

RESNET UPDATE: WHAT'S RESNET BEEN UP TO AND WHERE IS IT HEADED

Presenters

Peter Rusin, Colorado Energy Office
Daran Wastchak, D.R. Wastchak, LLC

October 7, 2015



PRESENTATION OUTLINE

- RESNET Helping the Colorado Energy Office Elevate its New Home Program
- Promotion of the HERS Index
- Integration of the HERS Index into the 2015 IECC
- Working with EEBA on New ERI Training Course
- RESNET EnergySmart Builder Program
- Update on the new RESNET Quality Assurance Program
- IECC Code Inspector Certification for Raters
- New RESNET Water Efficiency Rating (WER) Index



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October 7, 2015

RESNET HELPING THE COLORADO ENERGY OFFICE ELEVATE ITS NEW HOME PROGRAM



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October 7, 2015

RESNET PROMOTION OF THE HERS INDEX

National and Local Media Coverage



The Washington Post

THE ARIZONA REPUBLIC
azcentral.com

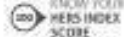
Los Angeles Times



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October 7, 2015

www.HERSIndex.com



WHAT IS THE HERS® INDEX?

The Home Energy Rating System (HERS) Index is the industry standard by which a home's energy efficiency is measured. It's also the nationally recognized system for inspecting, testing and calculating a home's energy performance.

[FIND OUT MORE](#)

Latest news: [VIEW](#)



What's Behind the Growing Popularity of HERS® Index Scores?

When it comes to buying cars and appliances, American consumers can shop around for the best value based on MPG and energy-guzzling options for cars and EnergyGuide labels for...

A Homebuyer's Guide to Energy Efficient Homes

The demand for energy efficient homes has risen dramatically over the last few years due to the fact that they provide their owners with the power to fully control their energy costs...



INTEGRATION OF THE HERS INDEX INTO THE 2015 IECC



As of 2015, the IECC is the primary building code in the United States. It is the most widely adopted building code in the United States. The IECC is the primary building code in the United States. It is the most widely adopted building code in the United States.



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October 7, 2015

INTEGRATION OF THE HERS INDEX INTO THE 2015 IECC



Climate Zone	Energy Rating Index
1	52
2	52
3	51
4	54
5	55
6	54
7	53
8	53

Climate Zone	Energy Rating Index
1	59
2	59
3	59
4	63
5	63
6	62
7	60
8	60



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October 7, 2015

INTEGRATION OF THE HERS INDEX INTO THE 2015 IECC

Six informational fact sheets are available

- Overview of the ERI Performance Path in the 2015 IECC
- Benefits of the Energy Rating Index Score Option
- Frequently Asked Questions
- Cost Effectiveness of Using the ERI to Comply with the 2015 IECC
- Implementation Guidelines for the ERI Performance Path
- ERI Performance Path Score Alternatives
- Case Studies: Incorporating the HERS Index into an Energy Code



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October 7, 2015

WORKING WITH EEBA ON NEW ERI TRAINING COURSE

- EEBA-RESNET collaboration to create a new course for builders, designers, HERS Raters and allied trade professional to better understand and implement the ERI in the IECC 2015
- Southface Institute selected as the Lead Developer for the course
- Allied trainers in other geographic areas are:
 - Energy Logic
 - Performance Systems Development
 - Florida Solar Energy Center
- Initial course launch will be in early 2016
- Courses initially offered in states where IECC 2015 has been adopted at state and/or local level

(2:45) "EEBA-RESNET Collaboration for Industry Training on the IECC 2015 ERI and RESNET HERS Index"



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October 7, 2015

RESNET ENERGYSMART BUILDER PROGRAM

- Builders are committed to:
 - Having all of their homes energy rated following RESNET Standards
 - Marketing their homes' HERS Index



