

Making home energy improvements simple and affordable.

# **Multi-Family Projects**













#### **Background:**



Energy Smart Colorado is transforming the local energy efficiency market by supporting significant, measurable retrofits in existing homes throughout Eagle, Pitkin, and Gunnison counties.

Goal: 15% savings in 10% of homes by 2013 (2000 homes in 2012, 4100 homes by 2013)

How can we achieve our goals?

Partnerships with multi-family neighborhoods.











#### **Resort Communities in Colorado**



#### **Lifestyle Community:**

A community whose basic attraction is its quality of life. This stands in contrast to a more "traditional" community in which the basic attractor is a job."

% of residential units that are 2<sup>nd</sup> home or vacation accommodations:

Vail 53%
Aspen 32%
Crested Butte 26%

Emerging Trends in Colorado Resort Towns, December 2011, Melanie Rees, Rees Consulting, Inc.











#### **Historic Factors**



Economic Boom Periods, and Affordable Housing Projects

Electric heating in areas where natural gas lines not available

#### Central Heating System Efficiency

1980 - 70%

2012 - 95%+

#### **Locally Adopted Building Resolutions:**

< 1991 – R-value requirements not specified by code

1991 –R-19 ceiling, R-11 floors and walls

1997 -R-30 ceiling, R-19 floors and walls

2003 –R-49 ceiling, R-20 floors and walls





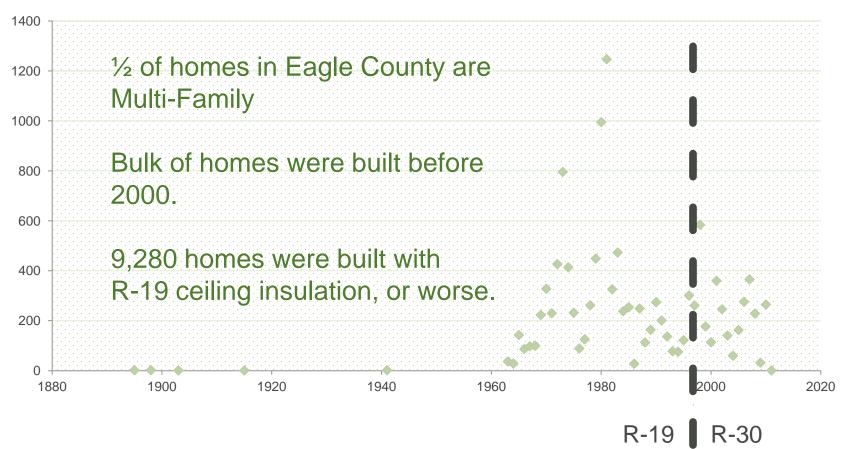






# **Eagle County**# of Multi-Family Homes by Year Built















#### **Multi-Family Targets**



Residential Multi-Family Buildings built prior to 1997

MF Buildings with Aging Common Boilers

Electric Heated Neighborhoods





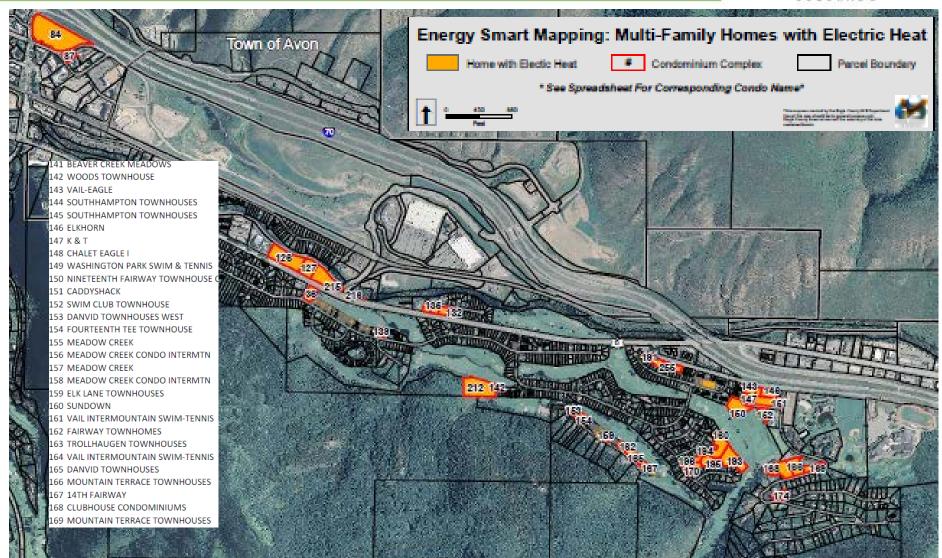






## **Multi-FamilyTargets**





#### **The Charter at Beaver Creek**















# Montaneros, Vail









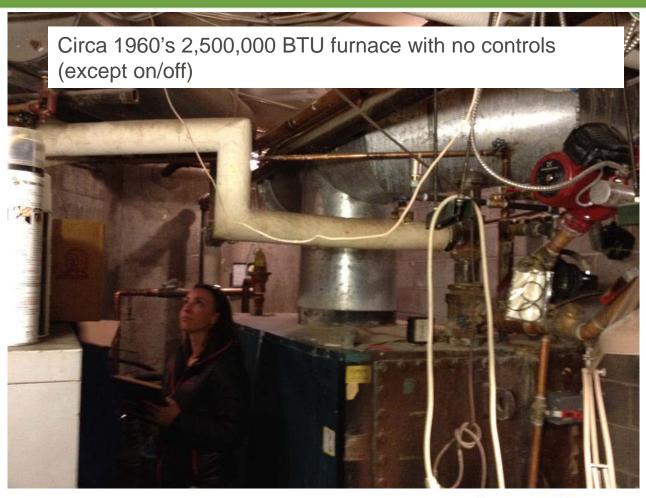






# **Central heating - before**















### Central heating, after





2011 Replacement with (4) high-efficiency 500,000 BTU, separate controls, insulated pipes.











### **Guidelines for Multi-Family**



### Is it Residential MF OR Commercial MF?

**Residential** – clearly defined thermal and pressure boundary. (10% Sample Method)



**Commercial** – shared entrance, common hallways, shared amenities. (TEA)













## Case Study, Villas at Brett Ranch







- 1) Replace Failed Heating Controls in Garages
- 2) Air seal and add insulation to attics.









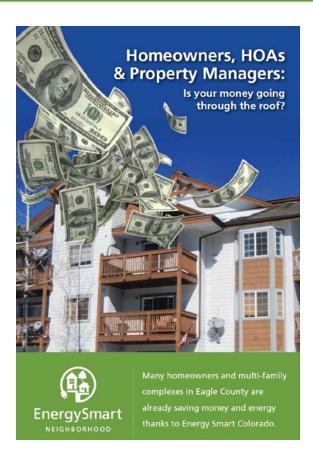






#### **Marketing to Multi-Family Neighborhoods**







video at:

http://vimeo.com/37343186











#### **Challenges, Opportunities**



Finding Motivated Property Managers, and HOA Board Members (these projects need a driver from inside the neighborhood)

Complexity of Buildings - heating type and envelope

Ownership Structures – HOA, Property Managers, multiple points of contact

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Sales effort to reach target neighborhoods (>30 years old, central boiler / electric heat)

Project management, coordination

Building Data available – Municipalities / County Assessor (> 30 years, Older Boilers, Electric Heated Neighborhoods)









