

The Time for (Behavior) Change is Now

Applying Social Marketing Principles to
Residential Energy Efficiency Programs

Jane Hummer

Jan Harris, Ryan Firestone, & Patricia Thompson

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Navigant Consulting, Inc.
1722 14th St., Ste. 230
Boulder, CO80304
720-564-1130
www.navigantconsulting.com

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Project Background



- **Assignment:**
 - Meta-analysis of successful behavior change initiatives in energy efficiency and other fields (public health, transportation, water conservation)
 - Project conducted for Northwest Energy Efficiency Taskforce Regional Marketing Coordinating Council
 - The Council's ultimate goal: to make residential energy efficiency behaviors as commonplace as recycling
- **Methodology:**
 - Reviewed over 100 papers, academic studies, and program evaluations; narrowed down to 3-4 programs each in four broad categories of behavior change initiatives:
 - Media campaigns
 - Community-based social marketing
 - Feedback mechanisms
 - Competitions

The Current Situation



- “Energy efficiency behaviors” can include:
 - **Habitual behaviors** (e.g., turning off lights when leaving the room)
 - **Purchasing behaviors** (e.g., selecting energy-efficient appliances)
 - **Program participation decisions** (e.g., the decision to get a home energy audit through a utility program)
- No-cost and low-cost energy efficiency behaviors: potential energy savings of 20-30% in U.S. residential sector (Gardner and Stern 2008, Laitner, Erhardt-Martinez, and McKinney 2009, Nadel, Shipley and Elliot 2004)
- Concern about climate change, but waiting for the technological deus ex machina rather than making incremental changes
- 30 years of energy efficiency programs in the U.S. have not significantly closed the gap, despite major investments of ratepayer/taxpayer dollars

Time for a Major Shift in Thinking



- People are rational economic actors.
- People just aren't aware of what to do.
- People don't realize energy efficiency is cost-effective.
- Primary barrier is first cost
- Technology is king
- Strategy: just give them a rebate

Old School Mentality



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Old School Mentality



- Attitudes and behaviors are diverse and rooted in social/community contexts
- Many already know what to do
- Non-financial barriers exist
- Financial savings aren't necessarily most motivating factor
- Energy is not top of mind
- Strategy: win over hearts and minds

Social Marketing Perspective



Elements of Successful Behavior Change Programs



- Successful behavior change programs often:
 1. Use **segmentation and barriers research** to inform program design
 2. Design programs **with evaluation in mind**: baseline research, pilots, control groups
 3. Select appropriate **marketing channels**
 4. Empower **local change agents**
 5. Invoke **social norms**
 6. Meet consumers' desire for **quantification and prioritized actions**
 7. Generate a sense of **enthusiasm and excitement**

Segmentation and Barriers Research



- Many utilities assume their target audience for residential programs should be “all residential customers”
- One-size-fits-all messaging fails to acknowledge significant variations in consumers’ energy-related attitudes and behaviors as well as their ability to change behaviors
- Conduct segmentation studies and qualitative barriers research to focus program interventions on reducing those barriers faced by prioritized segments

Program Design with Evaluation in Mind



- Evaluation is much easier if integrated into the program design:
 - **Baseline surveys** to determine current attitudes and behaviors
 - **Control groups** to isolate the effects of the program from other influences
 - **Post-program surveys** ideally immediately after program and again in a year to measure persistence
- Programs with a narrow focus on a few behaviors are easier to evaluate
 - Also less likely to induce the “option paralysis” that can result from a “65 ways to save energy in your home!” message

Appropriate Marketing Channels and Local Change Agents



- Successful campaigns use a **mix of marketing channels** and understand the strengths and weaknesses of each
- **Mass media** is great at focusing attention on previously unknown problems; less effective at delivering complex, action-oriented information
- **Social media** and “**actual human beings**” can deliver more customized information; people respond to word-of-mouth
- Empower people to act as change agents or energy efficiency **champions** within their communities: more “actual human beings” delivering the program’s message
- Local change agents have better understandings of **cultural context**

Program Example: HEET Barnraising Parties



- Home Energy Efficiency Team – non-profit organization in Cambridge, Massachusetts
- Adopted the “barnraising party” model for home weatherization and efficiency upgrades
- Friends and family recruited for free labor
- 40% of volunteers go on to make efficiency upgrades in their own home
- Efficiency is fun and tangible



Social Norms



- Social norms: the sense that “everyone” is doing the desired behavior, and there would be **negative social consequences to not doing it**
- More **willingness to consider new ideas** if they come from “people like me” or friends/family/neighbors
- Social norms are best invoked when social networks (both on- and off-line) are engaged:
 - HEET barnraising parties
 - Project Porchlight neighborhood canvassing with CFL giveaway
 - Drives people into other energy efficiency programs
 - Creates energy efficiency evangelists out of volunteers
 - Frequent sharing of energy saving tips by Facebook “fans” of ConEd’s Power of Green

Quantification and Prioritized Actions



- Comparative billing programs such as OPOWER provide feedback on how one household's energy consumption compares to its neighbors
 - Consistent energy savings of 1.5-3.5% in pilots across U.S.
 - Everyone likes to think of themselves as above average; but most don't know about others' energy habits
- Consumers want quantitative estimates of how much they'll save and how much they have already saved
 - Precision is less importance than prioritization/order of magnitude
- Vague "save money" messages may do more harm than good

Enthusiasm and Excitement



- Energy efficiency needs an image makeover: **fun and feasible**, not an onerous task in self-deprivation
- Community-based efforts (Project Porchlight, HEET) make efficiency fun for participants by engaging their friends and families in social events
- Competitions generate excitement and publicity and provide public recognition for “good behavior” (another form of social incentive):
 - School competitions (e.g., America’s Greenest Campus)
 - Community challenges (competing against neighboring cities)
 - Reality-style TV competitions (e.g., the Greenest House, Power of One Street)

Closing Thoughts



- Many promising ideas for increasing energy efficiency in residential sector; some can be applied to resource acquisition programs
- Lack of evaluation research is biggest barrier to more widespread deployment of these ideas
 - Challenges can be overcome with evaluation planning
 - Need to study persistence and market transformation effects
 - Opportunity for evaluators to really push this field forward
- Financial incentives may be easier to keep track of, but social incentives can transform a market
- Give a man a CFL, secure one CFL's worth of energy savings; teach a man to love the CFL, and inspire a lifetime of energy-efficient behaviors



Questions?

Jane Hummer

+1 720.564.1130

jane.hummer@navigantconsulting.com