



Connecticut Home Energy Solutions Stage 1 Performance Measures and Financing Focus Groups

DRAFT

7/16/2012

Submitted to:

**Connecticut Energy Efficiency Board
Connecticut Lighting & Power
United Illuminating**

Submitted by:

NMR Group, Inc.

Contents

EXECUTIVE SUMMARY	I
KEY FINDINGS.....	I
Barriers to Home Performance Measure Installation	II
Barriers to Use of Low-interest Financing	II
Barriers to Use of Rebates	III
Increasing Installation of Home Performance Measures.....	III
CONCLUSIONS AND RECOMMENDATIONS	IV
1 INTRODUCTION.....	1
1.1 SITE AND PARTICIPANT SELECTION.....	2
2 PROGRAM DESCRIPTION.....	5
3 FINDINGS	7
3.1 BARRIERS TO HOME PERFORMANCE MEASURE INSTALLATION.....	7
3.1.1 Factors Involved in Home Performance Measures Installation Decisions	7
3.1.2 Perceptions of Measures and Awareness of Savings.....	8
3.1.3 Knowledge of Payback Periods	9
3.1.4 Satisfaction with the Audit.....	10
3.2 BARRIERS TO USE OF REBATES AND LOW-INTEREST FINANCING	11
3.2.1 Rebate Program and Low-Interest Financing Awareness.....	11
3.2.2 Attitudes towards Rebates and Low-Interest Financing	12
3.3 INCREASING INSTALLATION OF HOME PERFORMANCE MEASURES.....	14
3.3.1 Program Strengths.....	14
3.3.2 Rebate Program and Low-Interest Financing Participation Motivators	15
3.3.3 Marketing and Outreach Opportunities	16
4 CONCLUSIONS AND RECOMMENDATIONS	17
APPENDIX A: CT HES FOCUS GROUPS SCREENER	A1
APPENDIX B: CT HES NON-USER FOCUS GROUPS DISCUSSION GUIDE.....	B1
APPENDIX C: CT HES USER FOCUS GROUPS DISCUSSION GUIDE	C1

Tables

TABLE 1-1: SUMMARY OF OBJECTIVES AND RESEARCH QUESTIONS.....	1
TABLE 1-2: FOCUS GROUP LOCATION AND PARTICIPATION CHARACTERISTICS.....	3
TABLE 1-3: FOCUS GROUP ATTENDEE DEMOGRAPHICS	4

Executive Summary

This report presents the results of four focus groups conducted by NMR Group, Inc. (NMR) with Connecticut residents to assess the reasons that participants in the Home Energy Solutions (HES) non-income eligible program do not install recommended Home Performance (HP) measures¹ in greater numbers or take advantage of program-provided resources such as rebates and, especially, low-interest financing to help fund measure installations. The focus groups took place between May 14, 2012 and May 17, 2012 in four Connecticut communities, and were funded by the Connecticut Energy Efficiency Fund (CEEF) in cooperation with Connecticut Light and Power (CL&P) and The United Illuminating Company (UI) (together referred to as the Companies).

The focus groups were conducted to provide information on the following objectives:

- Identify barriers to adopting Home Performance measures—especially insulation and heating measures—recommended during the initial HES energy assessment
- Understand why HES participants are not taking greater advantage of rebates and, especially, low-interest financing to offset the initial cost of HP measures, again emphasizing insulation and heating systems
- Outline steps the Companies may take to increase installation of Home Performance measures, particularly insulation and heating systems, with or without low-interest financing

We chose to hold groups in four locations throughout Connecticut to obtain opinions of participants across the state, thereby increasing the diversity of housing types and participant demographic profiles represented in the groups. To provide insight into barriers to installation of HP measures, three of the four groups were held with customers who received home energy assessments but reported on the phone that they did not install heating systems or insulation utilizing program rebates or financing. The fourth group included only participants that installed heating systems or insulation with program rebates or financing. This final participant group provided information on customers' motivations to use the program opportunities as well as the challenges these participants experienced that may illustrate the barriers for other participants considering the installation of HP measures.

Key Findings

The key findings of the report are summarized below. The main body of the report includes more detail on these and other findings.

