

Engaging Small and Medium Sized Businesses in Behavior Change through a Multifaceted Marketing Campaign

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ABSTRACT

Step Up and Power Down - Commercial (SUPD-C) is a pioneering marketing and behavior change campaign that asks owners, occupants, and operators of downtown businesses in San Francisco and San José, California to join a community-wide movement to reduce energy waste. Pacific Gas and Electric Company (PG&E) is partnering with the cities to increase awareness and knowledge of energy conservation, change energy use behaviors and drive businesses to participate in utility efficiency programs. The initiative is designed to transform how business communities think about and use energy.

SUPD-C takes a multifaceted approach to fostering awareness and behavior change. It uses a suite of marketing and outreach strategies to engage participants. Once engaged, businesses can receive various services, depending upon their size and level and type of interest, including: energy audits specific to behavior and operational changes, more traditional energy audits, comparative usage reports, building operator training, behavior change campaigns for employees, help in accessing other utility efficiency programs, and local and city-wide recognition for their achievements.

SUPD-C's approach to motivating businesses maps to the potential for energy savings. The campaign takes a hands-on approach to motivating behavior change in the largest businesses because the opportunity for savings is greater, and takes a lower-touch approach with small and medium-sized businesses (SMBs). Recognizing the challenge of engaging SMBs with lower-touch approaches, PG&E has sponsored exploratory research to better understand this traditionally underserved sector. This paper describes the SUPD-C campaign, reviews the highlights and insights of the research conducted with SMBs, and provides overall conclusions.

Introduction

SUPD-C is a complex pilot marketing campaign with the objectives of raising energy use awareness and motivating behavior change among business owners, employees, and facility managers in downtown San Francisco and San José. The campaign intends to meet these goals:

- Increase business customer awareness of the utility's current efficiency programs
- Drive businesses to participate in existing energy efficiency programs at increased levels
- Achieve a measureable decline in energy use through operational, behavioral, and equipment changes

While SUPD-C seeks to engage businesses of all sizes within the two targeted central business district areas, the campaign focuses most resources on the largest businesses. Their

greater resources to engage and to change their occupant and building operations behaviors, and their higher energy use, provides them with more potential to save energy. The most tailored and innovative services deployed by SUPD-C include behavioral and operational audits to assess the potential for behaviors to reduce energy waste, personal coaching, training programs for building operators, and employee involvement campaigns that focus on specific end-uses and employ behavioral interventions. The engagement of PG&E's largest customers is also important for the potential influence they have upon changing the broader business culture as it relates to energy usage as leaders in their communities.

Although the largest businesses are a key focus of SUPD-C outreach given the sheer volume of energy they consume, smaller businesses are also served by the campaign. Theories of community-based social change suggest that SMBs need to engage in reducing energy waste in tandem with larger businesses if true market transformation is to occur (McKenzie-Mohr 2011). SMBs are numerous and the business lifeblood of most communities. They have many opportunities each day to demonstrate and influence energy related behaviors. And, due to their greater numbers, SMBs as a collective force can demonstrate a central theme of the campaign: the call to *take simple actions that add up to making a big difference* (SUPD-C website). Moreover, energy efficiency programs traditionally underserve SMBs, so including them in SUPD-C makes sense from an equity point of view.

Finally, SMBs have savings potential. According to the U.S. Department of Energy, 90 percent of the commercial building sector in the United States is made up of small buildings that account for 20 percent of the energy consumed (Drake 2014). Pacific Northwest National Laboratory and the National Renewable Energy Laboratory studies show small buildings have the potential to save energy and that energy savings represents an opportunity for SMBs to improve their bottom lines.

Thus, as part of designing and executing SUPD-C, PG&E analyzed the SMB markets in San Francisco and San José, and set out to know more about SMBs and how to include them in the campaign. As part of this process they sponsored the market intelligence and other research discussed in this paper.

After this introduction, we further describe the SUPD-C campaign, customer journey, and services, ending with a summary of its current enrollment status. We then discuss research that PG&E sponsored to build understanding of SMBs, to establish a baseline for their awareness, knowledge, attitudes, and behaviors (AKAB) related to energy efficiency, and to test, through an embedded randomized control trial (RCT), the effect of a specific behavior change intervention on enrollment and active participation in the campaign. In the final sections of this paper we present conclusions across the research.

