

It's a Tankless Job, but Somebody's Gotta Do It: Assessing Consumer Reactions to a Utility-Sponsored Tankless Water Heating Program

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Introduction

Tankless natural gas water heaters, described as a “Classic Market Transformation Opportunity” at the 2006 National Symposium on Market Transformation, account for less than 2% of the 5,000,000 gas water heaters sold annually in the United States. Those who would promote tankless water heaters face formidable market barriers such as higher cost, lack of customer familiarity, and inappropriate installations leading to customer dissatisfaction.

Methods and Analysis

Little is known about recent purchasers of tankless water heaters, and understanding recent purchasers of tankless water heaters is crucial to designing successful new market transformations and refining current market transformations. This study uses data collected in the Fall of 2006 from 101 households that participated in the Gas Network's tankless water heater rebate program. The following aspects of customer attitudes and behavior are assessed in this study:

- How do people find out about tankless water heaters?
- Why did they purchase a tankless water heaters
- How satisfied are program participants and what leads to their satisfaction or dissatisfaction?
- How do they use their tankless water heaters?
- What kinds of people are buying tankless water heaters?

Participants are extremely satisfied with their tankless water heaters. However, satisfaction may be associated with the distance between the water heater and the primary point of usage. Participants who installed their tankless water heater farther from the point of usage than the water heater it replaced are less satisfied with the overall performance of the water heater, with the amount of time it takes hot water to come out of the faucet, and with the reliability of the water heater. In addition, one-third of all respondents cite the time it takes hot water to come out of the faucet as the characteristic with which they are most dissatisfied

Program participants predominantly live in single family homes that are less than 4,000 square feet in size, are middle aged, have moderate to high annual household incomes, are well educated, and live in households with four or fewer people. The primary motivation for purchasing a tankless water heater for more than one-half of respondents is to save energy or gas. Ninety percent of respondents replaced a storage tank water heater with their tankless water heater, and 75% of respondents estimate that they now use about the same amount of hot water as when they had a storage tank water heater.

Policy Implications and Importance to Program Managers

Participant satisfaction with their tankless water heaters should be encouraging to program managers, and rebate programs and other market transformation efforts can help address price and information barriers faced by tankless water heaters. However, program managers should recognize that professional training of plumbers and contractors on proper placement and installation of tankless water heaters may be a critical to customer satisfaction.