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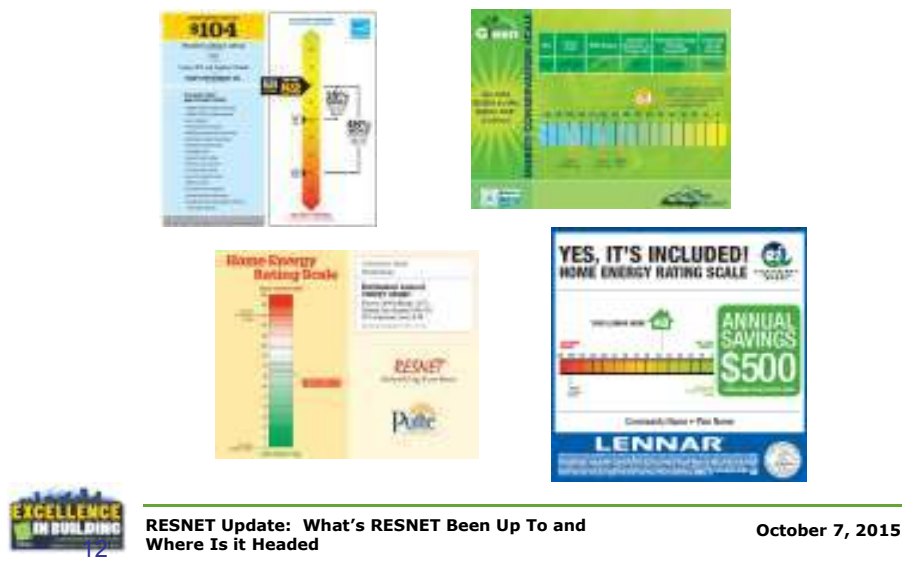
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RESNET ENERGYSMART BUILDER PROGRAM

- Over 200 builders have joined the program
- Colorado Builders:



RESNET ENERGYSMART BUILDER PROGRAM



RESNET ENERGYSMART BUILDER PROGRAM

(1:00) “Who Are RESNET Energy Smart Builders and Why You Should Become One”



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October 7, 2015

NEW RESNET QA PROGRAM

HERS Index Score Consistency Task Force

- Comprised of Home Builders, Rating Software Tool Developers, Rating Providers
- Recommendations presented to RESNET Board on October 22, 2013:
 - Enhanced Quality Assurance of Ratings
 - Independence of Quality Assurance Designees
 - Clearer and consistent information and training from RESNET to Quality Assurance Designees
 - Home Energy Rating software program improvements to ensure greater consistency of HERS Index scores



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October 7, 2015

NEW RESNET QA PROGRAM



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October 7, 2015

NEW RESNET QA PROGRAM

RESNET Steps to Improve Quality & Consistency

- Integration of QA checks into HERS calculation software programs
- Amendments to Chapter 2 – Rater Training
- Amendments to QA provisions in the RESNET Standards
 - First draft currently out for 30 day industry review
 - Enter formal ANSI Approval Process
 - Estimated completion by March 2016
- QA “Pilot” Program (begins July 2016?)
- “Quality Agents” to replace Quality Assurance Designees
 - Key differences: financial independence + direct agents of RESNET
 - New exam + Training event
- New RESNET QA Program goes live (1-1-17?)



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October 7, 2015

IECC CODE INSPECTOR CERTIFICATION FOR RATERS

“Impending crisis in the future availability of a code professional workforce.” – IECC



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Raising the Profile, Filling the Gaps

Report from a Town Hall Meeting
on the Future of Code Officials



Issued ~ Fall 2014

IECC CODE INSPECTOR CERTIFICATION FOR RATERS

“Impending crisis in the future availability of a code professional workforce.” – IECC

- Survey of 4,000 code professionals conducted by the National Institute of Building Science (March to May, 2014)
 - 80% of the existing code professional workforce is expected to retire in the next 15 years, 30% in the next 5 years
- Town Hall on the Future of Code Officials (September 20, 2014)
 - Recruitment recommendations:
 - “Faces of Code Officials” campaign to raise the profile of the code enforcement profession and positive benefits it provides
 - Local ICC chapters creating internship, mentorship, and outreach programs
 - Engaging local high schools and community colleges
 - Code officials should serve in local advisory and community boards



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“Impending crisis in the future availability of a code professional workforce.” – IECC

- Outsourcing of energy code inspections to certified RESNET HERS Raters
- RESNET partnership with the International Code Council (ICC)
 - Discounted price for certified RESNET HERS Raters to be tested and certified as ICC Energy Code Inspectors and to become members of the ICC.
 - Membership will allow HERS Raters a voice in the IECC and IRC development process.
 - Certification allows HERS Raters to conduct the IECC and IRC code inspections and testing.