A History and Tour of SUPD-C

History, Team, and Target Audiences

PG&E created SUPD-C based on key lessons learned from Envision Charlotte, a 501(c)3 not-for-profit established in 2011 focused on economic development through sustainability. Envision Charlotte's first initiative was a community engagement pilot launched in partnership with Duke Energy that focused on improving behavioral and operational efficiency in office buildings in downtown Charlotte, North Carolina. SUPD-C, while similar to Envision Charlotte in certain respects, incorporates a larger geographic area, has more external partners, and targets a more diverse mix of business types, building owners, and building stock. PG&E, as an energy

efficiency administrator, designed SUPD-C to increase participation in its existing energy efficiency programs and create stronger relationships with community businesses, both customers and indirect recipients of its services. Design for the campaign began in the third quarter of 2014 and the campaign launched in mid-2015. It is planned to conclude during the first half of 2017.

Figure 1 below provides a glimpse of the complex SUPD-C team, including PG&E, the city partners, marketing, field implementation, and evaluation contractors, and a behavioral advisory committee. SUPD-C’s external partners include local business associations, the San Francisco 2030 District, and the Clinton Global Initiative.

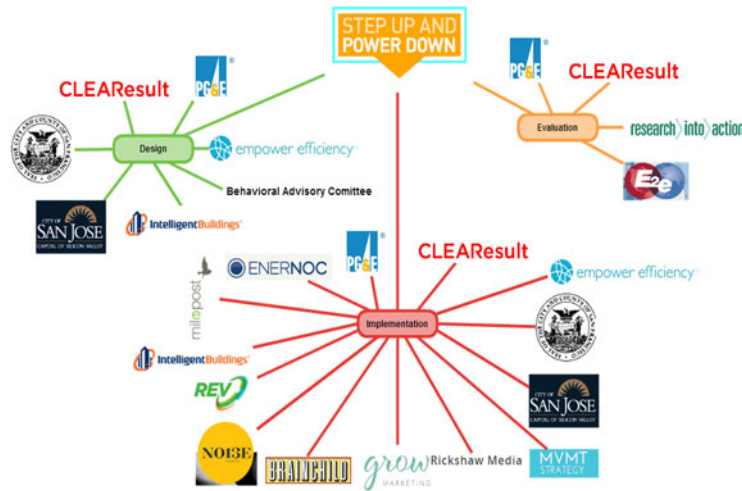


Figure 1. SUPD-C Ecosystem

During design, the SUPD-C team performed a detailed market characterization effort to define the campaign’s geographic areas, identify the business segments to target, and estimate participation rates and energy savings potential. Based on these analyses, PG&E selected the downtown business cores of San Francisco and San José as the campaign’s target areas and identified large commercial customers and SMBs as key targets, as shown in Figure 2.

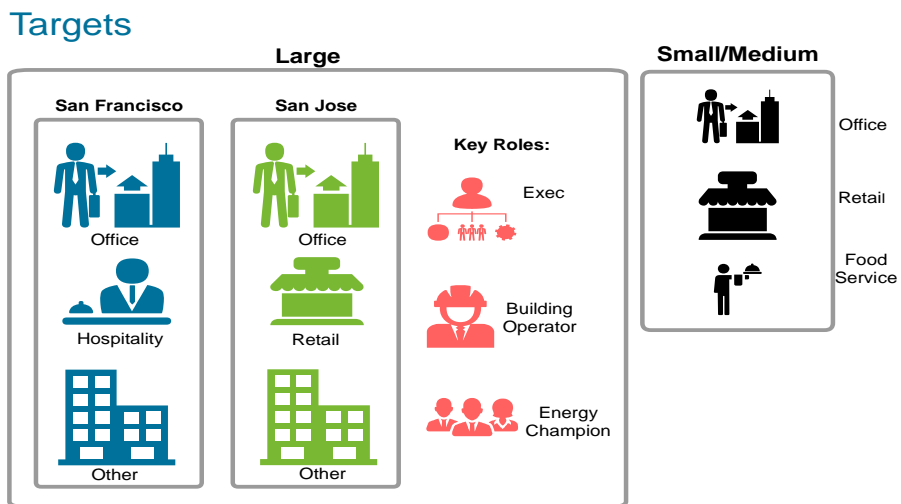


Figure 2. SUPD-C Campaign Targets

Campaign Marketing Approach and Themes

SUPD-C markets its services through five primary channels: its campaign website <https://stepupandpowerdown.com>, paid media (e.g., banner ads), social media (Facebook and Twitter), experiential marketing (e.g., Perk Up and Power Down coffee trucks and 3-D chalk art), and giveaways of SUPD-branded collateral. According to the Working Draft 2016 Step Up and Power Down Playbook (January 25, 2016), the campaign intends “to help businesses take simple actions to reduce energy waste for a more sustainable future and a better California” (p. 6). Themes reflected in the website include taking “simple actions every day to reduce waste” and “saving together” to reach city-specific goals which, if reached, will result in PG&E investing \$1 million in local sustainability projects of each city’s choice.