¹ While the HP category encompasses a variety of different measures, including such items as water heaters and geothermal systems, NMR focused on heating systems and insulation measures in the focus groups. Non-HP measures were also discussed to some extent.

Barriers to Home Performance Measure Installation

The focus groups yielded the following key findings related to barriers to HP measure installation.

- Attendees assert that upfront costs present the greatest barrier to measure installation, while energy savings—both immediate and long-term—serve as the strongest drivers of measure installation. Other barriers include such concerns as difficulty coordinating installations with contractors, and doubts about the necessity of measures. Improving a home's resale value and level of comfort, replacing or repairing equipment, and protecting the environment served as additional drivers.
- Focus group attendees reported that they considered insulation—especially attic insulation—to have the highest savings potential of the measures recommended to them. They may have formed this opinion in conversation with their auditors, but at least some attendees had the HES visit conducted in order to find out if they were eligible for insulation rebates.
- Although focus group attendees were aware of the concept of payback period, only one-fourth of the attendees recollected discussing payback period with the auditor during the kitchen-table wrap-up. The findings also made clear that the attention the auditor paid to payback period influenced the importance payback played in attendees' decisions on whether to install measures.
- Attendees overwhelmingly characterized the auditors as pleasant, thorough, informative, and helpful in providing recommendations and suggestions. The very few complaints given were varied and did not exhibit any systematic quality control issues, though some could be ameliorated with simple procedural changes (discussed below).
- Over the course of the focus group discussion many attendees voiced disappointment about the limited financing and rebate information they received from the auditor. However, this disappointment likely stemmed from what they learned about these program offerings during the focus group instead of being felt prior to the group.

Barriers to Use of Low-interest Financing

The focus group discussions centered on understanding why HES participants are not making greater use of low-interest financing offered through the program. The discussions about financing often proved difficult because no attendees had used the option and only one had applied for—and been denied—financing. Despite this challenge, the discussions resulted in some key insights into barriers to use of low-interest loans.

- Lack of awareness and understanding of low-interest financing serves as the most critical barrier to greater use of the option. While attendees—particularly those that had actually used rebates—seemed to be more amenable to the idea of financing, overall a general wariness about borrowing money also served as an important barrier to greater use of the financing option. The focus groups suggest that auditors spent very little time discussing

the financing options with attendees, but instead gave more attention to rebates. NMR will explore possible reasons for the greater attention given to rebates in vendor interviews to be conducted in 2013.

- The focus group discussion also demonstrated that terminology matters. Attendees expressed more comfort with the idea of “payment plans” compared to “financing” and especially “loans” even though these terms refer to the same process. However, each term was still considered as synonymous with “borrowing money,” an action that many attendees said they were unwilling to take.
- Attendees who were more amenable to the financing or loan option indicated that they may have installed additional measures had they known about them.

Barriers to Use of Rebates

The focus group discussions also investigated the barriers to HES participants making greater use of rebates. The primary barriers are as follows.

- In contrast to low-interest financing opportunities, attendees expressed greater awareness of rebates, although the discussions also made clear that not all attendees fully understood the rebate amounts, structures, or processes. The primary barriers impeding greater rebates included the perception that the rebates were not deep enough to offset costs, that the attendee could not get the work performed before rebate deadlines), or that the rebate process was a hassle.
- Rebates served to allow some attendees to install measures they may not otherwise have adopted. However, some users who took advantage of heating rebates noted that they likely would have installed the heating equipment without the rebate because, from their perspectives, the rebate amount relative to the cost of the heating system was negligible. Attendees generally perceived the insulation rebates as being deeper and, therefore, more attractive.
- Six of the 14 rebate users had originally had their rebate applications denied, with the rebate vendor informing them that they needed to correct something on the form. The most frequent correction involved the contractor not supplying the correct or adequate documentation to the attendee. Other times the attendees made mistakes on the forms. Attendees also noted that they sometimes had to call the rebate vendor multiple times to check on the status of their rebate.

