Home Performance with ENERGY STAR Program – Partial Participating Homeowner Survey

The purpose of the Partial Participating Homeowner Survey was to gather information from homeowners who received HPwES Program incentives, but did not choose to purchase measures with HPwES incentives. The survey was designed by GDS Associates to contribute to the Market Characterization and Assessment evaluation of the HPwES program. The survey was managed by APPRISE Incorporated. Interviews were conducted by Braun Research.

Sample

Target Population

The target population for the survey was homeowners who received an audit by an HPwES contractor during the period from July 1, 2007 to December 31, 2007, but did not choose to purchase the recommended measures with HPwES program incentives.

Sample Frame

HPwES contractors do not consistently report on audits that do not result in HPwES projects. For that reason, there is no available list of such homeowners. To develop a sample frame, we contacted the HPwES contractors who participated in the Participating Contractor Survey and requested that they select a sample of the targeted homeowners. We made requests of 60 contractors. We received responses from 21 contractors with 156 homeowners.

Sample Selection

All homeowners received from the contractors were included in the sample. We obtained 67 completed interviews. The 90% confidence interval for the sample is +/- 10%.

Data Collection

Overview of Data Collection Procedures

The Partial Participant Homeowners Survey was administered as a telephone interview with the homeowner. Sampled homeowners were mailed an advance letter from NYSERDA and one from APPRISE notifying them of the data collection effort and describing the study. Interviewers from Braun Research conducted the interviews using a computer-assisted telephone interview (CATI) survey instrument.

Survey Instrument

The survey instrument was designed to collect information on key performance indicators identified for the HPwES in the Program Theory and Logic Model. One objective of the survey instrument was to

update the time series measurements of market indicators obtained from previous surveys. So, it was important to ensure that questions were consistent with the prior surveys. However, the survey also addressed some new issues of interest to NYSERDA program staff. Those questions, in particular, needed to be pretested to ensure that they collected the required information and used clear and concise language.

The survey was designed to ask the homeowner about 7 of the 12 measure groups that were included in the Participating Homeowner Survey. For each respondent, we received information from the contractor on which measures had been recommended to the client. Question language was varied depending on the status for each measure. [Note: Some contractors were unable to give us information on which measures were recommended. Those homeowners were asked to report on which measures were recommended.]

Survey Administration

The survey was fielded in June 2008. Interviewers called homeowners between 9 am and 9 pm on weekdays and weekends. If they reached the household's voice mail, they left a message on first contact. After the first contact, they left a message every other day. The study was in the field for three weeks. Attempts were made with each project contact at least once per day during the field period. Survey administration averaged 15minutes per completed interview. Table 3 shows the final disposition of the sample. The estimated response rate was 66%.

Table 3 – Partial Participating Homeowner Survey Sample Disposition

Disposition		Number	Percent
Complete	Complete	67	43%
	Partial	2	1%
Contacted	Refused	30	19%
	Not Completed	14	9%
Not Contacted	Quota Met	0	0%
Excluded	Duplicate	0	0%
	Homeowner no longer available	0	0%
	Information not available for homeowner	17	11%
	Not Eligible	26	17%
TOTAL		156	100%

Data Processing

Coding

The survey included many "field-coded" questions. In these questions, the respondent was asked an open-ended question. The interviewer had the choice of coding the response as one (or more, for some questions) of a number of pre-coded categories that were coded from the open-ended responses for the prior survey, or coding the response as "Other" and entering a text string to summarize the response. For each applicable question, staff reviewed each "Other" response and then selected one of the pre-coded responses or made the response eligible for development of a new code. After reviewing all questionnaires, text responses were grouped into categories. If a group represented at least 5% of responses (three or more), a new code was created. If there were less than three responses, it was left as "Other."

Data Processing

The survey data were checked for consistency with the CATI survey instrument. The survey data were combined with the sample frame data. A number of data file formats were developed, including SAS, SPSS, Stata, and Excel. All files were labeled with variable labels and value labels.

The survey started with a series of questions related to the 7 measure groups. Homeowners were asked one of three question series, depending on whether a measure groups was recommended and whether it was purchased. Those questions were coded into a series of analytic variables for each measure group. The specification for that coding is appended to the end of this document.

Weights

Since the population of partial participants is unknown, no weights could be computed for this survey. Analysis should be done using unweighted data.

Measure Coding

For each of the 7 measures, code variables M?a – M?e

M1a – Program Installation (Database)

3. Contractor recommended / not purchased
4. Contractor did not recommended
5. Do not know whether contractor recommended measure

Specifications – Take direct from survey administration file

M1b – Program Installation (Survey)

3. Contractor recommended / not purchased
4. Contractor did not recommended
5. Do not know whether contractor recommended measure

Specifications

Code = 3 if [M1a=3 and B5b NE 7, 11] or [M1a=5 and B8a=1]
Code = 4 if [M1a=4] or [M1a=5 and B8a=2]
Code = 5 if [M1a=5] and [B8a NE 1, 2]

M1c – Installation and One Year Plans (Survey)

5. Contractor recommended / not purchased / planned through program
6. Contractor recommended / not purchased / planned outside program
7. Contractor recommended / not purchased / not planned
8. Not Recommended

Specifications

Code = 5 if [B7 = 1, 3] or [B10 = 1, 3]
Code = 6 if [B5a=1] or [B7 = 2, 4, 5, 96, 97, 98] or [B10 = 2, 4, 5, 96, 97, 98]
Code = 7 if [B6=2, 96, 97, 98] or [B9=2, 96, 97, 98]
Code = 8 if [M1b = 4, 5]

M1d_1, M1d_2, M1d_3 – Why Not Purchased

1. Plan to install later
2. Cost of the measure was too high
3. Installed standard efficiency because of cost
4. Did not think measure was higher quality or efficiency

5. Did not see value
6. Materials were not available
7. Contractor recommended against doing measure
11. Contractor recommended against applying for incentives
12. Was not approved for incentives
13. Selected contractor was less expensive
14. Selected contractor was better quality
15. Other
97. [97] Don't Know
96. [96] Refused
99 [99] Not Applicable

Specifications:

If [M1a = 3] and [M1c = 7], extract codes from B5b
If [M1a = 4], code = 99
If [M1a = 5] and [M1c = 7], extract codes from B8b
If none of those conditions exist, code = 99

M1e – Installation Plans

1. Same contractor / inside program
2. Same contractor / outside program
3. Different contractor / inside program
4. Different contractor / outside program
5. Other
6. [97]Don't Know
7. [99] Not Applicable

Specifications:

If [M1a = 3] and [B6=1], extract codes from B7
If [M1a = 4], code 99
If [M1a = 5] and [B9 = 1], extract codes from B10
If none of those conditions exist, code = 99