

SESSION 6B

SHOW ME THE SAVINGS

Moderator: Lynn Westerlind, National Grid

PAPERS:

Do ENERGY STAR® Homes Programs Make a Difference? Comparison of Baseline Studies in Two States—One with and One without a Residential New Construction Program

Dorothy Conant, Independent Consultant
Leslie Badger, Vermont Energy Investment Corporation
Richard Faesy, Vermont Energy Investment Corporation
Thomas Mauldin, Nexus Market Research, Inc.

What Else Does an ENERGY STAR® Home Provide? Quantifying Non-Energy Impacts in Residential New Construction

Betty M. Tolkin, Nexus Market Research, Inc.
William Blake, National Grid
Elizabeth Titus, New England Energy Efficiency Partnerships, Inc.
Ralph Prah, Prah and Associates
Dorothy Conant, Independent Consultant
Lynn Hoefgen, Nexus Market Research, Inc.

Key Challenges with Cost-effectiveness Tests for Next Generation Residential Energy Retrofit Programs

Marc Milin, ICF International
Dean Gamble, ICF International
Dale Hoffmeyer, Environmental Protection Agency

SESSION SUMMARY:

This session will focus on the challenges in determining cost-effectiveness of energy efficiency programs.

The first paper will take advantage of the rare opportunity to compare the findings of two recently completed residential new construction baseline studies conducted in two states—one with a long standing ENERGY STAR® Homes program (Vermont) and one planning to develop a residential new construction program (Maine). Both studies were completed in 2008. Each study audited roughly 80 non-ENERGY STAR®-qualified homes. In addition, 30 ENERGY STAR® Homes in Vermont were audited. Both studies collected detailed information on building shell characteristics; HVAC and water heating equipment; lighting, including the use of compact fluorescent bulbs; appliances; and included blower door and duct blaster testing. In addition, both studies interviewed builders.

The second paper examines non energy impacts (NEI), a.k.a. non energy benefits, attributable to new homes: thermal comfort, reduced outside noise, lighting quality, indoor air quality, safety, higher resale or rental value, and protection from energy price increases. These benefits were quantified through a survey of 70 recent ENERGY STAR® homebuyers. Homebuyer survey findings are compared to the NEI valuations provided through depth interviews with 30 ENERGY STAR® builders.