Increasing Installation of Home Performance Measures

In the focus groups, attendees were asked to consider ways in which the program could increase the rates of HP measure installations. Some of the findings related to this topic—and touching on program strengths more generally—include the following:

- Attendees appreciated the ability to choose an installation contractor that was not necessarily the auditor. In fact, most of the rebate users used a different installation contractor. Attendees voiced skepticism about auditors who seemed overly eager to sell

certain measures and wondered if the recommendations were biased towards the specialty areas of the auditors.

- While persistently reluctant to take advantage of financing, attendees said they may be more willing to do so if offered zero-percent financing and approval during the audit—both steps NMR understands the program may soon adopt, if it has not already done so.
- Attendees split over their opinions of on-bill repayment, with some liking the idea of having one less bill to pay, and others fearing that there would be some hidden “catch.”
- Attendees also suggested other approaches to increase the number of measures installed, some of which are listed below:
 - Follow-up calls *after* the home assessment to discuss financing options and payback periods
 - Providing more information on non-energy benefits
 - Offering certificates verifying installations for home resale purposes

Conclusions and Recommendations

NMR makes the following recommendations stemming from the key findings above. The numbering scheme reflects the grouping of related recommendations, as explained more in the main body of the report.

Recommendation 1: The program should proceed with its efforts to offer zero-percent financing and approval of financing during the audit. Given attendees’ generally more negative response to the word “loan,” the program should take a cue from retail stores and adopt language such as “payment plans” or “zero-interest” or similar phrasing when describing the opportunity. Vendors should be directed to avoid the word “loan” so as not to deter customers from choosing the financing option. On-bill financing may be preferred by some participants, but not universally so. The additional uptake in use of this option may be minimal and limited to households that were already inclined to use rebates, but it is likely that these households may install more measures through the financing program than they would with rebates alone.

Recommendation 2: The program should instruct contractors to discuss the financing option in more detail with all eligible participants. Auditors must be willing and able to describe the financing package accurately and enthusiastically to all eligible participants, rather than relying solely on printed program materials to promote the option. NMR will explore the issue of how vendors promote the financing option in more detail in planned vendor interviews to be conducted in 2013.

Recommendation 3a: To increase rebate participation, the auditors must make certain that they are explaining the rebate process thoroughly and emphasizing the value of the rebates relative to measure cost, particularly in the case of insulation which in many cases can cover up to 50% of the entire cost of installing the measure.

Recommendation 3b: NMR concurs with the recommendation of an attendee who suggested that the program conduct follow-up communication with participants after the audit to discuss the opportunities. While NMR believes that a follow-up call should not replace discussion of rebates and financing during the kitchen-table wrap-up, a call could provide the participant an opportunity to ask questions about rebates and financing and clarify information provided in the audit report. Such follow-up may serve to increase use of rebates and financing to install HP measures.

Recommendation 3c: Attendees also suggested that participants receive an incentive of some sort for recommending the program to other customers. It is NMR understanding that the program already provides this or a similar incentive, but we recommend stressing its availability more to participants. Likewise, auditors should make certain to promote the non-energy benefits of recommended HP measures such as increased home comfort and the high-tech and convenience features of some advanced HP equipment that participants may not immediately associate with energy efficient measures.

Recommendation 3d: NMR also believes the program should consider adopting other attendees' suggestions to provide certificates verifying improvements that homeowners could then present when selling the home.

Recommendation 4: Given the significance of payback in rebate users' decision-making process, the program should emphasize payback through program materials and the auditor wrap-up dialogue. Moreover, every effort should be made to inform participants of likely energy savings they could expect, providing realistic ranges of savings for major measures from comparable households. The program may also want to consider future research, through a quantitative effort, to better understand what length payback period is essential in most participants' decision-making processes.

Recommendation 5: The program should provide additional training to qualified HP contractors on how to supply the correct information to participants for filling out the rebates. The program may also want to provide online or other forms of assistance to help participants understand the application. The program may consider identifying ways to streamline the rebate application process.

Recommendation 6: The program might benefit from providing more detailed information to participants prior to the initial visit regarding the scope of program offerings. Additionally, auditors and other technicians associated with the program should be required to undergo training that clarifies the program's expectations of their professionalism as program representatives. This would include mandating that all team members be introduced to the participant and that the team leader receives explicit permission to begin the audit before any team member starts the assessment. Moreover, if auditors cannot answer questions, they should explain this to the participant and provide their own contact information and that for the program should the participant wish to follow-up about the question.