RESNET Update: What’s RESNET Been Up To and Where Is it Headed

October 7, 2015

Your RESNET HERS Rater Certification Qualifies You for the ICC/RESNET Member Value Package

The International Code Council (ICC), in cooperation with RESNET, is offering certified RESNET HERS Raters the opportunity to build their professional qualifications and enjoy the valuable benefits offered exclusively to ICC Members at a savings of more than \$50.

Through the ICC/RESNET Member Value Package, you will receive:

- 1 year ICC Building Safety Professional Membership
- An electronic download of the 2012 or 2009 International Energy Conservation Code (IECC)
- A copy of the 2012 IECC. You must purchase the 2012 IECC code book for a savings of more than \$50.

Don't miss out on this opportunity that is only available to certified RESNET HERS Raters. Simply submit the application on the back of this flyer and begin to enjoy all the benefits of being an ICC Member.

For more information on ICC Member benefits visit www.iccbuilder.org/ICCMV today.

INTERNATIONAL CODE COUNCIL

OVERVIEW OF THE NEW RESNET WATER RATING INDEX

- Objective of WER Index
 - Create an Index for “water” that is similar to the RESNET HERS Index
 - Allows homebuyers to more clearly understand how efficient their home uses water
 - Allows for the monetization of a home’s water efficiency
- RESNET partnering with the International Code Council (ICC) to develop a national consensus standard
- RESNET plan for implementation:
 - Adopt Interim Guidelines by December 31, 2015
 - Interim Guidelines to serve as basis for development of an ANSI standard on WER Index

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October 7, 2015

OVERVIEW OF THE NEW RESNET WATER RATING INDEX

- RESNET has created a WER Index Guidelines Working Group
- Working Subgroups:
 - Modeling and development of reference home
 - Rating inspection and testing procedures
 - Rater training and qualification requirements
 - Indoor water appliances
 - Outdoor water use



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October 7, 2015



QUESTIONS

A black stick figure is shown in a thinking pose, with one hand on its chin and a question mark above its head.

RESNET Update: What's RESNET Been Up To and Where Is it Headed **October 7, 2015**



RESNET: Helping the Colorado Energy Office Elevate its New Home Program

Peter Rusin
October 5, 2015



The Colorado Energy Office

MISSION STATEMENT

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.

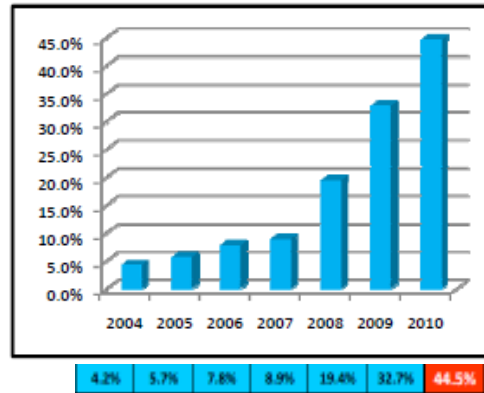
DEPARTMENT VISION

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.



Growth of the New Homes Program

ENERGY STAR® Qualified New Homes - Colorado Market Penetration



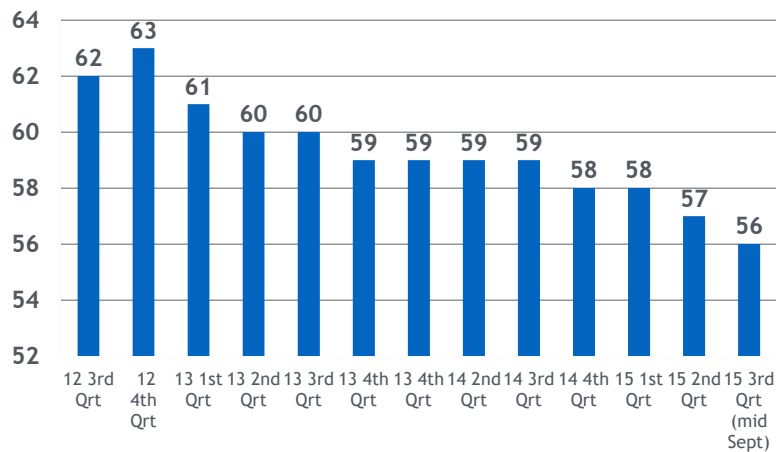
45% of all new homes in 2010 and 2011 received ESNH label.

