

**Title:** A National Review of Community Based Energy Efficiency Program Designs: Finding Transferable Insights From 21 Unique Programs

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Community-based programs (CBP) are a promising way for U.S. energy efficiency program administrators (PAs) to overcome persistent barriers to energy efficiency adoption through community targeting and local partnerships. Yet, aside from sharing a core design element—the community—piloted CBPs have diverged in their use of engagement methods like micro-targeting, local messengers, concierge services, contests, incentives for partner organizations, workforce training, and others. Moreover, each CBPs operates within a unique “ecosystem” of customer barriers, community capacity, energy efficiency portfolios, and regulatory context.

Evaluations have found that CBP design elements achieve variable success in different community ecosystems, but it is challenging to disentangle the effectiveness of design elements from the community context. This poses a challenge to both the evaluation of an individual CBP, and to the transfer of thematic findings across contexts. The lack of easy transferability is a barrier for PAs deciding whether, and how, to develop a CBP in their area. Synthesis studies would offer a way to combine and organize insights from multiple evaluations, but we are aware of only several, limited, CBP evaluation syntheses.

In this paper, we synthesize multiple CBP evaluations to answer the questions, “Which CBP design elements add the most value, in which contexts, and why?” Our comprehensive literature review of CBPs that enrolled customers into existing PA programs (n=21 programs representing 10 states and 20 energy efficiency PAs) provides an updated description of the CBP landscape using summary statistics and narrative examples. Early literature review results show that most CBPs involve PA partnerships with municipal governments (75%) or non-profits (58%) that offer one standardized program to several communities (63%), though some provide an umbrella framework that local implementers adapt (38%). Most CBPs have been designed to “lift” participation across the general population (63%), but about one-third of programs focus on either moderate-income customers (29%), geographic areas with demand constraints (29%), or include small business add-ons (38%).

Our paper will also summarize a series of in-depth interviews with CBP stakeholders identified in the literature review (n=10 expected, including PA and community representatives) to provide an understanding of how the community ecosystem and PA motivations influence program design and success. We will map program designs to persistent community barriers and use case studies to highlight why design elements are variably successful in overcoming these barriers in certain conditions. Finally, we will suggest how PAs, evaluators, and communities can use our results to design new CBPs for improved evaluability. To our knowledge, results of these research activities will provide the most comprehensive study of CBPs to date.

References: NOT TO BE INCLUDED IN THE ABSTRACT SUBMISSION

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