1 Introduction

This report summarizes the results of four focus groups assessing the reasons that participants in the Home Energy Solutions (HES) non-income eligible program do not install recommended Home Performance (HP) measures in greater numbers or take advantage of program-provided resources such as rebates and, especially, low-interest financing to help fund measure installation. NMR Group, Inc. (NMR) conducted focus groups between May 14, 2012 and May 17, 2012 in four Connecticut communities: Farmington, North Haven, Stamford, and Storrs. The focus groups were funded by the Connecticut Energy Efficiency Fund (CEEF) in cooperation with Connecticut Light and Power (CL&P) and The United Illuminating Company (UI), collectively referred to as the Companies.

The study objectives included the following:

- Identify barriers to adopting HP measures—especially insulation and heating measures—recommended during the initial HES energy assessment
- Understand why HES participants are not taking greater advantage of rebates and, especially, low-interest financing to offset the initial cost of HP measures, again emphasizing insulation and heating
- Outline steps the Companies may take to increase installation of HP measures, particularly insulation and heating, with or without low-interest financing

Table 1–1 summarizes the research questions used to address these objectives during the focus group discussions. Some research questions provide information on more than one objective.

Table 1–1: Summary of Objectives and Research Questions

Objectives	Research Questions
Identify barriers to adopting HP measures, especially insulation and heating measures, recommended during the initial HES energy assessment	<ul style="list-style-type: none"> • How do HES participants decide which HP measures to install and which not to install? Are some measures more attractive or desirable than others? Why? • Do customers understand the concept of payback period? Is it something they consider when deciding whether to install HP measures? Or do other considerations (e.g., upfront cost, hassle, reluctance to take out a loan, other priorities for finances, etc.) take precedence over long-term savings? • Do customers feel that they know the level of savings to expect from the recommended measures? Which measures do customers believe achieve the greatest savings? • Why do participants not take greater advantage of rebates and financing? What might increase their use of these resources?

Objectives	Research Questions
Understand why HES participants are not taking greater advantage of rebates and, especially, low-interest financing to offset the initial cost of HP measures, again emphasizing insulation and heating	<ul style="list-style-type: none"> • How many customers install the measures on their own, without using program resources? Do those customers install the exact same measure that was recommended, or do they install similar ones? Are the efficiency levels the same? • Are HES program participants aware of the rebate and financing resources available, and, if so, do they understand the rebates and financing (both in their own estimation but also through discussion to uncover any misconceptions about the program details)?
Outline steps the Companies may take to increase installation of HP measures, particularly insulation and heating, with or without low-interest financing	<ul style="list-style-type: none"> • Why do participants not take greater advantage of rebates and financing? What might increase their use of these resources? What other resources might be more attractive to participants than rebates or financing? • What other things might the Companies do to make installation of HP measures, especially those with deeper savings, more attractive to participants?

1.1 Site and Participant Selection

In order to meet these objectives in a manner that included a wide range of HES participants, four focus groups were held in four different Connecticut communities. NMR selected focus group locations based on the following criteria:

- Location amenable to recruitment of both CL&P and UI customers
- Professionalism of staff and quality of the available focus group and observation rooms
- Estimated cost of holding the groups at the facility

Ultimately, we held four groups, one in each of the following locations: Farmington, North Haven, Stamford, and Storrs. Using lists of 2011 HES program participants from CL&P and UI, NMR recruited 13 participants for each focus group, with the expectation that approximately 10 attendees would actually make it to each focus group; we did not dismiss any attendee if more than 10 arrived. We intended to hold one group with participants that had used either rebates or low-interest financing from the program for the installation of insulation or heating systems (“users”²). The other three groups were expected to be conducted with those that had received recommendations for insulation or heating systems during the HES visit, but had not installed either measure through the program (“non-users”). Ultimately, two of the three groups intended

² To distinguish easily between participant types, we refer to those that installed heating systems or insulation with program rebates or financing as “users.” We refer to those that did not install the measures through the program (despite receiving home energy assessments) as “non-users.”

for non-users included at least one user³: one half of attendees (6) in the Farmington group were users and one attendee in the Storrs group was a user. This resulted in three types of groups: Users and non-users combination, users-only, and non-users-only. Table 1–2 presents the breakdown of measure type by group, indicating how many of the attendees in each focus group installed heating systems or insulation through the program. Of all participants that attended, only one had attempted to take advantage of the program’s low-interest financing opportunity, but she was denied the loan. Our inability to recruit low-interest financing users reflects the low incidence of use among all HES participants and underscores the need to understand barriers to use the financing option.