Averaging 4,000 Ratings Per Year 2010 and 2011

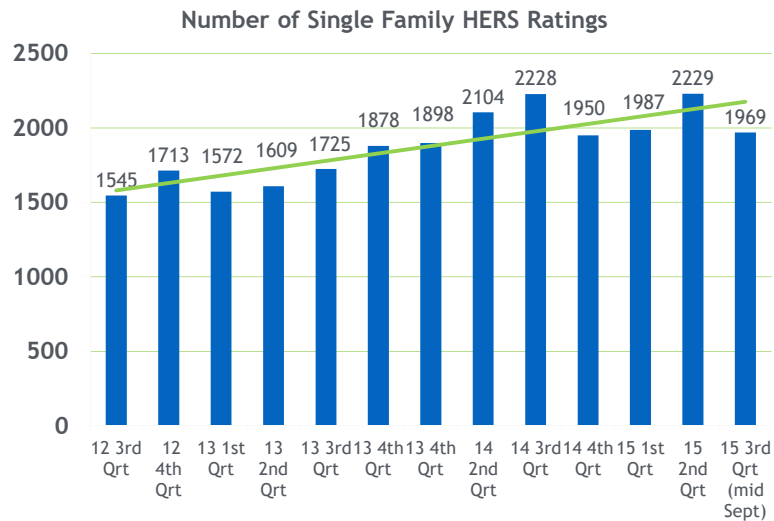


Better Data Drives Office Goals

Statewide Average Single Family HERS Score



Better Data Drives Office Goals



New Home Incentive

Tiered Incentives:

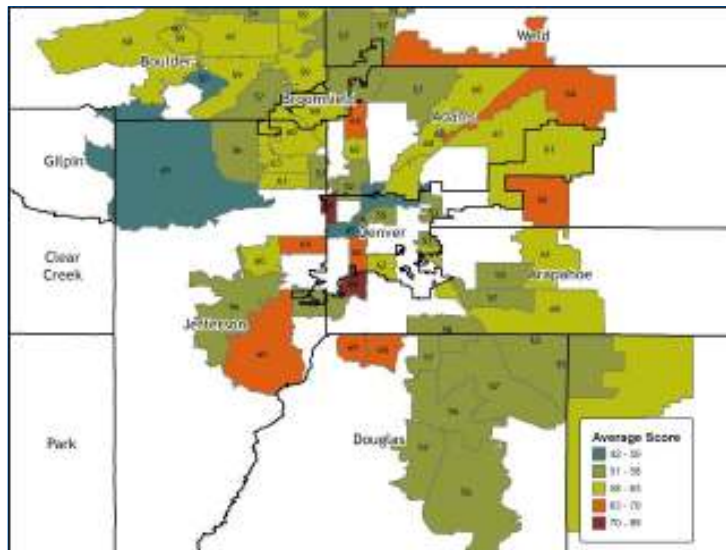
HERS Index Rating 50-40	: \$2,000 benefit (includes \$500 non state match)
HERS Index Rating 39-25	: \$3,000 benefit (includes \$1000 non state match)
HERS Index Rating 24-11	: \$4,000 benefit (includes \$1000 non state match)
HERS Index Rating 10 and below	: \$8,000 benefit (includes \$2000 non state match)

State versus Non-State Contributions:

- The incentive is split between State and non-state sources for the first three tiers. (Lender, Realtor, Utility, Builder)
- Lenders can use premium pricing and builders can use closing cost to cover match.