Outreach

Large customers. PG&E Account Managers lead outreach to large commercial customers, supported by other SUPD-C team members, which includes an engagement manager (EM) who continues to work with customers once they agree to take the first steps in the large customer journey (see below). Account Managers leverage existing relationships to promote the campaign and, in some cases, have made connections with large customers through community-based organizations, including business associations.

SMBs. The city governments of San Francisco and San José lead outreach to SMBs through existing outreach teams. Outreach staff members visit businesses in the campaign’s target areas to explain the campaign, encourage decision-makers to join, and leave behind branded collateral. Other members of the SUPD-C team conduct phone-based outreach to SMBs who have expressed interest in the SUPD-C through the campaign website. SMBs are invited to participate through a mailed invitation that asks for a pledge and promises the gift of monthly Business Energy Reports (BERs) for a year that provide comparative energy use analysis and energy saving suggestions. SUPD-C has embedded the RCT (described more fully below) in this outreach process to assess the impact of providing the BERs on increasing participation in the campaign.

Engagement and Customer Journeys

Large customers. Large customer engagement begins with planning and analysis led by the EM. The engagement process includes meeting with the customer to better understand their needs and to arrange for technical audits and/or energy practices inventories (EPIs). EPIs are behavioral and operational audits that provide concrete, tailored recommendations for reducing energy consumption through changes in policy and employee behavior. EPIs include collecting and reviewing documents; conducting short interviews with individuals in key company roles; performing walk-throughs and observations of key facility areas, and, when possible, group discussions with 8-10 staff members.

Starting with a customer *pledge*, the journey continues through *commitment*, where the EM and customer develop a plan of action and the customer agrees to it; *execution*. Then the customer completes actions, which can include employee engagement campaigns that help employees change specific energy related behaviors, like turning out lights. The next steps are

retention, where the EM checks in with the customer regularly; and *awareness and recognition*, where customers are acknowledged for their campaign efforts and accomplishments in various media.

SMBs. The first step in engagement for SMBs is to sign a *pledge* to support the Step Up and Power Down movement. At that time, the SMB also receives window clings that designate their business as a participant and other SUPD-C branded items. SMBs then continue their journey with a *visit* from the city teams to conduct a quick walk-through audit to help them select and *commit* to an action plan, and an optional orientation to SUPD-C. The SMB then *executes* the plan, which can improve operational changes. The cities follow up with SMBs for *retention* through phone calls, emails, and site visits to support and confirm actions. SMBs in eligible sectors are updated through monthly BERs. When SMBs take actions, the cities share their success stories with the marketing teams to publicize via social media and other channels, and thereby the SMBs receive *recognition* for their good works.

Web-Based Tools

Large customers. The Energy Manager platform, an online energy information dashboard, is targeted to energy managers or building operators in large buildings, offers a “deep dive” into energy use. Users can explore the facilities’ energy consumption, emissions, cumulative savings over time, and energy use comparisons to similar facilities.

SMBs. EnerNOC’s Energy Check tool is targeted to SMB decision-makers and employees within large businesses, like energy champions, who want access to easy-to-understand information about their business’s energy use and energy saving options. The tool allows customers to view monthly energy use and compare it year over year, as well as to similar buildings. Energy Check includes the similar information as some customers receive in the BERs, as it is the system that generates the BERs. Users can create an action plan, usage budgets, and access tailored energy saving tips.

Training

Enhanced operations and maintenance training is available to large customer participants for their building operators and engineers. Trainers help participants diagnose building performance issues and provide both low- and no-cost opportunities that save energy and improve building performance.

Sustainability Circles help large and medium sized customers improve their organization’s sustainable practices. Over the course of five, day-long, face-to-face sessions, participants create a customized Sustainability Action Plan that makes the business case for implementing both large and small-scale initiatives.

