

QUICK TAKES: EVALUATING EMERGING TECHNOLOGIES

Moderators: Linda Dethman, Research Into Action and Phil Degens, Energy Trust of Oregon

Introducing... Emerging Technologies! Evaluation of Vendor Partner Solicitation Efforts

Martha Thompson, Evergreen Economics
Tami Rasmussen, Evergreen Economics
Carol Yin, Yinsight, Inc.
Kristina Miller, SDG&E

Innovative Austin Energy WiFi Thermostat Program Evaluation

Joseph S. Lopes, DNV GL
John Trowbridge, Austin Energy

I'll Gladly Pay You Tomorrow for an Energy Upgrade Today:

Integrating Financing into Residential Upgrade Programs

Joe Van Clock, Research Into Action
Marjorie McRae, Research Into Action
Jane S. Peters, Research Into Action
Edward Vine, Lawrence Berkeley National Laboratory

Window Attachments: The Next Big Energy-Savings Measure?

Stephen Bickel, D+R International
Emily Phan-Gruber, D+R International
Erika Burns, D+R International
Shannon Christie, D+R International

Pilot Study for a Thermostatic Shower Restriction Valve

Anders Wood, Cadmus
Joseph D'Acquisto, PPL Electric

Dimming Ballasts: As Good As We Think?

Dave Bisbee, Sacramento Municipal Utility District
John Caffrey, ADM Associates, Inc.

Filling the Measure Pipeline: An Examination of Six Utilities' Emerging Technology Measure Development Processes

John Cornwell, Evergreen Economics
Martha Thompson, Evergreen Economics
Carol Yin, Yinsight, Inc.
Miriam Fleischlein, Southern California Edison

SESSION SUMMARY:

Join us for a fast-paced journey through the highlights derived from evaluations of emerging technologies programs, measures, and services. Two papers evaluate California utility programs charged with bringing new technologies to market and into their measure portfolios. Four of the five remaining papers look at the promise of specific energy saving technologies and one examines the buzz around new financing services for residential programs.

The papers assessing utility programs designed to foster new technologies reveal how these programs identify and solicit innovative new technologies and services. The papers also highlight key insights about the review, vetting, testing and piloting processes that the programs employ.

The paper on financing examines financing mechanisms used in a variety of programs funded through the 2009 American Recovery and Reinvestment Act (ARRA) and implemented by diverse

organizations across the nation. The evaluation of this grand experiment shows financing, while not a panacea for all retrofit ills, is a good tool that appeals to many and will be used by a subset of customers.

The technologies papers tackle quite dissimilar devices, from window attachments to WiFi thermostats. While all examine savings impacts, various ones also look at costs, savings potential, customer satisfaction, and program issues:

- The innovative WiFi study looks at the challenges and benefits an established demand response program faced when it switched from old thermostat technologies to new ones. At the same time, it switched to a new program delivery approach.
- The windows attachments study breathes new life into a set of familiar but generally underappreciated technologies, analyzing the potential savings from high efficiency storm windows, cellular shades, and interior window panels. It also introduces new resources that program administrators can use to identify and compare these products.
- The shower valve pilot study tested a product that stops the flow of hot water to a trickle until the user activates it with a pull cord after stepping into the shower. The paper estimates the product's energy savings and discusses the results of a user satisfaction survey.
- Finally, the dimming ballasts paper investigates the impacts on energy savings that can occur due to a non-linear relationship between the power vs control signal performance curves for high efficiency lighting control products.