



Pursuing Energy-Efficient Behavior in a Regulatory Environment: Motivating Policymakers, Program Administrators, and Program Implementers¹

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This white paper examines how policymakers, program administrators, and program implementers can be motivated to pursue behavioral change in a regulatory environment. For the purposes of this report, behavior change is defined rather broadly, encompassing both behaviors associated with the purchase and installation of energy-efficiency technologies as well as behaviors, decisions, and actions that might be thought of as more independent of technology. The latter include energy use habits, lifestyle choices, and consumption patterns. The insights and lessons discussed in this paper are drawn from a wide variety of sources including interviews with representatives from the energy and utility communities, as well as program documentation for energy-related programs and projects. The paper also draws from information on non-energy related programs that operate within a similar environment, and publications that explore the effective strategies of high-performance government organizations.

The three primary goals of this report include: (1) identifying common perceptions of behavior change strategies; (2) identifying contexts in which program administrators, implementers and others have been or are likely to be motivated to pursue behavior change as a means of reducing energy consumption; and (3) specifying effective policy options to further motivate policymakers, program administrators, and program implementers to pursue behavior change as a means of enhancing energy and carbon savings.

The research clearly indicates that policymakers and program managers are already motivated to pursue behavior change strategies but that a variety of factors have worked to deter them from pursuing these strategies as a means of achieving cost-effective reductions in energy consumption. While our research effort began with the assumption that policymakers and others might be motivated by an assortment of current factors, including: (1) the rising cost of energy, (2) concerns about improving customer service, (3) the development and application of new information and communication technologies that can reshape traditional utility infrastructures and enable households to better manage their energy consumption, and (4) efforts to meet new climate change imperatives, our findings caused us to shift the focus of our study. More specifically, our survey results suggest that the limited implementation of behavior change strategies is a result of multiple barriers and that these barriers outweigh existing incentives.

Among the most significant barriers to using behavior-based approaches include concerns regarding (1) the lack of sufficient research on the effectiveness and persistence of behavior

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change strategies in terms of energy savings, (2) the impact of established measurement and evaluation methodologies that undercount the energy savings from behavior, and (3) current rigid regulations that hinder experimentation and innovation.

The large scale of potential behavior-based energy savings and their increased accessibility are generating renewed interest in and an increasing demand for approaches that address individual, household and organizational behavior. A variety of new research studies suggests that while the current pool of potential, behavior-based energy savings is often overlooked, it could provide significant and sizeable energy savings. In fact, recent estimates suggest that savings in the residential sector alone could be on the order of 25 percent. Moreover, this large source of potential energy savings is increasingly accessible due to changing perceptions as well as new information and communication technologies. Behavioral approaches are increasingly recognized as providing new means of meeting both short- and long-term energy and climate change goals, accelerating the pace of energy savings and expanding the longevity and sustainability of energy savings. In short, behavior change strategies are increasingly recognized as essential for enabling the full potential of new and existing technologies as well as establishing new, energy-efficient lifestyles and habits. Given the potential scale of energy savings and potential environmental and consumer benefits, it isn't surprising that an overwhelming majority of the energy experts interviewed for this paper expressed concern that too few behavior change strategies were currently being pursued. We conclude that a more thoughtful integration and application of behavior change strategies is likely to require a reassessment of traditional approaches to energy efficiency and energy conservation so as to remove existing biases and disincentives, to increase our knowledge and our confidence regarding the effectiveness of specific behavior change strategies, and to expand our capacity and expertise to execute and evaluate effective approaches.

Given the research performed for this paper, we have formulated four primary recommendations. First, we recommend that funding and support for research and experimentation in behavioral programs and policies be increased so as to expand the base of reliable knowledge regarding the most effective approaches for achieving behavior-based energy savings. Second, we recommend that current schemes for program implementation and energy savings attribution be adjusted to incorporate mechanisms that facilitate the recognition of energy savings from behavioral programs. Third, we recommend that existing measurement and accountability practices be adjusted to allow program managers more leeway to incorporate behavioral programs and apply qualitative measures of customer satisfaction. Finally, we recommend that the scope of understanding regarding the purview of utility regulators be viewed more broadly so as to enable greater investment in a broader range of cost-effective programs – particularly those focused on understanding human behavior -- and that more social scientists are encouraged to join the staff at all levels. A more detailed discussion of these recommendations can be found in the conclusions section of this report.