

SESSION 14

RESIDENTIAL INCENTIVES: TAX CREDITS, DIRECT INSTALLATION, AND MARKET TRANSFORMATION

Moderator: Robert D. Bordner, Energy Market Innovations, Inc.

PAPERS:

Long Term Market Transformation from a Short Term Subsidy: Energy Savings from Residential Air-to-Air Heat Pumps in Norway

Even Bjørnstad, Enova SF, Trondheim, Norway

Per Ivar Helgesen, Enova SF, Trondheim, Norway

The 55% Tax Reductions for Building Retrofitting in Italy: The Results of the ENEA's Five-Years Activities

Giampaolo Valentini, ENEA, Italian National Agency for New technology, Energy and the Sustainable Economic Development

Patrizia Pistochini, ENEA, Italian National Agency for New technology, Energy and the Sustainable Economic Development

Moderate Income Comprehensive Energy Efficiency Program Evaluation

Robert Mowris, Verified, Inc.

Ean Jones, Verified, Inc.

SESSION SUMMARY:

This session includes papers that evaluate the effectiveness of three distinctly different program designs, each of which provides incentives intended to achieve energy and demand savings in the residential/domestic sector. In Italy, a generous tax-credit against personal income taxes is used to provide incentives for residential building upgrades. In the USA (State of California), energy efficiency measures were offered at no cost to moderate-income households – an approach typically reserved for low-income households. And in Norway, an almost decade-long initiative utilized incentives to transform the market for air-to-air heat pump technologies. Each of these programs claims significant savings above and beyond what would have otherwise been achieved. In each case, very different evaluation approaches are utilized. The Italian tax credit proved to be extremely politically popular, with an enthusiastically vocal electorate, and this paper provides a summary of participation trends and resulting benefits and costs to the citizenry. The evaluation of the moderate-income direct install program in California places considerable emphasis on installation verification and measuring the direct effects of the measures installed in participating households. The authors also posit that significant financial incentives are needed, even in moderate-income homes, to continue achieving savings in this sector. And finally, the Norwegian experience places considerable emphasis on tracking market development *attributable* to the program interventions. Three different approaches are employed to estimate market baselines, against which observed market changes are then estimated to quantify net program impacts.