Energy Behavior Engagement with Energy Assistance Recipients

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June 27, 2017   NEUAC, Fort Lauderdale
Energy Outreach Colorado

• “Dedicated to helping Coloradans afford home energy.”
  
  • Advocacy
  • Energy Bill Payment Assistance
  • Energy Efficiency Programs
    – Nonprofits
    – Multi-Family Housing
  • Energy Conservation & Education (Behavior Change)
Xcel Energy Program

GOAL:

– Engage participants in energy saving actions
– Reduce energy consumption/costs
– Promote access to other vital energy programs

Population

- Responsible for Electric and/or Gas bill
- In need of assistance or LIHEAP (LEAP) qualified
- Opt-in for In-Home Coaching
OUTCOMES

• Utility Outcomes
  • Maximize energy demand reduction by promoting energy efficiency programs

• EOC Outcomes
  • Decrease energy use per family in return decreasing energy assistance needs and stretching fundraised dollars further

• Client Outcomes
  • Empowerment to control home energy use
Do increased levels of engagement increase the overall energy savings in the home?
Program Area Focus

Goal: Address barriers that exist in rural vs. urban Colorado areas

Xcel Energy Territory:
- Denver Metro
- Mesa County
- Summit County
- Alamososa County
Program Area Focus

Territory Descriptions

- **Denver Metro**
  - Urban area, densely populated

- **Mesa County**
  - Western slope, less populated but still a major city

- **Summit County**
  - Rural, Mountain/resort town

- **Alamosa County**
  - Valley, very rural

Program focus ended up being solely in **Denver Metro and Mesa County** due to lack of energy assistance agency participation in **Summit & Alamosa** counties.
Tier 1 – Daily Engagement

Daily energy education provided upon receipt of energy assistance
- EOC provides training & materials during energy assistance grant training
- Agency signs up participants for on-site workshops (when applicable)

- GOAL: 5,000 Clients
Program Design – Materials

Tier 1 – Daily Engagement

More ways to save:

- **Clothes**
  - Wash full loads of laundry
  - Air dry your clothes

- **Electronics & Appliances**
  - Unplug small appliances
  - Don’t block any air vents or radiators

- **Computers**
  - Use the computer’s sleep mode

- **Kitchen Appliances**
  - Limit the use of large appliances

Choosing 3 of these action items could mean more money for: groceries, childcare, and transportation.
Energy Assistance Participants attend workshop facilitated by agency staff
- EOC provides training to agency staff
- Agency staff facilitate on-site energy workshop
  - Workshops include energy bill overview, no-cost energy saving tips, customized energy plan
  - Gift card or LED bulb given for attendance

- GOAL: 500 Clients
Program Design – MATERIALS

Daily Engagement

Workshop Engagement

In-Home

Tier 2 – Workshop Engagement

Energy Worksheet

STEP 1: What energy saving actions have I already taken?

STEP 2: Check all actions that apply to my home. Circle 1 action I can easily CHANGE:

- Use space heaters
- Leave lights on when not in use
- Leave electronics turned on when not in use (i.e., TV)
- Wash laundry in hot water
- Leave fridge door open while searching for food
- Wash/dry small, not full, loads of laundry
- Wash small loads of dishes in the dishwasher
- Allow water to run continuously while hand washing
- Leave electronics chargers plugged in when not in use
- Block air vents with furniture or rugs
- Close shades on sunny days (in winter)
- Open shades on sunny days (in summer)

1. 
2. 
3.

Your Home’s Energy Action Plan:

1. 
2. 
3.
Tier 3 – In-Home Engagement

EOC staff address no/low cost opportunities in the home

- Direct installations of low-cost measures (CFLs/LEDs, showerheads/aerators)
- Received gift card for participation
- Customize energy saving opportunities
  - Display energy saving goal in the home

- **GOAL:** 75 Clients
Tier 3 – In-Home Engagement

Your Home’s Energy Action Plan:

1. ________________
2. ________________

Actions you already take to save | Actions you have not taken, but want to try

I pledge to take action on these 2 energy saving initiatives:

1. ________________
2. ________________

Signature __________________ Date _____________

* Write these actions on the back side of this sheet, next to the check box.
**GOAL VS. PARTICIPATION**

<table>
<thead>
<tr>
<th>Tier</th>
<th>Goal</th>
<th>Outcome</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>5,000</td>
<td>&gt;5,000</td>
</tr>
<tr>
<td>2</td>
<td>500</td>
<td>1,030</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
<td>54</td>
</tr>
</tbody>
</table>
### INSTALLATION RATES in 54 HOMES