Table 1–2: Focus Group Location and Participation Characteristics

Rebate *	Participation Types			
	Farmington (May 14)	North Haven (May 15)	Stamford (May 16)	Storrs (May 17)
Heating System	2**	3	0	0
Insulation	4	4	0	1
No rebate	6	0	10	5
<i>Total</i>	<i>12</i>	<i>7</i>	<i>10[†]</i>	<i>6</i>

*No participants in any of the groups enrolled in the low-interest financing program; however, one participant had attempted to enroll in it but was denied the loan.

**One of the two was not entirely sure if the rebate came from the program or from tax credits. For the purposes of analysis, this participant is considered to have installed the heating system rebate through the program.

† This group began with 11 participants, but one participant left at the very start of the group. Throughout the report, when giving response counts, we denote if more than 10 participants had been present at the time of the discussion.

In addition to selecting participants based on their use or non-use of insulation and heating rebates and financing, the focus group attendees were also selected according to the following screening criteria:

- No focus group participation in the past 12 months (to avoid inclusion of “professional” focus group respondents)
- Directly involved in making decisions related to the energy-efficiency assessment
- Mix of demographic characteristics including sex, age, and income

³ While NMR had intended to have user-only and non-user-only groups, three situations occurred during recruitment that resulted in the mixed groups. First, the databases received from the Companies did not always accurately note whether participants had been recommended measures or used program resources to install them (we recognize that some attendees were awarded their rebates in 2012, so were not reflected in the 2011 data we received). Therefore, during recruitment, potential attendees may not have been asked about all the types of measures they actually had been recommended or installed. Second, the recruitment script contained an error in which some households receiving recommendations for both insulation and heating measures were only asked whether they used the rebate or financing for heating and not for insulation, allowing some insulation rebate users into the group. Third, some participants simply got confused and said they did not use a rebate or financing, when in fact they had. The end result allowed for a more diverse mix of perspectives within the group than we intended, but this did not interfere with our ability to draw useful conclusions.

To the extent possible, we sought to recruit groups balanced with varying demographics based on gender, age, and income, but given the challenges of recruiting the specific participation types, demographic criteria came second to participation type in our recruitment prioritization. Table 1–3 summarizes the characteristics of the focus group attendees by group and demographics. [Appendix A](#) contains the entire screener.

Table 1–3: Focus Group Attendee Demographics

Characteristic	Quota Per Group	Farmington (May 14)	North Haven (May 15)	Stamford (May 16)	Storrs (May 17)
<i>Gender</i>					
Female	≤8	9	5	5	4
Male	≤8	3	2	5	2
<i>Age</i>					
18-34	1-2	1	0	2	0
35-54	6-7	6	5	5	2
55 or older	4-5	5	2	3	4
<i>Household Income</i>					
Less than \$60,000	1-2	2	0	0	2
\$60,000 to \$89,999	3-5	5	4	3	3
\$90,000 to \$124,999	3-5	3	1	4	1
\$125,000 or more	3-5	2	2	3	0
<i>Number of Attendees</i>					
	13	12	7	10*	6

*The characteristics of the attendee that left early have been omitted.

