

## **SmartPower Energy Efficiency Messaging Research Executive Summary**

### **Background**

The SmartPower focus over the past five years has been the growth of the clean energy market. Our approach with municipalities, religious organizations and even residential customers in becoming clean energy purchasers has often been the coupling of energy efficiency with those purchases as a way of offsetting costs. Our expertise in uncovering consumer barriers and developing campaigns to address those barriers has contributed to market growth. We now intend to apply that approach to the energy efficiency arena.

While corporations and government institutions have understood the need to reduce costs through energy efficiency measures, residential customers still consider energy efficiency akin to turning down the thermostat, turning off lights, and purchasing Energy Star appliances. The need for a stronger, more powerfully motivating campaign that engages all consumers in energy efficiency actions can have an enormous effect in creating an educated public that is more conscious of its energy usage and consequences.

Partnering with the Department of Environmental Protection agencies throughout the Northeast and the NE EPA, as well as the Connecticut Clean Energy Fund, SmartPower has begun the implementation of a message research approach akin to our work in creating the very successful “Clean Energy, Its Real. Its Here. Its Working.” Campaign.

### **Energy Efficiency Focus**

While there is so much information available to consumers on how to be energy efficient, in some ways the plethora of information becomes overwhelming. Consumers are inundated with things they can do and as a result, often do nothing or very little. Our objective in setting out to create a successful campaign is to focus on a few actions that consumers could take. We know that any message, to be effective, must be simple. Therefore our criteria in selecting Energy Efficiency measures included:

- Simple to perform
- Repeatable daily, not a one time event
- Applied to homeowners and renters
- Crossed age groups (adults and teens)
- Adoption of this measure will make a difference
- No need to purchase anything to do it

Our working group identified three simple, everyday activities that would be “tested” as part of our Energy Efficiency research. From an initial list of over 125 activities, we selected the following actions for our research focus:

1. **Unplugging/Turning off-** Lights, television, computers, cell phone chords, printers, I pod chargers, household appliances, etc. In today’s household, a family of four is plugged in everywhere. Even when these appliances and chargers are not in use, they draw electricity and spill carbon dioxide into the air.
2. **Shorter Showers** – Teens especially are often reported to be lingering in the shower for up to 20 to 40 minutes. The amount of electricity that is spent heating that water creates substantial emissions over the course of a year.
3. **Car Idling** – Waiting to pick up friends, warming up the car during a cold day, sitting and chatting with friends is a way to use up gasoline and spill carbon dioxide into the air.

*A description of the energy efficiency equivalencies provided to panelists can be found in Appendix A.*

Again, these daily activities were selected because they involve almost every member of the household, and every member of the household can do something about them. Utilizing the expertise of our group, we have identified the environmental and financial impact of these measures over the course of a day, year, and even several years.

## **Research Approach: Phase 1: The Living Diary**

In the past SmartPower has found that a quantitative research approach to clean energy purchase behavior often yields the “Boy Scout” answer – consumers always report a willingness to spend more for clean energy, and yet the market does not bear that out. We had the same concern with energy efficiency. Rather than ask consumers in a telephone or on-line survey what they were willing to do, or ask them theoretically in a focus group setting, we instead recruited participants for a two week, real life research experiment.

From across New England we recruited a total of 81 adults and teens to participate in our Energy Efficiency on-line research. They were provided with information about our three Energy Efficiency activities including the environmental implications, the financial implications and the equivalencies of these actions (how many cars off the road, how many trees would need to be planted, etc). Over the two week period we asked them a series of questions, gave them homework assignments and other tasks that led to over 1000 diary entries, all designed to determine:

- Barriers to being Energy Efficient
- Motivations for being Energy Efficient
- Identification of Energy Efficient activities most likely to succeed

*A description of the Living Diary process and what was asked of panelists over the two week period can be found in Appendix B.*

## Research Findings

Our purpose is to utilize the findings of this research in the development of an energy efficiency campaign that will work.

### 1. Need to be Inspired

Our participants all reported what busy lives they live. They have so many things they are focusing on from the time they get up in the morning to the time they go to bed at night. Getting their attention to focus on something like Energy Efficiency is going to be a primary challenge.

