



## Process Evaluation Insights on Program Implementation<sup>1</sup>

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Program evaluation is an important part of energy efficiency policy in California and the United States. To track the progress and effectiveness of regulatory- and policy-driven investments in energy efficiency, regulators and policy organizations expect program administrators to conduct program impact, process, and/or market evaluations. Typically, impact evaluation findings are readily available in public proceedings concerning energy efficiency programs. This is because the question of whether energy savings have occurred and at what cost is of great interest to the public and regulatory bodies.

Process and market evaluation findings, on the other hand, are much less readily available in public proceedings. In part, this is because process and market evaluations generally are most interesting and useful to the program management team and less so to the public; sometimes program administrators consider them confidential or proprietary. As a consequence, many of the lessons learned from process and market evaluations are not readily accessible to the public or to organizations that seek to learn from others' experience. In addition, most process evaluations tend to focus on a single program, so evaluators rarely have the opportunity to integrate other evaluators' conclusions. The purpose of this paper is to provide more access to process and market evaluation findings.

This paper, like process and market evaluation, is a qualitative research effort. To develop the paper, we reviewed conference proceedings for process and market evaluation findings since 1992. We also conducted interviews with 43 individuals who are either practitioners or users of process and market evaluation to obtain their insights. We have sought to extract lessons learned that were identified by multiple contacts. The findings include perspectives on program implementation that may seem common sense or are well known, yet we, and our contacts, have found that even common sense findings often have to be learned and relearned. We hope that this paper will bring them to light so others do not need to learn them through yet another disappointing program experience.

**The program implementation insights in this report address five areas: program design, program implementation, program administration, reaching market actors, and reaching customers.**

The primary lesson learned about program design is that, prior to launch, most programs would benefit from a better understanding of the intended market through market research. Too many programs are designed without any real investigation of the market. Knowing who the customers and market actors are and what motivates them before the program is designed is more likely to result in an effective program.

Program implementation requires the implementer to communicate directly with the target market. Each market has real barriers to the adoption of energy efficiency products and services, and evaluators note it is hard to imagine too much communication with the market. Communication goes two ways; programs need to both learn from the market, as well as reach the market with the program message. As the target market is clearly defined, the theory and logic of the delivery and implementation should be developed to facilitate implementation.

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Effective program administration facilitates customers' participation and assures process and product quality. Many organizations make the mistake of targeting several of their programs to the same customers and market actors. This confuses everyone. In addition, program administrators must streamline access to their programs with easy to use and understand forms and requirements. . Program administrators can work more effectively with third-party implementers, program support contractors, and market actors when the reward systems define both the quantity and the quality of work expected and have well structured and graduated quality assurance procedures in place.

Market actors can be valuable partners in delivering energy efficiency products and services. As many programs target changes in building and construction, a key first step is to recognize that the building and construction is a fast-paced industry that responds to the market. Retailers, distributors, and manufacturers business models vary greatly by product and manufacturer, so understanding the process of bringing a product or service to market and selling it will help program administrators understand how to influence purchasing decisions.

Customers vary greatly, therefore, part of the market research conducted for program design should focus on what is required to reach and motivate customer response. For instance, the cost of serving *residential customers* can be high, so reducing program transaction costs is a critical goal. As a consequence, successful residential programs leverage existing market relationships and join with national efforts and local groups that have an interest in supporting energy efficiency and provide leverage for the program.

*Commercial customers* range from very small to very large. Keeping transaction costs low is important when trying to reach small commercial customers, while large commercial customers expect one-on-one contact. Yet, commercial customer energy costs are a small portion of the budget (less than 5%), and these costs are typically treated as a fixed cost instead of a variable cost. Thus, commercial businesses' interest in energy efficiency often is very low. To reach commercial customers, program implementers need to understand the unique business case for each business type and target a financial justification message for energy efficiency that fits each business.

*Industrial customers* typically can achieve greater energy savings than commercial or residential customers. However, industrial process improvements are unique to each plant and, therefore, highly skilled and knowledgeable people must analyze each customer's opportunities. Energy efficiency program administrators typically do not have sufficiently experienced staff to satisfy their industrial customers' needs and should contract with engineering consultants to gain the confidence of the industrial firms. Also, because medium and large commercial and industrial customer organizations require many decision-makers to review proposed energy efficiency investments, program managers should design and direct energy efficiency efforts to multiple levels of the organization.

In addition to insights about program implementation, **we developed recommendations about improving process and market evaluation.** To maximize the benefit of evaluation, program implementers and administrators need to use process and market evaluations earlier in program cycles. Such evaluations should be research projects that are formative and explore the range of program issues pertinent to the specific program: the program processes, the market components, and whether measures are performing as intended. In addition, the range of methods used for process and market evaluation research needs to be expanded to include on-site observation, engineering process evaluations, geographic information system (GIS) analysis, market simulations, social network analysis, concept mapping, mental or cultural models analyses, and the use of pilot programs and experiments.

In conclusion, this paper demonstrates the essential benefits of using process and market evaluation in the creation and development of a program. It is important that regulators and program administrators use process and market evaluations as a formative tool for creating excellent energy efficiency programs.