2 Program Description⁴

The HES program aims to reduce energy use through comprehensive energy efficiency improvements of single and multi-family homes in the state. The program utilizes a number of delivery mechanisms to meet this goal:

- **Home Energy Assessments.** Certified auditors conduct energy assessments in which they perform diagnostic testing and identify cost-effective energy savings opportunities in participants' homes. Customers pay \$75 for these assessments.⁵ Home energy assessments are one of the primary services of the HES program, referred to as Core Services.
- **Direct Installation.** During the initial visit to the home, certified auditors install or provide free measures in the participants' homes including air and duct sealing, CFLs, domestic hot water measures, and hot water pipe insulation. Direct installation is also a Core Service.
- **Kitchen Table Wrap-ups.** The last Core Service involves communicating the findings and next steps to participants. Following the home inspection, the auditor explains for which HP measures the customer is eligible to receive rebates or low-interest financing from the program. To assist customers in their decision making process, the auditors are expected to provide information regarding payback and program financing opportunities for the measures as well.
- **Home Performance Measure Rebates.** Upon receiving the home energy assessment, participants may be eligible for program rebates for add-on measures (non-direct install) that the inspector identified as cost-effective based on the participant's inspection. These measures include, but are not limited to, heating and insulation measures, appliance replacement, cooling measures, and window upgrades.
- **Financing Opportunities.** The program currently offers low-interest and no-interest financing with on-bill repayment for some add-on measures. Participants are made eligible for these repayment plans to encourage and make possible their investment in the recommended add-on measures. The eligible add-on measures have changed over time and vary by heating fuel type, but insulation, heating systems, replacement central air conditioning systems, ground source, ductless, and replacement air source heat pumps, windows, and heat pump and tankless water heaters are typically eligible for financing.

⁴ Source: Connecticut Light and Power Company, United Illuminating Company, Yankee Gas Services Company, Connecticut Natural Gas Corporation, and Southern Connecticut Gas Company. "2012 Electric and Natural Gas Conservation and Load Management Plan." September 30, 2011.

⁵ Funding that allows oil- and propane-heat customers to pay the \$75 co-pay remains precarious, but, according to a recent article, it appears that the \$75 co-pay for delivered-fuel customers will continue for the time being. <http://www.ctmirror.org/story/15856/home-energy-efficiency-funds-safe-now>

The focus groups touched on all of the program components above but emphasized the relatively low participant uptake of heating and insulation measures and the small numbers of participants taking advantage of program financing options.

3 Findings

This section summarizes the findings from the focus groups, addressing each of the objectives described above. In this report we refer to those that installed HP measures through the program as “users” and those that received the audit but did not install these measures through the program as “non-users.”

3.1 Barriers to Home Performance Measure Installation

In the focus groups, NMR explored not only barriers to usage of HES program rebates and low-interest financing opportunities, but also focused on the challenges involved with attendees’ awareness, decisions, and follow through in installing HP measures more generally.

3.1.1 Factors Involved in Home Performance Measures Installation Decisions

The focus group attendees discussed a variety of issues that factor into their decision of whether to install measures recommended by the auditor. Some serve as barriers, others as motivators, and the remainder can be either, depending on the attendee’s personal situation.

Upfront costs presented the greatest barrier to measure installation. Most users agreed that upfront cost was the greatest drawback to installing HP measures, which they noted could be substantial for many of the add-on measures. Likewise, non-users most commonly pointed to cost as the reason why they did not install the recommended HP measures.

In addition to upfront costs, attendees also referenced other perceived challenges or barriers to installation, including the following:

- Difficulty of coordinating contractors
- Belief that the recommendations were unnecessary⁶
- Concern that insulation installation would damage walls
- Lack of awareness of program financing and rebate opportunities, as described in more detail in Section 3.2
- Current energy bills are not high enough to warrant the work
- Attic spaces are difficult to access
- Unforeseen medical expenses and other personal hardships⁷
- Economic and financial insecurity

A number of motivations for measure installation existed. Despite the concern about upfront costs, users and non-users also identified factors that served to encourage measure installation,

⁶ Note that these beliefs were not necessarily correctly informed. In one case, the homeowner believed that the home had enough insulation in the attic, but also did not seem to understand the benefit of installing more than the minimal amount that was present or the depth of the discount on attic insulation installation.