However, once we have their attention, our panelists wanted positive inspiration. They want to know how easy it is to integrate energy efficiency into their busy lives. It appears to be more effective to *inspire* them with what they *can* do versus *tell* them what they *should* do.

### 2. Magnifying the Power of Me

Our participants were impressed when they were able to see how their actions, when multiplied over time and coupled with the actions of others, could make a real difference. This fact made them feel more powerful and uplifted. As one respondent reported, “We can make a difference.”

### 3. Feeling Smarter is Cool

An emotional benefit of being more energy efficient is that it made our participants feel smarter about themselves on a number of levels. They felt more creative, responsible, and connected to contemporary culture. They felt more knowledgeable. Saving money becomes smart and cool. There appears to be a social currency connected with being energy efficient that made them feel good about themselves.

Many panelists utilized a light bulb as the symbol of this feeling. “When I save energy its like a light bulb has gone off in my head that I’m getting it.”

### 4. Generational Difference

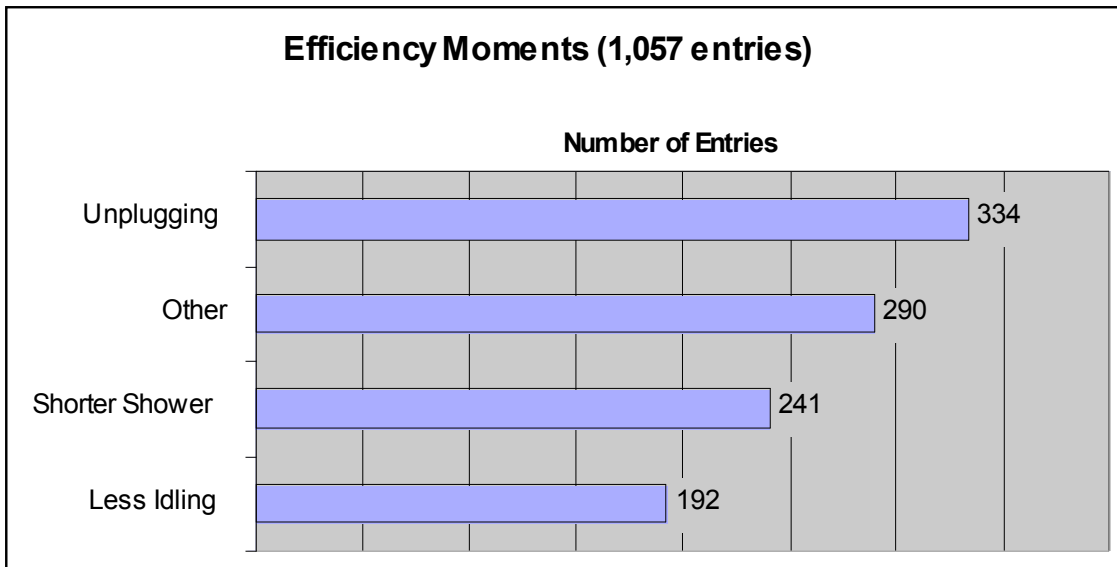
There is a distinction based on age and life stage in viewing Energy Efficiency. The Old School mentality is one of not being wasteful, reducing, reusing and maintaining. The New School mindset is one of “saving my world” with opportunities, new ideas and technology. Both schools are positive about Energy Efficiency, but would represent a very different message approach and different “voice.”

Younger participants talked about their parents hassling them about being more efficient, almost always talking to them about being less wasteful. Some saw this study as a way of turning the tables and having kids teaching parents.

<b>Old School Efficiency</b>	<b>New School Efficiency</b>
Explain what they had to do versus what they were going to do.	More focused on what they are going to do, opportunities.
A little more defensive about efficiency	Starting with a clean slate, open to change.
Efficiency seen as discipline and work.	See the hero as more youthful, a kid's voice.
A little more interested in maintaining what they have.	Efficiency seen as normal part of life.
Hero as more understated.	Want luxuries but focused on their future.

## 5. Unplugging Won

Unplugging was the more frequent efficiency experienced. This seemed to be because it was the easiest, required the least sacrifice and was the most universally relevant to all panelists.