Denver Metro Average HERS Ratings



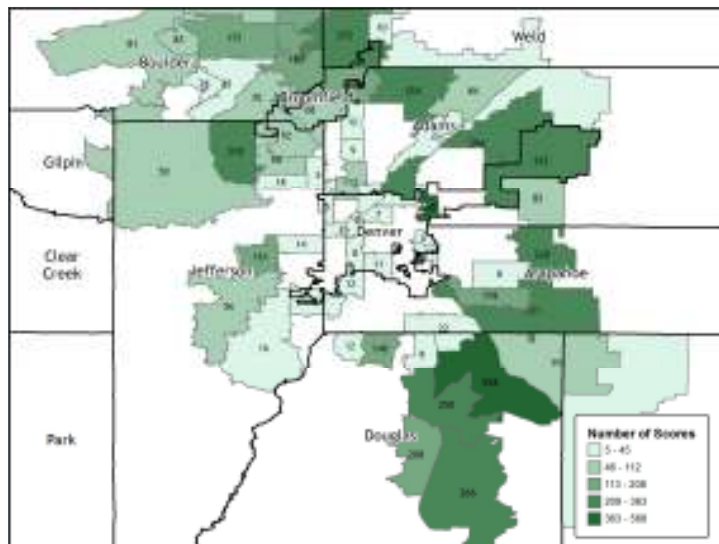
Approximately 55% of all new 2014 single family homes are built in Denver Metro

66% of these home receive HERS Index Scores

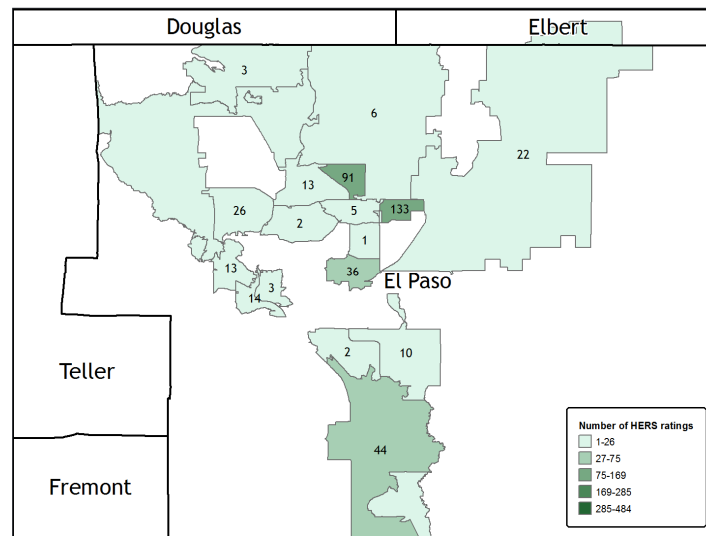
The cooler the color the better the score.



Denver Metro Number of HERS Ratings 2014



Colorado Springs Number HERS Rating 2013



Colorado Springs Builder Program

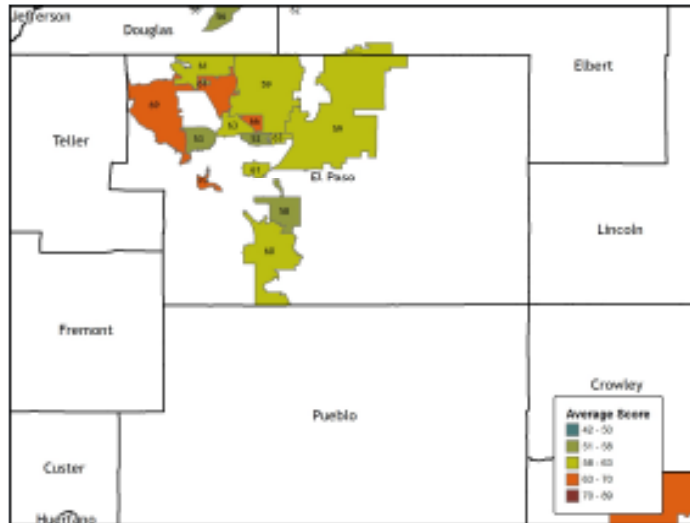
To Help Transform the 2nd Largest Colorado Market:

- In the fall of 2013, using RESNET HERS Rating data, the CEO identified Colorado Springs as an area with limited HERS Index Ratings.
- For 2014, the CEO hired a consultant to provide builder technical assistance
 - HERS Rating average dropped 4 points from 2013 to 2014
 - 6 builders enrolled into the RESNET Energy Smart Builder program
- In 2015, the CEO will continue to provide builder technical assistance on building science and marketing, which includes marketing materials.