⁷ Multiple attendees noted that they had experienced or anticipated medical issues in their families that had delayed or caused them to reconsider home improvements.

even if the attendees did not ultimately install the measures. Most commonly they referenced their interest in reducing their current and long-term energy costs as a driver of HP measure installation. Other motivations included the following:

- Fixing equipment that needed to be repaired or replaced anyhow
- Increasing the resale value of the home
- Improving the comfort of the home
- Extending the life of existing equipment (e.g., warmth from installing attic insulation will prevent pipes laid there from freezing)
- Saving energy and protecting the environment

Attendees took into account a number of considerations in their decisions to act. In addition to the barriers and motivations described above, attendees in all groups discussed other factors that they weighed in their decisions to make costly energy efficiency improvements. The factors they listed were varied, yet most often, they said they considered the potential for increasing the comfort of their home. Other considerations names are as follows:

- The cost of fixing older heating systems as opposed to replacing them
- The age of the current equipment
- Payback period
- Current operating costs
- Time planned to own the home (differing timelines for selling a home can influence upgrade decisions)
- Attendee age
- Opportunities for immediate fuel/utility bill savings
- Attractiveness of advanced features available with new HVAC equipment (e.g., ability to add central air conditioning)

These considerations can be perceived as both potential program obstacles and program opportunities.

3.1.2 Perceptions of Measures and Awareness of Savings

The ways in which HES participants perceive the measures they are recommended and the savings that can be achieved likely influences the decision to adopt HP measures. We explored these questions with focus group attendees.

Attendees considered insulation to have the highest savings potential. Overwhelmingly, attendees perceived insulation as the measure having the greatest capacity to save them money, an opinion that could have been formed in conversation with their auditors during the kitchen-table wrap-up. Furthermore, at least some attendees in our groups were highly-informed about high-savings measures before their participation in the program, as some noted that they requested the audit specifically to find out if they would be eligible for insulation rebates. Similarly, attendees most commonly found attic insulation (13 attendees, although not all offered

an answer to this question) to be the most attractive measure that was recommended. One non-user explained that the attractiveness of upgrading insulation was due to the lower upfront costs of installing attic insulation in comparison to the upfront costs of upgrading the heating system.

Auditors generally explained the reasons for their recommendation, but some attendees desired additional details on the potential savings of measures. For the most part, users and non-users confirmed that the auditors explained why they made the recommendations they did. One-half of users (7 of 14) indicated that the auditor told them how much energy they could save with the recommended measures. A smaller share of non-users (10 of 22) received clear information on the savings. Users and non-users alike mentioned a desire to have auditors quantify the savings as opposed to merely mentioning where they exist.

3.1.3 Knowledge of Payback Periods

Attendees were aware of the concept of payback period. Nearly all attendees, users and non-users alike, confirmed that they were aware of the concept of payback period before the focus groups. However, based on attendee responses, it seems as if auditors are inconsistent in whether they discuss payback period during the kitchen-table wrap-up. Only one-quarter of attendees (9 of 36⁸) confirmed that their auditor discussed the concept of payback period with them. However, in these homes, some attendees notes that the auditors addressed payback period rather than providing detailed savings estimates.

Payback period was an important consideration in the installation decision for attendees who discussed payback with their auditor. Almost all rebate users reported that the length of the payback period factored strongly into their decisions to install HP measures; the one user who said payback was not important noted that she knew she was going to install the measure prior to the audit. Importantly, all of these users—including the one who said payback was not important—had discussed the payback period with their auditor. However, only those non-users that discussed payback with their auditor said it was an important consideration in their decision-making process. This indicates that HES attendees give relatively more importance to payback period when it is addressed by the auditor. Yet, for some, the payback period may never be a key component of the decision making process.

Well, for [me] it was the upfront cost: I mean ... a refrigerator, a cheap one, is \$500 and a furnace is \$1,000. I didn't have [the money for the recommended measures]... [Payback] didn't mean a thing to me.

Most attendees could not pin down the period they considered to be acceptable. A few attendees indicated that to replace existing working equipment with a more efficient unit through the program, they would require a payback period of less than ten years. However, most attendees were not able to specify the length of the acceptable payback period, suggesting that payback might be an appropriate topic to explore in future research efforts.

⁸ This question was asked prior to the 36th participant departing from one of the groups.

3.1.4 Satisfaction with the Audit

Participants' experiences with their home energy assessments can influence their interest in installing measures using additional program resources such as rebates and financing. We address the issue of audit satisfaction below.

