## Does Social Marketing Work: Addressing Measurement Gaps in Impacts and Retention for Behavioral Programs

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## Introduction

The authors present the results of a project that included a comprehensive literature review and a two-year social marketing experiment conducted in Colorado. We conducted a cross-sectional review of social marketing literature to examine the costs and benefits of social marketing education and identify lessons learned in energy, hazardous waste, water, and other fields. We then conducted a carefully-designed experiment to both *deliver* community-based social marketing (CBSM) and to carefully *study and measure* its effects – including two effects that are commonly omitted in the literature – cost-effectiveness and retention of behaviors. We explore how social marketing compares to widget based energy efficiency approaches in terms of impacts, cost effectiveness and retention.

## Discussion

No demand side intervention, whether technology or behavior based, can reach its full potential without some level of outreach. Installing a programmable thermostat for a homeowner that does not know how to program it will not save energy; likewise, adding a low flow shower head in a household that takes 25 minute showers to make up for the low flow may not results in measurable savings.

In this poster the authors build on a 2009/2010 study they conducted to analyze the *actual* costs, impacts, and retention, of various levels of social marketing by including the results of other published campaigns in North America and beyond. We share the final results of a detailed social marketing project they completed, including 18 months of behavior retention data and post project surveying. We combine these results with published results from other energy-based social marketing projects to analyze and compare the overall cost/benefits of social marketing results to the benefits, costs, and retention results for technology based approaches as well as standard education – including detailed results presented on dollar per kWh basis.

The literature review allowed us to assess the techniques being used to measure (or estimate) the impacts attributable to the education and behavior change programs. We note the treatment of free-riders and spill-over in the studies, and the approaches (and results) for retention, or the estimated useful lifetime, of behavior change interventions, and whether / how partial retention is addressed. We present results, best practices, and gaps in measurement used for outreach and social marketing programs, and compare with the approaches used for – and the reliabilities associated with - widget-based programs. Knowing ahead of time what to expect, the barriers to measurement, and the potential costs of the measurement will assist program managers design appropriate EM&V approaches, and point out measurement issues that need additional research. The results and ranges for impacts and costs for social marketing and outreach programs, and the findings on measurement methods may help allow behavior change

programs to move into utility's verifiable EE portfolios and/or highlight remaining measurement and other barriers to their progress.

## Conclusions

This analysis reviews social marketing and outreach programs to assess their performance, cost-effectiveness, and retention, and compares results to widget-based programs. In addition, it examines measurement methods to identify whether reliable methods are being applied, and highlights best practices and remaining gaps. If you implement an extensive behavioral change program, how long can you expect the impacts to last and do the last longer when social marketing is used compared to standard outreach and education? Knowing the answers to these questions will allow attendees to weigh the benefits of social marketing for their own programs and design successful measurement programs.

Are the costs for outreach worth the effort? Our study finds a tentative "yes" – but the final conclusion depends on the final retention of the behavior. About 9 months after the cessation of CBSM outreach, we find the retention is dramatically higher than in the non-door-to-door area. Keep posted, as we'll be tracking the retention of the behavior change for more than 2 years, and that will give us the final benefit-cost results.