(Other: shutting off computers, using cruise control, conserving water, hanging clothes to dry, walking short distances instead of driving, cutting back AC, carpooling, going into fast food restaurant rather than use drive thru)

Not surprisingly, our panelists also found the Energy Equivalencies most inspiring for “Turning Off/Unplugging.” The equivalencies gave participants extra incentive to become more efficient.

Efficiency Action	% Most Motivating
Turning Off/Unplugging	53%
Shorter Showers	29%
Less Idling	18%

Most panelists found depictions of environmental impact of their personal usage to be the most motivating and inspiring because they could visualize it and relate to it.

- References to pounds of waste or pounds of carbon dioxide were ideas they could visualize and this made them powerful.
- They saw how these amounts could be visualized over time and how much of an impact this would have on them.
- Most were amazed at how much waste was generated from little objects like light bulbs or amount of water they required to take a shower.
- Most of the sacrifices seemed doable and minimal.

## 6. Measuring My Accomplishment

Our participants wanted to know how much they're saving beyond the reduction of a bill. They want to be able to measure the impact of their efficiency in a broader way. It is the power of knowing how they're doing that is likely to make them keep doing it.

## 7. Tone and Future Focus

The tone of our equivalency statements seemed to hit the right chord because it focused on the future without being preachy, forceful or condescending. The equivalencies were factual based and did not attempt to overtly "sell." Additionally, our panelists did not want to feel guilty for how they had lived their lives up to this point. The future orientation on the impact they could make almost gave them amnesty for past behavior and was clearly more inspiring.

Most panelists reported they were inspired to continue to utilize energy efficiency measures even after the research concluded. Most were more inclined to practice turning off and unplugging.

## Energy Efficiency Campaign Challenges

The research identified critical elements of a successful campaign. The right amount of information, the correct tone, which is not too preachy and a style that will engage the

younger “new school” of efficiency will be most effective. However, identifying new media opportunities that will break through the clutter and busy lives these teens and young adults live in is very challenging. Not only does this task require outstanding creative execution but a targeted and creative media plan as well.

## **Next Steps: Phase 2 Research, Creative, Testing and Beyond**

SmartPower has developed campaign concepts and creative approaches that have been tested in focus groups throughout New England. Our research effort has led us all the way to the point where a final campaign can be created. However, in order to actually develop and test the program, SmartPower had to seek private foundation and state partners to assist in the funding of this effort. With funding in place from Foundations and state partners, we have begun the three steps necessary to bring this message to the marketplace.

Those Three Steps include:

1. Based on the research, make the creative messages that will resonate and “break through” to the consumer;
2. Test that message in a state and then adjust the message and messengers accordingly;
3. Repeat the entire process on a national scale – research, creative work and implementation. When complete, we have a consumer friendly message that breaks through and resonates with the American consumer – causing them to adopt energy efficiency in their lives.

## **Appendix A**

### **Living Diary Energy Equivalencies**

#### **Car Idling:**

Letting your car idle for **5** minutes every day wastes 15 gallons of gasoline per year, costs you up to \$45, and adds an extra 293 lbs. of climate-warming carbon dioxide to the air over the course of one year. It would take roughly 34 trees to absorb carbon dioxide at that same rate. Over the next 50 years, that adds up to an extra \$2,250 out of your pocket and an extra 14,650 pounds of carbon dioxide into the air!

Letting your car idle for **10** minutes every day wastes 30 gallons of gasoline per year, costs you up to \$90, and adds an extra 586 pounds. of climate-warming carbon dioxide to the air over the course of one year. It would take roughly 68 trees to absorb carbon dioxide at that same rate. Over the next 50 years, that adds up to an extra \$4,500 out of your pocket and an extra 29,300 pounds of carbon dioxide into the air!

Note: The car idling assumes \$3/gallon gas, even for the “over the next 50 years” estimate. But even if we wanted a better 50 year estimate, I don’t think we could get it. DOE estimates only look ahead 30 years and you could make a good argument that their price forecasts are way too low.

