

## 2012 BECC Conference: Poster Presenter Abstracts

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### ***Lessons Learned from a Field Experiment on Energy Feedback Devices***

The use of energy feedback devices as a means of reducing home energy consumption is growing, but the body of empirical research on their effectiveness is not yet well developed. Much of the existing research has been conducted using middle class and or affluent participants, and little work has been done that systematically varies the types of messages used in feedback, or other variables that might interact with the use of feedback devices. Researchers at Arizona State University working on Energize Phoenix, a large Better Buildings Neighborhood Program grantee funded by ARRA and the DOE, planned two experiments that would include lower income residents in rental properties, and test the effective of persuasive messages in conjunction with the use of TED and ThinkEco devices. In this session, we present the lessons learned in the design of two large field experiments. Specifically, we address navigation of the seemingly incompatible bureaucracies of three large organizations, unanticipated obstacles related to permitting and construction, technological constraints, and the challenges of working with underserved populations. We then recommend strategies for anticipating and overcoming the implementation challenges in large field experiments.