

SESSION 7B

ADVANCES IN UNDERSTANDING APPLIANCE MARKETS

Moderator: Shel Feldman, Shel Feldman Management Consulting

PAPERS:

Seeing There Without Being There: Results of Using the Internet to Assess Appliance Availability in Retail Stores

Thomas Mauldin, Nexus Market Research

Lynn Hoefgen, Nexus Market Research

Angela Li, National Grid

Impact of Energy Prices and Energy Efficiency Activities on Sales of ENERGY STAR® Appliances in California

K. H. Tiedemann, BC Hydro

Bounce-Back from ENERGY STAR® Specification Changes in the Appliance Market in the Northeast US: A Regression Analysis

Seth E. Snell, Ph.D., Applied Proactive Technologies, Inc.

SESSION SUMMARY:

Assessing the availability of energy-efficient appliances in retail stores is an important component of the evaluation of appliance programs, and this factor is discussed in our first paper, “Seeing There Without Being There: Results of Using the Internet to Assess Appliance Availability in Retail Stores.” Surveying the inventory stock at a large number of retail stores can be time-consuming and expensive. This paper discusses the results of an approach to assessing retail availability that uses the Internet as a cost-effective alternative for collecting data on a large number of models at stores located in different regions.

Market transformation programs create new challenges and opportunities for program evaluators. In our second paper, “Impact of Energy Prices and Energy Efficiency Activities on Sales of ENERGY STAR® Appliances in California,” the study develops and applies an interrupted time-series model, using quarterly sales data for the period 1998-2003, to measure market transformation in the California markets for refrigerators, clothes washers and dishwashers. There are three main conclusions. First, an increase in electricity price is associated with increases the sales of ENERGY STAR qualifying refrigerators, clothes washers and dishwashers. Second, the additional energy efficiency activities that were launched following the 2001 California energy crisis were followed by an increase in the sales of ENERGY STAR refrigerators, clothes washers and dishwashers. Third, the energy savings for the three appliances were substantial.

Our final paper, “Bounce-Back from ENERGY STAR® Specification Changes in the Appliance Market in the Northeastern US: A Regression Analysis,” examines the drop-off in availability of qualifying equipment and the bounce-back recovery time associated with ENERGY STAR specification changes for the major appliances. The study looked at sales floor inventory information from retailers throughout the Northeastern United States. This is an important issue because technology changes, which are frequent in an emerging market, can have major effects on expected program outcomes. The EPA, the DOE, and their ENERGY STAR partners have undertaken various strategies to prevent the drop in available ENERGY STAR products following a specification change, with limited success.

Linear regression analyses of the proportion of models on sales floors that are ENERGY STAR qualified, across retailers throughout the region, shows that the drop off is least and bounce-back the quickest for clothes washers, and largest and most prolonged for room air conditioners. This study also provides a forecast of the availability of ENERGY STAR models in the Northeastern US.