

Problem

Only one third of homeowners who complete a Home Performance with Energy Star (HPwES) audit go on to complete a recommended wholehouse energy upgrade (NYSERDA, 2012). Financial incentives and information campaigns may not be sufficient to change complex and deeply rooted habits. Barriers to uptake after audit include:

- Lack of trust
- Significant upfront costs
- Time constraints
- Confusing paperwork/complicated program incentives
- Uncertainty about quality of contractor work
- Uncertainty about cost benefits of retrofits

Our project aims to demonstrate that a contractorled behavioral intervention will increase the average audit conversion rate and homeowner investments in energy efficiency measures following participation in a home energy assessment. Our Energy Educator intervention utilizes an array of social marketing tools (McKenzie-Mohr & Smith, 1999; Vigen & Mazur-Stommen, 2012) to foster energy-efficient behaviors and investments.

Participants

Participants in this behavior pilot will be 170 owners of 1-to-4 family residential buildings within a 30 miles radius of Ithaca NY who contact Snug Planet to request a comprehensive home energy assessment.



Contractor-Led Social Marketing to Promote Energy Efficient Decisions and Behaviors in the Residential Sector Principal Investigator: Kathryn A. Caldwell, Ph.D. - Department of Psychology, Ithaca College Implementation Partner: Mary Kate Wheeler, B.A. & Jon Harrod, Ph.D. – Snug Planet *Proposed funding from NYSERDA: \$100,000*



Randomized Control Intervention Experimental treatment group:

- Homeowner receives a face-to-face visit from Energy Educator prior to their energy audit visit from a building analyst. • The Energy Educator will:
 - Build trust and rapport (cultivating relationships)
 - Provide data on the average household usage as a comparison (activating social norms).
 - Provide customized recommendations for no cost and low cost steps to reduce base load energy use in lighting, appliances, electronics and hot water.
 - Provide a checklist that doubles as an *Energy Action Plan* for homeowners to sign if they choose to commit to completing the items they check (making a commitment).
 - Provide information and paperwork assistance regarding NYSERDA grants, loans and rebates to homeowners.
- Follow up with each of the homeowners visited one month from their initial visit to check on homeowner progress and encourage action steps to complete the no cost and low cost improvements and audit recommendations. **Control Group:**
 - Homeowners will receive energy audit only.

	delivering comfort and energy savings
	Energy Action Plan
Lighting	
Install 🗌	energy efficient compact fluorescent light bulbs (CFLs) in light fixtures.
Install:	some energy efficient, long-lasting LED bulbs in our home.
Turn of	f lights when not in use, or install motion sensors to turn them off automatically.
Hot Water	
🗌 Install	high pressure, low flow shower heads.
Lower	water heater temperature to 120°F.
🗌 Insulat	e hot water supply pipes.
Appliances & Ele	ectronics
Reduce	phantom energy load by turning power strips off or installing a smart power strip
Regular	ly clean and/or service appliances:
C Replace	e old, inefficient appliances with new Energy Star models:
Health & Safety	
🗌 Install a	and maintain a smoke & CO detector on each floor.
Condu	ct a home radon test.
Save MORE Ene	гду
Recom	mend a Snug Planet home energy audit to a friend.
🗌 Like us	on Facebook or follow us on Twitter for energy-saving updates and resources.
Other:	
Other:	
May we share y saving work?	our Energy Action Plan online to celebrate the community-wide impacts of ou
Ses 2	
	Signed:



1) The energy educator intervention will increase homeowners' participation in the existing Home Performance with Energy Star (HPwES) program and increase the conversion rate, average job size and average dollars per lead. (2) Homeowners who receive the energy educator intervention will implement low-cost/no-cost energysaving retrofits at a higher rate than homeowners who do not receive the energy educator visit.

Early Lessons Learned (Anecdotal Evidence)

One year of piloting our behavioral intervention in the field suggests that:

- down hot water)
- project is underway).

McKenzie-Mohr, D., & Smith, W. A. (1999). Fostering sustainable behavior: An introduction to community-based social marketing. Gabriola Island, BC: New Society Publishers.

NYSERDA. (2012). Green Jobs - Green New York: Annual Report (pp. 49-66). Albany, NY: New York State Energy Research and Development Agency.

Vigen, M., & Mazur-Stommen, S. (2012). *Reaching the "high-hanging fruit"* through behavior change: how community-based social marketing puts energy savings within reach. Washington, DC: American Council for an Energy-Efficient Economy.



Hypotheses

 Increased ease with the HPwES application process helps homeowners feel excited about working with us. Customers have greater trust in the quality of the company and the install work they are obtaining. • Energy savings often happen immediately because homeowners learn easy low- and no-cost actions

(ie.g., base load reductions, shower heads, turning

• The Energy Educator conveys information and insight about the performance issues in the home, customer's goals, and any barriers to the building analyst. This information facilitates a more efficient and productive audit. Audit times are decreased and sales close rates have increased as a result of the EE program (statistical analysis forthcoming once the funded

Selected References