PG&E’s Best Practices lunch seminars provide best practices for efficiency building operations. The seminars are open to building operators from both participating and non-participating organizations, and PG&E uses the events to recruit participants for SUPD-C.

Enrollment Status

SUPD-C is on target to meet its goals of 100 large business customers and 900 SMBs pledging to Step Up and Power Down. As of May 12, 2016, 113 large commercial businesses

and 974 SMBs have pledged. The campaign is now transitioning from building general awareness and obtaining pledges to driving deeper engagement and participation that will reduce energy use.

SMB Research To Date

Given the numerous challenges to effective SMB outreach, PG&E supported research to inform its customer journey and outreach techniques. This section discusses the approach and key insights from three primary pieces of research that PG&E supported to date:

1. Focus groups to gather market intelligence
2. A survey to measure baseline characteristics and response to campaign ideas
3. A randomized control trial to test the effectiveness of an outreach strategy to encourage sign up and involvement

In addition, the SUPD-C team conducted two types of secondary research that touched SMBs:

- A market characterization to analyze building stock and ownership, business types and employee profiles, and understanding of related local government initiatives that might be leveraged to benefit campaign goals.
- An analysis of baseline participation of SMBs in PG&E's existing portfolio of energy efficiency programs.

Market Intelligence Focus Groups

PG&E sponsored focus groups to provide a “window on the world” of SMBs in San Francisco and San José. The key goal of these groups was to pinpoint key challenges and opportunities in marketing to SMBs in these communities.

Research strategy and methods. PG&E sponsored four focus groups with SMBs in early 2015, two in San Francisco and two in San José, targeted to two business segments that the market characterization had identified as having the most potential for energy savings: food service and retail. Altogether, 29 SMB customers participated in the groups; all were owners or managers of SMBs and all were in the targeted downtown areas, with 14 from San José and 15 from San Francisco. Seventeen food service customers and 12 retail customers attended.

SMB observations. The SMB owners in the focus groups were entrepreneurial, no nonsense, and fast moving. Participants came from varied neighborhoods, diverse business models, experience, and customer bases. They came from diverse ethnic backgrounds and, especially in San José, often spoke English as their second language and employed many people whose primary language was not English. The business owners tended to be extroverted and candid and their businesses ranged from bars to high-end eateries, and from beauty salons to art galleries.

Insight: How SMB owners view community. Small and medium business owners see community as their local neighborhood, not the business community and not the wider city. They are very:

- Integrated with community: support local charities, sponsor events, use neighborhood contacts, track local news
- Dependent on community: local clientele
- Responsible to community: see payback as part of their job: “*You can have a serious ripple.*”

Insight: How SMB owners see sustainability. SMBs owners are focused on surviving and thriving. Sustainability is, first-and-foremost, keeping their businesses running. For them, environmentalism is a subset of sustainability, energy is a subset of environmentalism, and it is intertwined with other “green objectives,” as illustrated in the Figure 3 below.



Figure 3. How SMB Owners See Energy Efficiency

Key challenges and opportunities for participation. The focus groups identified three key challenges and opportunities for SUPD-C to work effectively with SMBs:

- The first challenge is how to engage SMB owners and employees through capitalizing on their community spirit and individuality and without breaking the bank. The research identified these key opportunities:
 - Tap into community based social marketing strategies to foster norms
 - Show the many faces and dimensions of SMBs
 - Use local trusted messengers and provide multi-lingual materials
 - Use non-corporate language
 - Provide visible rewards of real progress
 - Consider a strong initial push to start a “big ripple”
- The second challenge is how to weave in energy efficiency messages into the dialogue with SMBs. These opportunities emerged from the research:
 - Connect efficiency to a strong SMB present and future
 - Use “staying alive” sustainability language
 - Show energy as a controllable expense and a 100% bottom line benefit
 - Connect energy efficiency to the bigger picture of a “healthier” world
 - Make energy efficiency real – local, tailored SMB infographics and people

- The final challenge is how to provide guidance that is relevant to each market segment. The research supports two key opportunities:
 - Identify key opportunities for each market segment during the start-up period
 - Leverage or create a leadership network where similar businesses can exchange efficiency ideas

Baseline Survey

PG&E undertook the SMB baseline survey research for these purposes:

- To assess SMB awareness of and participation in PG&E programs
- To assess energy saving actions of SMBs
- To assess SMB interest in Step Up and Power Down

Research strategy and methods. PG&E supported a web-based survey of SMBs in the targeted areas in March 2015, using the email addresses of SMB available in their customer rolls. Altogether, 184 SMBs responded, 116 in San Francisco and 68 in San José, a 6% response rate. The methods involved an initial survey invitation followed by three follow-up prompts. The sample in this survey has similar characteristics to prior survey results except that respondents appeared to have more experience with PG&E energy efficiency programs. The sample size carried a +/-7% error rate and a 95% confidence level.

