

# POT O' GOLD? EXAMINING THE INFLUENCE OF FINANCING INCENTIVES

*Moderator: Jeremy Newberger, National Grid*

PAPERS:

## **Impact Evaluation of Financing Programs**

Emily Martin Fadrhong, Lawrence Berkeley National Laboratory  
Chris Kramer, Energy Futures Group

## **Show Me the Attribution: Recommended Methods for Estimating Impacts for Finance Programs**

Jeevika Galhotra, Opinion Dynamics, Inc.  
Katherine Randazzo, Opinion Dynamics, Inc.

## **Who Dunnit? Determining Savings Attribution When Both Rebates and Financing Are Available**

Stephen Grover, Evergreen Economics  
Jenny Fraser, Evergreen Economics

## **The Impact of On-Bill Programs on Loan Performance: Evidence from the Green Jobs, Green New York Program**

Jeff Deason, Goldman School of Public Policy at University of California, Berkeley

SESSION SUMMARY:

As financing programs expand and Green Bank-type concepts sprout up like wildflowers, this session will explore the methodological approaches to assessing the impact of financing. The impact of financing can be viewed as the impact of financing as compared to incentives or as how much of the savings in financing-only projects would have occurred anyway. Considering the attribution of the impact of financing programs in this way will help guide the growth and deployment of financing options.

Fadrhong and Kramer investigate the role of financing as a complement or a substitute to incentive programs. In this construct, they present a framework for a robust set of evaluation methodologies to understand the impact of these strategies, including methods to address the overlapping complexity of finance offerings in a mature private market. Acknowledging this complexity, they conclude with some guidance about assessing the relative costs, benefits, and risks of the decision (or not) to engage in evaluation of financing programs.

Galhotra and Randazzo build on the framework suggested in the first paper. They identify a number of characteristics of financing programs such as scale, delivery touchpoints, data availability and overlap of finance and rebate offerings. Based on this, they recommend three methods for potential use in the evaluation of financing impacts: nested logit model, latent class discrete choice model, and a self-report model. They assess the strength and weaknesses of these three options to evaluate financing programs relative to program characteristics.

Grover and Fraser look at the specific case of when both rebates and financing are available, such as the situation in California and an increasing number of other states. Specifically, they consider the application of the self-report model and the discrete choice nested logit model. Their primary focus is on the nested logit model which is used less frequently than self-report, and therefore worthy of further development. The paper delves into illustrations about how to structure a nested logit model and concludes with recommendations on how best to structure the nested logit model and provides some important modeling considerations that need to be addressed prior to designing the data collection activities.

Deason reports on his research on one facet of financing programs: the idea that offering on-bill repayment should be considered by lenders as enhancing the credit worthiness of borrowers. In New York, NYSERDA has been offering on-bill financing concurrently with an unsecured loan program for several years, allowing for a comparison of borrower behaviors. Deason reports on his data collection and preparation. Using a proportional hazard model, he analyzes the performance of the two sets of loans comparing a number of parameters. He concludes that on-bill loans default more often and suggests some reasons for this somewhat surprising result.