#### **Shorter Showers:**

Cutting your shower time by **3** minutes each day can reduce the amount of climate-warming carbon dioxide emitted by up to 715 pounds each year! That’s the same amount saved by recycling 220 pounds of waste or cutting back your driving by 750 miles. It would also save approximately 5,500 gallons of fresh water and up to \$73.

Cutting your shower time by **5** minutes each day can reduce the amount of climate-warming carbon dioxide emitted by up to 1,191 pounds each year! That’s the same amount saved by recycling 360 pounds of waste or cutting back your driving by 1,265 miles. It would also save approximately 9,125 gallons of fresh water and up to \$122.

Cutting your shower time by **6** minutes each day can reduce the amount of climate-warming carbon dioxide emitted by up to 1,430 pounds each year! That’s the same amount saved by recycling 440 pounds of waste or cutting back your driving by 1500 miles. It would also save approximately 11,000 gallons of fresh water and up to \$146.

Note: The shower numbers assume electric heating. If it were oil heating, the annual numbers for 3 minutes come out to 404 pounds/CO2 per year, 120 pounds of waste recycled, driving about 430 miles, and savings of \$45 (water saved is constant). The 5 minute numbers for heating oil are on the chart.

#### **Turning Off/Unplugging:**

**Lights and Television** – Remember to turn off the lights and TV when you leave a room. Leaving the TV and a pair of lights on for an hour a day wastes about \$14 worth of electricity each year and adds an extra 134 pounds of carbon dioxide to the air. In terms of greenhouse gases, that’s the same as burning through two and a half propane cylinders with your home barbeque.

**Lights** – Remembering to turn off the lights can save a lot of energy! A single 60-watt bulb left on for one hour a day will waste over \$4 worth of electricity and emit an extra 43 pounds of carbon dioxide. Make that two bulbs for two hours and you are wasting almost \$18 in electricity and adding over 170 pounds of carbon dioxide to the air. In terms of greenhouse gases, that's more than burning through 3 propane cylinders with your home barbeque.

**Computer, Monitor, Printer** -- Leaving your computer, monitor, and printer on when you're not using them can add up to \$60 to your annual electricity bill. It also sends an extra 754 pounds of climate-warming carbon dioxide into the air each year, which is equivalent to burning off 39 gallons of gasoline. You would have to grow roughly 88 trees to absorb carbon dioxide at that rate. Better yet, turn off and unplug your computer and accessories when you're not using them.

## Appendix B

# New England Energy Efficiency Message Development Living Diary™ Process

## Overall Approach Applied

Efficiency is the next big movement in renewable energy because of the significant reduction and environmental impact it offers. SmartPower has worked with the communications directors of New England states' Departments of Environmental Protection to do messaging research against a consumer/residential audience to best understand how to communicate efficiency effectively and in a way that goes beyond turning down the thermostat.

This diary has essentially been an ongoing deprivation exercise. Respondents have been asked to do without or with less in three key areas and then report on their progress throughout. Deprivation can be a highly useful research technique because it gets to the core emotional attachment people have with specific products in their lives.

We constructed the Living Diary in a way that helps us understand the dynamics of this person's life, how they viewed the importance of energy in their lives and what could motivate them to be more efficient. We hoped to unearth some messaging conceptual areas to help SmartPower and their agency to develop more compelling messaging ideas.

## Site/Study Title:

### *Energy Efficiency in Our Lives*

We'll organize the site into these tasks that will have the following flow:

Day 1	Day 3	Day 6	Day 9	Day 12	Day 14
<b>Energy Efficiency Moments Diary – Daily (all 14 days)</b> Diary of their energy efficiency experience					
<b>How We Live Today</b> – open-ended survey describing lifestyle in a number of ways	<b>Reaction to Efficiency Equivalencies</b> – motivation of specific elements	<b>Personifying Energy Efficiency</b> – pictures and descriptions of people they believe are energy efficient	<b>Symbolizing the Feeling of Being Energy Efficient</b> – imagery exercise	<b>The Coolness of Efficiency Story</b> – write a fictional story about a super energy efficient person as a cool hero.	<b>From This Day Forward</b> – what energy efficiency will they continue to practice in their lives?

In each of these tasks we asked panelists to answer questions, keep records or do some specific exercises. These were mapped out throughout the two weeks so the process does not become too onerous. They were given the assignments on a daily basis. We had a help function that they can use to contact our site administrator, Ray Fischer.