SMB basics. The SMBs speaking in this survey had the following characteristics:

- Most were decision-makers about energy use in their businesses (88%)
- SMBs in San Francisco tended to be larger, in terms of employees, than in San José
- SMBs hold mixed views of PG&E, with 42% or less having highly favorable views of PG&E in general, as an easy company to do business with, and as a trusted company
- Many SMBs (53%) highly value sustainability personally but fewer found it important for their businesses (44%) or customers (29%)
- Most SMBs have room to grow as energy efficiency partners with PG&E, with 22% being very familiar with PG&E's program, and 29% having participated in a PG&E program

Conclusions. The survey results supported the following conclusions:

- While saving money and identifying energy savings are naturally salient to SMBs, the appeal of other benefits and services will need to be grown.
- SMBs value good publicity and marketing opportunities with PG&E.
- Lack of time, staff resources, and finances are likely to affect SMB participation in SUPD-C.
- A group of SMBs (14%) qualify as “Hi-SMBs”: businesses that are *very likely* to participate in SUPD-C and that could become “flagship” representatives of SUPD-C. These SMBs are significantly more likely to be in San Francisco than in San José (81% to 19%) and differ significantly from other SMBs in these ways:
 - They trust PG&E more and know programs opportunities better

- They place higher value on SUPD-C’s ability to help them identify and realize energy savings and money
- They value all aspects of the SUPD-C offering more highly
- They are more likely to want to reduce energy use for social responsibility reasons
- They value sustainability more strongly for themselves, their businesses, and their customers
- They are more likely to cite ‘lack of knowledge’ as a barrier to participation

Recommendations. Three recommendations emerged from the survey results:

- The saliency of SUPD-C’s benefits should be extended beyond optimizing dollars and identifying energy savings through stories and examples that give the concepts greater reality, value, and substance. In addition, SUPD-C should provide SMBs with evidence that customer regard for sustainable practices is growing, that green campaigns can bolster employee morale and performance, and that SUPD-C publicity can make a difference to their business.
- SUPD-C should develop messaging and program processes that can mitigate the key barriers to action: lack of time, staff, and money.
- SUPD-C should consider a separate campaign targeted to reaching and involving Hi-SMBs as leaders in their communities. This campaign needs to emphasize social responsibility motives for energy efficiency, the ability of SUPD-C to help SMBs make connections, drive sustainability, and engage employees, and the training, communications materials, learning opportunities, and coaching as services.

Randomized Control Trial Recruitment Study

This section summarizes the methods and initial results of a RCT recruitment study implemented within SUPD-C to test the effectiveness of an outreach approach used to encourage SMBs to sign up for and engage with the campaign.

Research Strategy and Methods

The RCT design hypothesized that using the following two mechanisms, cited in the behavior change literature (Ignelzi et al. 2013), would produce significantly more sign-ups and active campaign participation in the treatment group than in the control group.

- **Reciprocity:** Research shows (Cialdini 2009) that when individuals receive a gift or favor, they are motivated to reciprocate, or “return the favor.” In SUPD-C, the free BERs serve as the gift intended to elicit feelings of reciprocity. We expect that when SMB customers are offered and then receive the BERs, they will reciprocate through signing up and becoming active participants in SUPD-C.
- **Prompts:** Research also shows that prompts, or reminders, are an effective strategy to encourage behavior change over time (Neff and Fry 2009). The reminder letter served as an initial prompt, and the SUPD-branded BERs serve as a monthly reminder to SMBs to sign up for and participate in the campaign. We expect these prompts will increase the likelihood that SMBs who are interested in SUPD-C but do not initially join the

campaign will sign up later. In addition, we expect that the BERs may prompt more active participation among customers who sign up for the campaign.

In this research we also explored how two other factors influenced SMB participation in the campaign: the campaign’s use of a third behavior change mechanism, personal contact,¹ to encourage participation, and the city where the SMB is located (San Francisco or San José).

