Home Energy Labeling in Colorado

Christian Williss
Director of Programs and Initiatives
The CEO’s vision is to help Coloradans live more prosperous and healthy lives by promoting innovative energy production and efficient energy consumption practices that are beneficial to the economic and environmental health of the state.

The CEO’s mission is to improve the effective use of all of Colorado’s energy resources and the efficient consumption of energy in all economic sectors, through providing technical guidance, financial support, policy advocacy and public communications.
The American Reinvestment and Recovery Act (ARRA) funding required Colorado to accelerate market transformation of the residential energy efficiency (EE) retrofit industry. This lead to the formation of the Residential Energy Efficiency Working Group.

- Studies in Portland and Seattle showed an overall trend toward higher selling prices and faster selling times for labeled properties.
- In 2009 ENERGY STAR New Homes reached a market rate of over 33% in Colorado growing to 45% in 2010.
- USGBC Colorado promoted the “Green MLS” to CEO as part of the working group.
- MLS systems are not regulated so the Committee provided a framework for industry stakeholders to gather and discuss voluntary recommendations.
Developing and Implementing MLS Fields

- Recommendations were centered around adding value while limiting liability to REALTORS®. These included:
  - Certifications supplied by 3rd parties.
  - Features and Green Addendum to be filled out by contractor or homeowner.

**Certifications:**
- HERS Rating
- ENERGY STAR New Homes
- LEED for Homes
- National Green Building Standard
- Other local green building certification program

**Features:**
- Solar PV (Electricity)
- Solar Thermal (Hot Water)
- Green Field Addendum (GFA) allows sellers to showcase additional common attributes of a ‘green’ home
Developing and Implementing MLS Fields

<table>
<thead>
<tr>
<th>GREEN CERTIFICATIONS</th>
<th>LEEDS for Homes Level</th>
<th>NAHB/ICC Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HERS Rating</td>
<td>Certified</td>
<td>Certified</td>
</tr>
<tr>
<td>Energy Star Qualified New Home</td>
<td>Silver</td>
<td>Silver</td>
</tr>
<tr>
<td>LEED for Homes</td>
<td>Gold</td>
<td>Gold</td>
</tr>
<tr>
<td>NAHB/ICC-700</td>
<td>Platinum</td>
<td>Platinum</td>
</tr>
<tr>
<td>Other Certifications (name)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GREEN FEATURES</th>
<th>Kilowatts</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar PV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solar Thermal</td>
<td></td>
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(Year Certified) (Year Installed) (Please upload the Energy/Green Feature Addendum to your listing to provide additional information - Available under Forms, at www.metrolist.com)
Impact of Real Estate Trainings

This graph shows words real estate agents enter into the comments section of Metrolist and IRES MLS systems to track market trend. Two thirds of all homes in the state are sold through these two systems.
Working with Appraisers

- In August of 2012, CEO signed an MOU with the Colorado Coalition of Appraisers (CCA) and the Colorado Chapter of the Appraisal Institute that formalized a process to develop valuation studies and promote continuing education.

- Colorado has helped 40 residential appraisers become certified through AI’s Valuation of Sustainable Buildings Program, over 10% of the national total with this designation.

- Since 2012 CEO has conducted three peer-reviewed valuation studies: Solar PV, New Homes Energy Efficiency, and Existing Homes Energy Efficiency.
  - These studies show that there is a positive market response in specific Colorado markets to solar PV and energy efficiency.
  - They also indicate that appraisers need more reliable and accessible energy efficiency information.
Better Data Provides Deeper Look

- In the spring of 2013, CEO signed an MOU with RESNET to provide HERS Rating data on a zip code level basis.

- Greeley, Grand Junction, Ft Collins/Loveland, and Pueblo had utility resources that CEO could promote to builders.

- CEO identified Colorado Springs as an area with limited/low HERS Index Ratings without any resources.

<table>
<thead>
<tr>
<th>Census Bureau Metropolitan Statistical Area</th>
<th>Number of Single Family Homes Built FY13</th>
<th>Percentage of New Homes with HERS Rating FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver-Aurora-Lakewood</td>
<td>7922</td>
<td>58%</td>
</tr>
<tr>
<td>Fort Collins-Loveland</td>
<td>1676</td>
<td>29%</td>
</tr>
<tr>
<td>Greely</td>
<td>1648</td>
<td>24%</td>
</tr>
<tr>
<td>Colorado Springs</td>
<td>2885</td>
<td>14%</td>
</tr>
<tr>
<td>Boulder</td>
<td>564</td>
<td>100%</td>
</tr>
<tr>
<td>Grand Junction</td>
<td>435</td>
<td>25%</td>
</tr>
<tr>
<td>Pueblo</td>
<td>219</td>
<td>23%</td>
</tr>
</tbody>
</table>

These seven Metropolitan Statistical Areas account for 90% of the new home construction in the State.
Colorado Springs Builder Program

To Help Transform the 2\textsuperscript{nd} Largest Colorado Market:

• In 2014, CEO hired a consultant to provide builder marketing assistance
  • HERS Rating average dropped 4 points in that year
  • Six builders enrolled into the RESNET Energy Smart Builder program

• In 2015, CEO added technical building science in the form of a week with HERS Index Rater
  • 10 builders enrolled into the technical assistance program
  • HERS Rating coverage percentage remains constant at 15%
  • Using house level modeling data the CEO is working with the utility to revamp DSM new home program

Source: RESNET
HERS Ratings Continue to Increase

Number of HERS Index Ratings for New Single Family Homes per Quarter

On track to have more than 9,000 Ratings in FY15-16
Introduction of the Home Energy Score

- REALTORs® need an asset score of less than $200
- Gaps in rater infrastructure
- HES has built-in advantages
- Utility energy audit and home performance programs use BPI as the base standard

Source: DOE
How Does an Energy Coach Help?

- The home is a good candidate for a retrofit at point of sale, but it won’t happen unless...
  - The real estate agent or home inspector provides a link to a network
  - The network provides an “energy concierge” service for most clients
  - The process must not delay mortgage closings

**Home Assessment**
- Qualified local energy auditor
- Help with selecting measures

**Loan Options**
- Unsecured low interest loan
- Not tied to mortgage, no delay

**Qualified Contractor List**
- Provide help with bidding process
- Ease the home buyer’s stress

**Verify Work**
- Home buyer can concentrate on moving into the home, less stress
To obtain a Home Energy Score in these areas the utilities have provided subsidies which reduce the cost between $65 - $100.

* Some Counties shaded only have 80% coverage of homes within counties
### Building a Central Labeling Database

#### Home Energy Score APIs
- EnergySmart Colorado
- Efficiency Works
- Xcel Energy
- HEScore from Home Inspectors
- Non-Utility Sponsored Audits and Tri-State G&T

#### Cakesystems Database
- SSO with MLS; HES requires signed waivers, Counties can auto populate without the waiver
- API to CORE LOGIC; HES requires signed waivers, Counties can auto populate without the waiver

#### HERS Index Ratings
- Iframe between HERS Registry and BetterbuildingsCO / Cakesystem database

#### Solar PV and Thermal Data
- County level data
- API from county assessor databases to Cakesystems

#### Option 1
- Feed to MLS vendors

#### Option 2
- Feed to MLS vendors

- Items the CEO is paying for to develop or obtain

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### Major Barriers
- Counties providing approval for HES release
- Non-reporting counties left out of process for Solar (pending report)
- HERS Registry does not include documentation
Contact Information

For more information, please contact:

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