#### In-Home - Installation Quantities

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>CFL</td>
<td>86</td>
</tr>
<tr>
<td>LED</td>
<td>106</td>
</tr>
<tr>
<td>Low-Flow Fixture - Bathroom</td>
<td>17</td>
</tr>
<tr>
<td>Low-Flow Fixture – Kitchen</td>
<td>16</td>
</tr>
<tr>
<td>Low-Flow Fixture - Showerhead</td>
<td>11</td>
</tr>
</tbody>
</table>
Program – RESULTS

Survey Results – Pre & Post Analysis
Self-reported changes were collected by issuing a survey pre-workshop and mailing a survey 3 months post-analysis

Survey Results

- 32% increase understanding of energy bill
- Increase frequency in energy saving actions (turning off lights, decreasing space heater usage, turning off electronics)

*Surveys revealed that 68% of low-income participants have someone occupying the home >16 hours per day.*
## Program Successes

### Successes

- Met ‘Tier 1’ & ‘Tier 2’ participation goals
- Increased level of education/engagement with energy assistance clients
- Increased number of trained staff/engaged agency staff
- Customized energy saving plans developed by energy assistance clients
- Additional program referrals to weatherization
### Challenges

- Agency staff turnover was challenging to keep up with relationships built and training
- Lack of agency time affected the number of organizations able to participate
- Scheduling in-home appointments for EOC staff was very difficult. Lots of interest (195 homes signed up) but very little follow-through from home occupant
- Reaching home occupant, EOC resources/available time for follow-up, client ‘no-shows’ for appointments led to failure of meeting ‘Tier 3’ goals
- Lack of weatherization applications actually submitted
In order to address challenges, the exact same structure will be implemented in 2017 with new and improved tier-level components.
Tier 1 – Daily Engagement

Daily energy education provided upon receipt of energy assistance

- EOC simplified energy saving resource guide and provided in-detail training to agency staff.
- Simplified and condensed resource guide allows for easier printing and more direct energy saving tips

- GOAL stays the same: 5,000 Clients ± 5,000 Clients
Tier 1 – Daily Engagement

Condensed Savings Guide with Question Prompts
Energy Assistance Participants attend workshop facilitated by agency staff

- Due to agency feedback, EOC revised energy workshop materials including the PowerPoint template, workshop worksheet, and energy saving prompts
- Also partnering with Office of Financial Empowerment to increase energy reduction in the financial literacy conversation
- **GOAL increases from 500 Clients to 5,000 Clients due to increase in agency participants**
**ENERGY WORKSHEET**

**REDUCE**
This is an easy habit that will save quite a bit. Light bulbs will last longer too!

Savings: $8 per year for each light bulb turned off for 4 hours a day. That is $80 each year for 10 light bulbs!

This could save ... $80 per year!*

**ADJUST**
Adjusting temperature overnight and/or while away could save a lot!

Winter: Set back 5-10*
Summer: Turn up by 5-10*

Efficient occupied settings:
Winter: 68° - 72° F
Summer: 74° - 78° F

This could save ... $80 per year!*

**POWER DOWN**
Phantom energy (electronics turned off but not in use) raise bills by 3% each year!
Whenever possible, unplug small appliances.

This could save ... $30 per year!*

Total Savings = $190 each year!

*Estimated savings based off of the average household.

 emissions.

**I Pledge to Save**
I Plan to Take Action By:

1. 
2. 

By taking action and saving, this allows more money for (circle one):

- Groceries
- Transportation
- Fun/Family Time

**Additional Energy Savings Options:**

**Kitchen**
- Run Full Loads of Dishes.
- Run Full Loads of Laundry
- Dry Clothes to Dry.
- Clean Linen Fibers.
- Eliminate Extra Fridge and Freezer. These are the appliances in homes that use the most energy each month.

**Laundry**
- Wash Laundry in Cold Water.
- Run Full Loads of Laundry
- Hang Clothes to Dry.

**Other**
- Close Curtains to Keep the Heat Out in the Summer.
- Keep Computers in Sleep Mode.
- Eliminate Space Heaters.

**My Home Takes Action...**

1. 
2. 

**Tier 2 – Workshop Engagement**

Revised worksheet and energy magnet
Tier 3 – In-Home Engagement

EOC staff & EOC Partners address no/low cost opportunities in the home

• Mile High Youth Corps – organization already with crew/outreach availability, conduct in-home client engagement

• Direct installations of low-cost measures (CFLs/LEDs, showerheads/aerators) PLUS Advanced Power Strips provided to qualified candidate

• GOAL increased from 75 Clients to 300 clients with ~100 installed Advanced Powerstrips
Conclusions

• Continue to utilize partnerships and their relationships to “meet clients where they’re at”
• Many clients want this information but may be in crisis mode while processing. Give them additional opportunities to engage
• Make energy saving fun and allow clients to customize energy saving actions to their own lifestyle/home type
• Use engagement opportunities to “plant the seed” for existing weatherization and similar programs
• Keep learning from challenges and implement program improvements
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