## Energy Efficiency Moments Diary – Daily

We had respondents keep a diary of each instance when they were being energy efficient through one of the three assignments. We also gave them an option to fill in other ways they were energy efficient on a daily basis. They were given the following template of questions to help them do this quickly and easily. It is much more useful for them to do this as close as possible to the moment when they were being energy efficient.

Type of Efficiency	When and Where	Doing Without	Difficulty Rating	Positive Feelings?	Frustrations and Barriers?	Reaction of Others?
Reducing car idling, shorter shower, unplugging or turning off electronics	Time of day and place within or outside of the household where the efficiency occurred.	What did they have to do without?	A 1-10 scale on how difficult it was to sacrifice using the energy they're used to using. ("10" is most difficult).	What, if anything, made them feel better about themselves?	Who or what was keeping them from wanting to be efficient?	Were others present? How did they react? What influence did this have on their feelings?

Panelists also indicated other types of efficiencies they might have practiced, as long as they covered these three areas as best as possible.

## How We Live (Survey) – Day 1

We asked them to describe the lifestyle of their family and/or household in terms of:

- ✓ Describing house and neighborhood
- ✓ Members of the household
- ✓ What drives the culture of the house? Kids? Pets? Work? School?
- ✓ Work at home? Type of work? Student?
- ✓ How do they spend time at home? Active or more sedentary?
- ✓ What types of interests do they have? Sports, hobbies?
- ✓ Describe a typical day in their lives from the moment they get up until they go to bed.
- ✓ What is the current level of awareness of energy efficiency in their household? Who or what is responsible for any current awareness or actions?
- ✓ What, if any, specific environmental, political or societal issue drives their attitudes and behavior related to energy consumption?
- ✓ Why (besides the money) are they doing this project? What do they want to get out of it?

## Reaction to Efficiency Equivalencies – Day 3

We then exposed respondents to the energy equivalencies for each of the three focus areas:

- **Car Idling**
- **Shorter Showers**
- **Turning Off/Unplugging:**
  - Lights
  - Television
  - Computer, Monitor, Printer
  - Etc.

We then gave them a short survey on these efficiency equivalencies:

- ✓ We asked respondents to rate each of these three on a 1-10 motivation scale... with 10 being the most motivating.
- ✓ Open-ended response to each that explains why they rated the statement more or less motivating.
- ✓ Relevance to their lives?
- ✓ Speaking in the right tone of voice?
- ✓ What was the most appealing single thought or sentence within all three efficiency equivalency descriptions?
- ✓ Which of the three actions would they be most likely to take? (Choose one of the three)
- ✓ What other actions would they take to be more efficient?
- ✓ What efficiency equivalency information would they want to know that would make this action even more motivating?

### **Personifying Energy Efficiency – Day 6**

Respondents were asked to post photos, copies of articles or write their own description of the most inspirational energy efficiency person they knew (or knew of). They were encouraged to use celebrities or other well known personalities or to describe someone they knew. What was it that makes this person inspirational to them? What were their characteristics? What were their values and beliefs? What specific trait did they have that made them more inspirational than others? Give a full description of the person.

### **Symbolizing the Feeling of Being Energy Efficient – Day 9**

Respondents were asked to post a photo or other image that represents the feeling they had when they were being energy efficient. The picture could not be of themselves or any source of energy (such as wind turbines, solar panels, etc). The picture needed to symbolize the feeling they had. They were also asked to write a brief explanation of why this picture fits the feeling they have.

### **The Coolness of Efficiency Story – Day 12**

Respondents were asked to write a fictional story about a super energy efficient person as a cool hero. This was totally imaginary and should have been fun. They could make up an energy efficiency super hero or just make up a story about an imaginary person who makes energy efficiency seem cool. This was not to be about anyone they knew and did not have to be realistic in any way. The idea was to see what characteristics energy efficiency needs to have to be seen as cool.

### **From This Day Forward – Day 14**

Respondents were asked to write what aspect of efficiency they would continue to practice now that the panel was over. And lastly, respondents were asked if and why they were continuing their actions.