Source: RESNET

Colorado Springs Average HERS Rating



Approximately 15% of all new 2014 single family homes are built in Colorado Springs

Only 18% receive HERS Index Scores

4 building pockets are at in the high 60's to 70.



2015 Colorado Springs Builder Program

Colorado Builder HERS Rating Program:

- Builders can receive up to \$4,000 in technical assistance from a HERS Index Rater of their choice with no adoption requirements.
- Builders must build between 40 and 700 homes a year
- The goal was to enroll 10 Colorado Springs Builder into the program in 2015 and 9 have been enrolled to date.
- The builders in both the technical assistance program and the RESNET Energy Smart Builder program in Colorado Springs build 60% of all new single family homes for Colorado Springs market.
- All builders do have access to marketing and sales assistance through Building Trust LLC



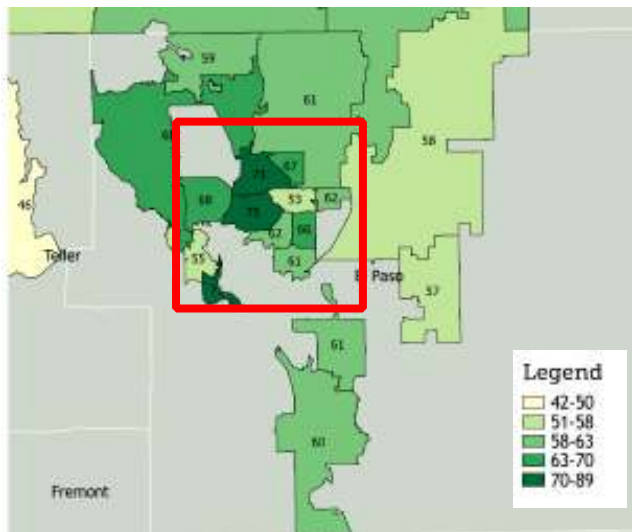
2015 Colorado Springs Builder Program

Colorado Builder HERS Rating Program Typical Report Results:

Model A	2 Story-4 bedroom w/crawl & basement	100% High Efficacy Lighting	.82 EF Water Heater	.97 EF Water Heater	Lighting Ventilation and .97 EF water heater	Upgrade Insulation Package	Upgrade Insulation and Mechanical	Upgrade Insulation and Mechanical and Energy Star	HERS 0
HERS Index Rating	68	63	64	62	57	63	52	48	0
IECC	09	09	09	09	09	09 & 12	15	15	



2015 Colorado Springs Average HERS Data



Average consistent at 63 HERS Index Rating

6 new zip codes now have multiple single family homes with ratings

Only tracking at 16% of all homes with a HERS Index Rating



2016 Colorado Springs Builder Program

Colorado Builder HERS Rating Program:

- January / February of 2016 gather all 15 builder in addition to consultants and Colorado Springs Utilities
 - How do we make a program sustainable?
 - Can changes be made to Demand Side Management programs and rebates?
 - Bridging the gap on water with Water Sense and WER Index
- Continue to offer sales and marketing training
- Develop additional two year plan with Colorado Springs Utilities on technical assistance with the addition of multi-family.



Thank You Stakeholders

- Most of the initiatives I have work on at the Colorado Energy Office are rooted in past work from dedicated people such as Paul Krischer, Robby Schwarz, Todd Gamboa and organizations such as Xcel Energy and multiple Home Builder Associations from around Colorado and the State HBA.
- As we move forward, Colorado Springs Utilities, RESNET, and Jon Martin are playing critical roles along with our past stakeholders to move Colorado forward.



Contact Information

For more information, please contact:

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A graphic with a background of a mountain range with yellow autumn foliage. In the center is a large white triangle containing 'CO' and 'COLORADO' below it. Below the triangle is the text: 'State of Colorado', 'John W. Hickenlooper, Governor', '1580 Logan Street, Suite OL1', 'Denver, Colorado 80203'. Below that are social media icons for Facebook and Twitter, with the text 'The Colorado Energy Office' and '@coenergyoffice' respectively. At the bottom left is the Colorado Energy Office logo.

State of Colorado
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