Methods. We randomly assigned SMBs to a treatment or control group. SMBs in the treatment group received an invitation to join SUPD-C that emphasized the campaign’s benefits, including the opportunity to receive 12 free, monthly BERs that provide tailored feedback about their energy use with comparisons to similar businesses.² The treatment group also received a reminder letter about the SUPD-C opportunity, and their first BER. SMBs in the control group received none of these communications. The final sample size for the RCT was 7,617 SMBs.

Results. Overall, the data showed that sign-ups for the SUPD-C campaign across the entire sample of SMBs was about 2%.³ Consistent with much research (Ignelzi et al. 2013), results show that personal contact strongly influenced sign-ups; SMBs that were visited or called were significantly (seventeen times) more likely to sign up for the campaign than those not contacted. Results also show that reciprocity and prompts increased sign-ups; SMBs in the treatment group were significantly (two times) more likely to sign up for SUPD-C than those in the control group. The results of the logistic regression model is shown in Table 1 below:

Table 1 Logistic Regression Results

Variable	Odds ratio	<i>p-value</i> *
Personal Contact (0 = not touched, 1 = touched)	16.9	< 0.001
Experimental Group (0 = control, 1 = treatment)	1.94	0.03
City (0 = San Francisco, 1 = San José)	1.80	0.07
Experimental Group by City interaction	.58	0.15

* Results are statistically significant when the p value is less than or equal to .05, and marginally significant up to .07.

Implications for future research. These findings support the value of conducting subsequent analysis of these effects over time as the RCT and personal outreach continue. This will allow PG&E to examine how the various behavior change mechanisms impact sign-up rates and SMB’s depth of involvement with SUPD-C, including the adoption or increase of energy efficiency behaviors. Given the small sample size, we do not anticipate we will find any statistically significant differences in energy use between the treatment and control groups. Nonetheless, during a planned post-campaign analysis of RCT data, we plan to conduct the following two sets of exploratory analyses to assess energy savings:

- Comparison of energy savings between **all** SMBs in the treatment and control groups.

¹ SMBs in both the treatment and control groups could receive such calls or visits.

² Approximately 9% of customers in the treatment group did not receive the first BER due to inadequate data.

³ Some customers in the BER sample could not be matched against the participating customer list and may not be captured in this analysis.

- Comparison of energy savings between **participating** SMBs in the two groups.

Conclusions

PG&E's support for SMB research within SUPD-C has produced several benefits, both for the campaign specifically and for a wider audience of program sponsors, designers, implementers, and evaluators who are searching for insights and guidance about how to reach and serve these hard-to-reach but important market segments.

First, this research informed various members of SUPD-C team and armed them with a better understanding of SMB customers. Marketers and other members of the implementation team report they have used the qualitative insights and survey information to help them craft messages, visuals and graphics, value propositions, and sell points. Evaluators and campaign decision-makers can rely on the survey results as baseline measures of key performance indicators that can be tracked over time. The SUPD-C team has requested an interim survey to test further aspects of the campaign and to examine how SMB awareness, knowledge, attitudes, and behavior have changed since the campaign's inception.

Second, the use of an RCT to test alternative recruitment and engagement approaches is a powerful and disciplined research choice. RCTs have become the gold standard for designing pilot and trial programs because they pinpoint causality – what interventions produce what results. With a greater understanding of causality, behavioral interventions can be more predictable and more successful. While it was not possible to structure SUPD-C entirely as a RCT, due to its goal of effecting change community wide and to the small number of large customers, the RCT added to our knowledge and understanding of behavioral change. The first analysis of this data examined the intervention's effect on sign up rates; subsequent analysis will try to tease out if the use of reciprocity and prompts can produce deeper engagement with SUPD-C, more energy actions, and more savings.

Third, the SUPD-C experience points out the critical role that behavioral science theory and systematic research can play in guiding program design and implementation, and in fostering a better understanding of what mechanisms work and don't work to change energy use behaviors. While some in the energy efficiency industry, including PG&E, are on the forefront of incorporating behavioral science rigor and insight into program design, implementation, and evaluation, our industry is still on the threshold of consistently using these tools. But the time is ripe. As Barack Obama recently stated, "A growing body of evidence demonstrates that behavioral science insights... can be used to design government policies to better serve the American people."

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