



Collaboration Makes Home Performance Happen

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Introductions

- ◆ **Boulder County's EnergySmart & Xcel Energy's Home Performance with ENERGY STAR programs come together:**
 - ◆ **Offer customer rebates**
 - ◆ **Financing (EnergySmart)**
 - ◆ **Qualified contractors**
 - ◆ **Drive more customer participation that brings deeper energy savings**

Collaboration is happening...



Programs at a glance: Xcel Energy's HPwES program

- ◆ Residential natural gas & electric energy efficiency rebate program
- ◆ Contractor certifications required
- ◆ Customers must use an Home Performance Contractor
- ◆ Customers must start with a Home Energy Audit through Xcel Energy's program- Snugg Home, iAudit Pro
- ◆ Test-in/test-out/CAZ Test
- ◆ Customers must complete at least 3 measures
- ◆ Average \$710 in rebates per home

EnergySmart Overview

- ◆ Residential & Commercial energy efficiency and retrofit program (Populus only does Res.)
- ◆ Serves all of Boulder County, CO
- ◆ Offers rebates
- ◆ Energy advising services, including:
 - ◆ Expert residential energy efficiency advice
 - ◆ Energy audits & audit review
 - ◆ Contractor pool management & coordination
 - ◆ Rebate processing and coordination
- ◆ Results: 6,500 homes enrolled to date
 - ◆ ~50% of enrolled homes have made paid upgrades
 - ◆ Owner-occupied upgrade rate: 63%
 - ◆ \$8.5M impact to area contractors

The Populus Team

- ◆ **Offices in Boulder & Denver, CO**
- ◆ **Focus: implementation of residential energy efficiency programs for municipalities and utilities**
- ◆ **Central Administrator of Boulder County's EnergySmart and the Denver Energy Challenge**
- ◆ **Employ more than 30 people in Colorado, including over 20 Energy Advisors**



Partners & Programs



◆ Populus has served over 7,500 homes in Colorado with energy advisor services since 2010

- ◆ Phone-based Energy Advisor Hotline
- ◆ Field-based energy advisors, including “quick installs”
- ◆ Contractor quality assurance and management of contractor pool
- ◆ Manage and schedule team of independent energy auditors
 - ◆ Leveraging Xcel Energy’s Home Energy Audit (HEA) rebate program
- ◆ Community Marketing & Outreach
 - ◆ Engagement with contractors, community organizations, associations, etc.

Case Study – Lafayette, CO

- ◆ 2100 SF house, 3 BR / 2 bath, 1 story w/ bsmt
- ◆ Built 1977
- ◆ Prev. utility bill:
\$3,000 / year
- ◆ Improvements:
\$10,000
- ◆ Low-Int. Loan:
\$5,000
- ◆ Total Rebates:
\$2,400



Case Study – Lafayette, CO

Improvements:

- ◆ Air sealing (from 7.5 to 3.6 ACH50)
- ◆ ERV for mechanical ventilation
- ◆ Insulation: Walls, ceilings, rim joist, floors
- ◆ New ENERGY STAR® Appliances
- ◆ New Lighting (25% LED / 75% CFL)
- ◆ New total utility bill: \$900 (\$2,100 lower)
- ◆ Programs leveraged:
 - ◆ Boulder County's EnergySmart
 - ◆ Xcel Energy's Home Performance with ENERGY STAR

Summary of project

- ◆ **Total Project Costs: \$10,000**
- ◆ **Less: Rebates: \$2,400**
 - ◆ **Xcel HPwES: \$1,400**
 - ◆ **EnergySmart: \$1,000**
- ◆ **EnergySmart low-interest loan: \$5,000 (3 yr)**

- ◆ **Out-of-pocket costs after loans / rebates: \$2,600**
- ◆ **Energy savings: \$2,100 / yr**
- ◆ **Loan repayment: \$1,600 / yr**

- ◆ **Positive cash-flow: \$500/ yr**

Energy Advisor Services

- ◆ **Expertise**
 - ◆ **Building science expert**
 - ◆ **Audit review & advice**
 - ◆ **Rebates: Local / regional / utility**
 - ◆ **Process program-specific rebates, consult on other rebates**
 - ◆ **Contractor referrals, bid coordination & review**
- ◆ **In home or on phone, depending on program and customer needs**
- ◆ **The Energy Advisor enables coordination of multiple programs - simplify process for customer**

Cross-program Coordination

- ◆ ES Customers enrolled in HPwES: 225
- ◆ Xcel Energy HEA audits performed (2012): 500+
- ◆ Xcel Energy rebates to ES customers: ~\$300K
- ◆ Deemed energy savings for Xcel Energy customers to date:
 - ◆ Electricity: 3.5M kWh / yr
 - ◆ Gas: 1M therms / yr
- ◆ 70% upgrade conversion rate for Xcel customers (not including free Quick Install items)
- ◆ Xcel-supplied quick installs to customers
 - ◆ 29,000 CFLs, 2,100 water saving showerheads
- ◆ *Both programs help drive the success of each other*

Contractor are key

- ◆ Required program orientation/training
- ◆ Contractors must sell high efficiency, complete rebate paperwork, and do a great install to participate
- ◆ Contractors must be certified
- ◆ Contractor management fosters success
- ◆ M&V feedback





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