light fixtures in a home with ENERGY STAR Qualified lighting can save about $45 each year in energy costs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>![ ]</td>
<td>![ ]</td>
<td>Use 1/4 the energy of traditional lighting and carry a two year warranty; double the industry standard.</td>
</tr>
<tr>
<td>Lighting controls</td>
<td>Occupancy sensors? How many? ______</td>
<td>![ ]</td>
<td>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.</td>
</tr>
<tr>
<td>Daylighting</td>
<td>Strong daylighting/natural light</td>
<td>![ ]</td>
<td>Ample natural light</td>
</tr>
<tr>
<td></td>
<td>![ ]</td>
<td>![ ]</td>
<td>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.</td>
</tr>
</tbody>
</table>

http://neep.org/initiatives/energy-efficient-buildings/green-real-estate-resources
COMMENTS: Pretty Cape in much sought after quiet family neighborhood. Nice home with updated kitchen and baths. L-shaped living room dining room combination with hardwood floors throughout. There is a porch off the kitchen. Heating fireplace, three bedrooms and bathroom. Updated only 5 years ago. The interior has just been repainted. The present owner installed a sump pump in the future.

EXCLUSIONS:

CONSTRUCTION & EQUIPMENT:

Heat FHW Zone: 1 Fuel: Gas

FLOOR PLAN: Semi-Full

LEVEL: Living room: 12x11.5

2nd Level Big Brk: 11.6x11.5

Stove: Full Bath

FINANCIAL:

Assmt. Bldg: 449,000 Land: 330,000 Total: 779,000

LAND IMPROVEMENTS & UTILITIES:

Zoning: Residential Grammar School: Davis K-2 Lane 3-5

PARKING: Yes

WATER: Town Sewer: Gas, Yes

REGISTRY: Massachusetts

SLVING OFFICE: RE/MAX Waltham Country

LAND SIZE: 10,000 sq. ft.

OWNER: Cynthia R. & Richard J. Sullivan

BUSEN: 781-273-7777

UO: 781-273-9262 ext. 3

SCHOOL BUS: Yes
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
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
THANK YOU!

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CGOLDTHWAITE@NEEP.ORG

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www.neep.org
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Better Buildings Summit
May 2016
Auto-Pop: The Chicago Story

Welcome Becky R Realtor for Team Becky

Search Results - Attached Single

Detached Single
Status: NEW
Area: 8021

Year Built: 1920
Dimensions: 37.5X125
Ownership: Fee Simple
Corp Limits: Chicago
Coordinates: N:2900 W:2600
Rooms: 7
Bedrooms: 4
Basement: Full

List Price: $399,900
List Date: 06/26/2013
List Dt Rec: 06/26/2013

Contract: Financing:
Blt Before 78: Yes

Subdivision: North Chicago
Township: North Chicago
Model: County: Cook
# Fireplaces:

Bathrooms: 1 / 1
Master Bath: None
Bsmnt. Bath: No

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 SQUARE/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 SQUARE/BUCTOWN SHOPPING & RESTAURANTS!
To fill-in the following fields, click the "Lookup Estimates" link and follow the instructions.

* Annual Estimated Electricity Costs: [Required]

* Monthly Estimated Electricity Costs: [Required]

* Annual Estimated Gas Costs: [Required]

* Monthly Estimated Gas Costs: [Required]
Add Utility Account Numbers: Electric and Gas

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.

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

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.
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 costs? Visit 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 appropriate energy usage for this home. In no way does this constitute a guarantee of future energy usage by the disclosing entity 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 Initiated __________
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.
Behind the Scenes: MyHomeEQ MRED API

Request for usage data

Usage data

Request for PDF report

PDF report

Natural gas usage data

Electricity usage data

API Processor

Data Cleaning, Usage Calculations

Usage Chart

PDF Generator
Better Market Performance
Sample: Chicago Attached Single Family

Higher percentage of the asking price:

Extra $4,576 for the average seller who disclosed energy costs

Less time on the market:

About one less mortgage cycle for the average seller

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
773-269-2220

ElevateEnergy.org
“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”
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
**Colorado’s Green Disclosure Form**

**Glossary**

<table>
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<tr>
<th>Material</th>
<th>Definition</th>
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<tbody>
<tr>
<td>SIPS</td>
<td>Structural Insulated Panels System</td>
</tr>
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</table>

**Local Data Input**

**MLS Input Form**

*Required field*
MLS to Consumers
Public Web site: ColoProperty.com

Green Features are searchable
➤ Green Disclosure
➤ Certifications
➤ Ratings
➤ Solar
Stakeholders

Builder, Homeowner, Seller

Energy Advocates

MLS

Lender & Underwriter

Appraiser

Brokers (Listing & Selling)

Education!

(More Forms)

(Local /State Forms)
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
• www.ColoProperty.com with searchable Green Features
• www.RESO.org – Fields & definitions

Thank you!