



U.S. EPA's ENERGY STAR Consumer Research to Drive Behavior Change

Behavior, Energy and Climate Change Conference
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Introduction: Formative Research



- From late 2010 through January 2011, EPA's Climate Protection Partnership Division (CPPD) ENERGY STAR Labeling Branch (ESLB) conducted formative research to inform the evolution of the Change the World, Start with ENERGY STAR® campaign.
- Goal: to better understand consumer attitudes and activities related to the environment and saving energy.
- The research process included a literature review that informed subsequent focus groups.



Focus Group Background

Eight focus groups* were conducted to assess:

- Attitudes about the environment and saving energy
- Effective messages and actions/initiatives to encourage energy-saving behaviors
- Motivators and barriers to adoption of energy-saving habits and energy-efficient improvements and purchases at home
- Information sources
- Probable impact of *Change the World* campaign outreach on behavior, along with the potential for social/community influencers

**Locations: Paramus, NJ; Atlanta, GA; Chicago, IL; and Denver, CO*

Key Focus Group Responses: Energy Efficiency of Homes



- Participants reported a wide variety of energy efficiency levels in their homes
 - When asked how they knew how efficient their home was: drafts, energy bill amount, and improvements/purchases completed.
- There is significant opportunity for making further energy-efficiency improvements
 - Even among those who have already completed several energy-efficiency improvements and purchases, very few felt their homes could not be improved to increase energy efficiency.

Key Focus Group Responses: Energy-Efficient Home Improvements and Purchases



- Energy efficiency improvements and purchases most often mentioned included: new windows, CFLs, insulation, programmable thermostat, and appliances
 - Less frequent responses: HVAC system and/or furnaces, or adjusting thermostat or water heater settings.
- Home electronic purchases were hardly ever named unaided

Key Focus Group Insights: Energy-Saving Habits



- Nearly all participants had incorporated energy-saving habits into their daily lives.
- Many have installed programmable thermostats—but not all have programmed them (difficulty programming, irregular schedules).
- The majority also did not unplug home electronics (don't want to reprogram or wait for them to initialize before use).



Information Sources

- Main information sources on energy efficiency cited as:
 - Internet search engines (mentioned most frequently)
 - Neighbors, co-workers, friends, and family
 - Retail stores (such as Home Depot, Lowe's, or Menards) and local hardware and appliance stores
 - Utility bill inserts and other information from utility companies
 - Contractors and repairmen
- Additional information sources mentioned:
 - Retailer and manufacturer websites
 - *Consumer Reports*
 - Home shows on HGTV and DIY Network
 - Television news shows and other media



Drivers/Motivators

- Top motivators for energy-efficiency improvements and purchases mentioned:
 - **Save money (incl. rebates and tax deductions)**
 - **Make necessary repairs/replacements**
 - Updating or remodeling, aesthetics
 - Comfort
 - Newer is more efficient, and energy efficiency is a bonus
 - Responsibility/guilt
 - Setting a good example/children

Barriers

- Why not make improvements?:
 - Cost/financial reasons
 - Waste
 - Other priorities
 - Time/inconvenience
 - Changes on utility bills/frustration with fluctuating utility rates offsetting savings from energy-efficiency improvements



Barriers: Changes on Utility Bills

- Participants generally noticed a slight reduction in their utility bills if energy efficiency improvements were made.
 - Some compared kilowatt usage for the same month in the previous year.
- Many expressed frustration with utility rate increases offsetting energy-efficiency improvements or purchases.

Pledge Concept



- Some willing to personally commit to save energy; most unwilling to publicly commit—particularly if they had to sign a pledge.
- Respondents believed if a public commitment to save energy was made, those making such a commitment would be more likely to follow through than those who did not.

Tactics and Strategies



- **Rebates** - Most interested in incentives that would motivate them to make energy efficiency improvements (instant, point of sale preferred)
- **Need for Information** – Some were less informed than others about energy efficiency; stated more information would get them to consider their behavior.
- **Reminders/Prompts/Tips on Products** - Receptive to placing reminder labels or prompts on products to encourage energy-efficient behavior.
- **Social Normative Probes** - Some interest in comparative usage information—within-neighborhoods (but need to compare apples to apples, as family size varies).

Tactics and Strategies



Influencers:

- Family had great potential for influence—specifically children and grandchildren.
- Houses of worship and other organizations such as children's schools were not seen as influencers.
 - Some interest if a local organization received a benefit for participation, such as a utility bill reduction.
- Celebrities were almost universally dismissed as influencers with regard to energy efficiency.

Tactics and Strategies



- **Encouraging Follow-Through Behavior** - Seeing an impact on utility bills would strongly encourage further energy-efficient behaviors and purchases.
- **Social Networking** - All groups contained individuals who use and who do not use social networking.
- **Competition** - The concept of national competitions with prizes or sweepstakes was not well received (low odds); more interest in locally-based competitions, particularly with a concrete benefit for participating and/or winning.



Key Insights

- **Energy efficiency is driven by a number of different motivators**
 - Energy efficiency is *not* the primary motivator for that behavior. Improvements and purchases are being made for a variety of reasons, including comfort and aesthetics.
- **Start with easy-to-implement changes, then encourage people to keep going**
 - Discussions with less energy-efficient Americans suggest the key to engaging them lies in starting with a series of small, easy changes that require little to no financial investment.
 - Promote idea that changes in habits and multiple improvements are needed. Energy efficiency is a multi-step process.
- **Results can help drive further action**
 - If people could see actual results from energy-efficient improvements, that evidence would be a strong motivator for additional improvements.

Key Insights



- **ENERGY STAR Brand Perception**
 - ENERGY STAR is widely recognized, but few truly understand the brand fully. Fewer realize it's an EPA program (EPA evoked strong emotion—both positive and negative).
- **Educate and Inform**
 - Many are unsure what to do or how energy efficiency recommendations impact them personally.
- **Prompts/Reminder Labels**
 - Respondents generally reacted positively to the concept of reminder labels and prompts, and would like to see them included more often on the products they purchase.

Key Insights



- **Joining a Movement**

- This concept elicited very little support because the vast majority of Americans aren't emotionally engaged in energy consumption; to join a movement, you have to care a great deal.

- **Personal Commitment**

- The concept of making a public commitment was not well received.
- Several participants were interested in making a personal commitment for themselves, their families, or their communities in regard to energy efficiency, primarily as a tool to reduce their costs.
- If people are encouraged to commit to behaviors by people they respect/care about, they're more likely to follow through.

Key Insights



- Those willing to commit wanted more details on what was expected; they thought measurable, attainable goals and progress reports toward goals were important.
- Some wanted more specific information on determining how improvements and purchases directly impacted their own energy usage.
 - E.g., if they replace their 5 most used incandescent bulbs or change the thermostat setting, how much would that save them personally. It's about quantifying the impact of the recommended improvements/purchases or behaviors/habits.

Key Insights



- **Climate Change**

- Most participants reacted very strongly to the concept of “climate change” when it was mentioned in the campaign description (with the most vocal reaction being negative), and many felt that it made the campaign less acceptable.
- Topic continues to be polarizing; there is still a great deal of confusion about the concept.

Research Results Applied to ENERGY STAR Change the World Campaign



- This formative research led to the current development of a more focused behavior-change ENERGY STAR campaign in 2012.
- First year will be partner-led pilot testing of different, individual, energy efficiency behaviors.
- Partnership with OPower in the works to help strategize how to reflect home energy savings results, as positive feedback for consumers.

Q&A and Contact Information



- Q&A
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