

Existing Homes Program Guide

Executive Summary

June 2010



Background

In 2008, CEE members convened to discuss several challenges they faced in administering residential energy efficiency programs, including a need to generate greater energy savings to meet aggressive targets at a time when savings from individual end uses were forecast to decrease due to new minimum efficiency standards. The obvious solution to addressing these challenges was to promote comprehensive efficiency improvements in existing homes. The next question that arose in member discussions was how to address existing homes in a consistent way, yielding the greatest societal benefit, when a new slate of energy efficiency programs were under development without the benefit of veterans' expertise and when manufacturers and retailers serving the existing homes market were beginning to message more about their own products' efficiency benefits.

To address this challenge, 110 CEE members and invited industry guests came together to form the Existing Homes Working Group. Representatives from the industries serving the existing homes market were invited to participate for two reasons. First, they could bring their knowledge of technical issues and market trends to the table, increasing the accuracy of the information being considered. Second, they could take away insights that would help them tailor their own campaigns or promotional efforts to be more consistent with energy efficiency programs.

Introduction

The conclusions of the Existing Homes Working Group related to designing effective energy efficiency programs are captured in the Existing Homes Program Guide. The document has become a key reference point for the industries working to influence efficiency in the existing homes market and represents the foundation for consistency in messaging, not just by efficiency programs but by all stakeholders.

The Program Guide includes:

- Data and trends related to the existing homes market;
- Technical information on the end uses and systems in existing homes; and
- An overview of the program approaches and strategies that have been tried before, in what circumstances, and with what level of success.

The purpose of the Existing Homes Program Guide is to enable efficiency programs to work with manufacturers, retailers, non-governmental organizations (NGOs), and other stakeholders to deliver programs that capture all cost effective, measurable energy savings opportunities in existing homes. It is organized from an energy efficiency program administrative perspective, presenting information for program managers who are either developing new voluntary energy efficiency programs or modifying established voluntary energy efficiency programs.

Information for New Programs

The Existing Homes Program Guide covers information that new programs might consider when developing an existing homes program. For example, cost effectiveness (whether the cost of running a particular program is justified by the energy savings that the program delivers) and baseline

market conditions are two aspects that programs should take into account. In addition, the Program Guide identifies six elements that should be included in all existing homes efficiency programs:

1. Identifying Potential Customers: Due to the expense of widespread marketing campaigns, energy efficiency program administrators can benefit from identifying a subset of customers who will be most interested in upgrading the efficiency of their homes.
2. Ensuring Capacity and Capability of the Workforce: A robust training and certification effort is needed to help develop and identify knowledgeable contractors who can fulfill efficiency program requirements.
3. Working With Trade Allies: Working with trade allies is essential for efficiency programs to successfully launch and sustain programs designed to improve whole house energy efficiency.
4. Reducing Financial Barriers Through Financing and Incentives: Financing and incentives can be used as levers to remove financial barriers and make energy efficiency improvements possible.
5. Motivating Consumer Action Through Marketing: By applying general marketing principles such as customer segmentation, efficiency programs can more effectively drive participation.
6. Verifying Savings: Efficiency programs need to consider how they will conduct measurement and verification (M&V) up front to ensure that energy reductions can be quantified.

Information for Established Programs

Established energy efficiency programs may consider changes to their programs for many reasons. These can include a dynamic policy environment (which may impact program cost effectiveness hurdles), new program goals, or the local conditions under which the program is operated.

Appendices

Appendices in the Existing Homes Program Guide provide current information on the following topics:

- Market Information: This section provides information about homes in United States and Canada, and identifies barriers to achieving greater efficiency in existing homes.
- Technical Information: Technical information includes a breakdown of end uses to incorporate into whole home programs (lighting, appliances, space conditioning, water heating, and electronics), as well as measures related to the building envelope (air sealing, indoor air quality, insulation, windows, duct sealing, and combustion safety testing).
- Workforce Development Information: Current efforts to expand the workforce are described, along with information about the challenges efficiency programs should expect and, who the market actors in workforce development are.
- Policy Context: Federal, regional, state/provincial, and local policies can affect existing homes programs; numerous organizations work to inform and influence these policies.
- Program Summary: Details on 15 CEE member programs for existing homes are presented, based on survey fielded in February and March 2010. This information will be updated on an approximately annual basis.
- References and Resources: Links to the materials referenced in the Program Guide are provided.

For more information, or to obtain a copy of the full CEE Existing Homes Program Guide, please contact Alice Rosenberg at arosenberg@cee1.org.