

THE SECRET OF MY SUCCESS: INSIGHTS GAINED THROUGH METRICS

Moderator: Riley Hastings, Eversource Energy

PAPERS:

What Have We Learned about Success and Its Drivers in Comprehensive Residential Upgrade Programs?

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Benchmarking and Best Practices Research: Making it Real

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SESSION SUMMARY:

This session features two different studies that used data-driven approaches to measure success in residential retrofit programs. Each of these studies used metrics or benchmarking in an innovative way to provide insights into best practices and successful program design.

McRae et al use statistical modelling to identify factors contributing to successful and unsuccessful outcomes. The team explores 12 quantitative indicators of successful program outcomes and identifies the drivers and detractors of success based on data from a diverse set of 54 comprehensive residential upgrade programs from across the country. Analysis of BBNP data reveals a robust metric for measuring relative program success and demonstrates that: a) contractor training helps prevent sub-par program outcomes and b) offering multiple pathways to participation and achievement of energy savings is critical to programmatic success: pathways include (1) offering direct install options, (2) multiple audit types (such as online, mail-in, phone-based, walk-through, or those using diagnostic equipment) , and (3) having a large number of eligible contractors than can perform upgrades.

Forcillo et al conducted a two-stage benchmarking and best practices exercise to help achieve continued program growth where 70% saturation had been achieved. The team selected peer multifamily programs across the country using metrics such as similar size and geography, similar or contrasting point in program lifecycle, and recognition as exemplary or notable with industry awards. The evaluation team conducted an initial review of dozens of program elements critical to the future design and implementation of the utility's program. Second, the evaluation team selected particular programs that demonstrated significant innovation, strove for increasingly comprehensive energy savings, or delivered a significant portion of portfolio energy savings. The research found three critical best practices: (1) alignment of incentives among market actors, property owners, and tenants, (2) reduction of transaction costs for performing deep retrofits and (3) creation of public-private financing partnerships to make capital available for building improvements and efficiency upgrades. They describe the innovative design, insights from the portfolio-wide research, and approach to benchmarking and establishing best practices, which have yielded actionable recommendations for the utility's programs, a rich database about peer utility programs, and a network of program managers.