Attendees were generally satisfied with their audits and auditors. Attendees gave high praise to the work performed by the auditors. They overwhelmingly characterized the auditors as pleasant, thorough, informative, and helpful in providing recommendations and suggestions. Two typical comments include the following:

"I was very impressed with the audit.... They were very neat. They were very thorough... they put everything back in its place and everything. They made a couple suggestions and everything. We were very pleased with it. So we've recommended it to many people."

"The thing I remember most is I asked a ton of questions. They were really, really responsive.... I was really interested in the blower door thing. They were all just very responsive and very nice."

Despite this generally positive experience overall, attendees did report a handful of varying complaints regarding the audit:

- The team could have made more home improvements during the audit (3 non-users, 1 user)
 - At least one attendee noted that the team did not fix everything (they overlooked air sealing work in some areas), but also said that a handy homeowner could complete the work following the contractors' example. Another explained that they had expected to receive more measures through the audit, indicating a greater need for communication between the program and participants regarding the scope of program offerings.
- The team was not neat and did not fully clean up after themselves (2 non-users)
- Auditors did not, or could not, answer attendees' questions (2 non-users)
 - One attendee was clearly aggravated in recounting her experience: from the attendee's perspective, the auditor did not understand building science and program rebates. The auditor could not answer questions about either, leaving the homeowner disappointed and frustrated. Another attendee reported asking the auditor multiple questions and was promised follow-up answers, but never received them.
- Too many auditors came per visit making the attendee feel uncomfortable (1 user)
 - The attendee felt uncomfortable during the audit because there were too many auditors, and some of the auditors began wandering around the home almost immediately without introducing themselves. As a result, the homeowner dismissed the first team and rescheduled the visit, specifying that they send fewer people.

- The team appeared to have been poorly trained or under-trained (1 non-users)
- The visit took too long (1 non-users)
 - While one attendee complained about the length of the visit, other attendees appreciated the long audit, noting that the length indicated to them that the auditors had been thorough.
- Too many visits were needed to install more measures (1 non-user)

While these concerns *may* have served as barriers to installing insulation or heating measures with program resources, too few attendees voiced any single concern to make them a likely explanation for the limited use of rebates and financing to install these measures, a topic addressed in more detail in the next section

Many attendees were disappointed in the limited financing and rebate information they received from the auditor. Despite their overall satisfaction with the audit, the attendees expressed a general feeling that they might have installed the HP measures (or additional measures for rebate users) if they had been better informed about the rebates and financing options available to them. Some attendees directly asserted that they wished they had been fully informed of the program's opportunities, while others left the impression that this was a pervasive concern about quality of information shared by the auditors. However, these opinions appear to have been formed over the course of the focus group discussion and were not necessarily held prior to their attendance at the focus group.

3.2 Barriers to Use of Rebates and Low-interest Financing

The second objective of the focus groups was to learn why HES participants that receive home energy assessments might not take advantage of the program's rebate and low-interest financing opportunities, particularly as they apply to insulation and heating. To achieve this objective, NMR asked attendees about their awareness of these opportunities, their attitudes towards financing options, and other factors that may have influenced their decisions to enroll in them.

3.2.1 Rebate Program and Low-Interest Financing Awareness

Auditors regularly let HES attendees know that rebates existed, but inconsistently informed attendees of financing options. Across all groups, all attendees spoke with the auditors at the end of the assessments to discuss the results. The attendees also confirmed that the auditors gave them written materials at the end of the visit with additional information about the program, signs that auditors are following through with these Core Services. The majority of attendees (9 users and 17 non-users) recalled that their auditors or the materials they received discussed rebates for HP measures, although, as addressed above and again below, not always at the level of detail desired by the attendees. As one expressed:

I remember signing a lot of paperwork, but I don't really remember having a discussion about what we could do.... They couldn't do that blower test, so basically they spent two

and a half hours changing about 15 light bulbs.... So I didn't really get a lot of education.

However, fewer than one-half of attendees (9 non-users and 2 users) recalled the auditors mentioning low-interest financing for HP measures even though all of the focus group attendees had received recommendations for measures (i.e., heating or insulation or both) for which they could have used financing, if otherwise found to be eligible for it.

While these 11 attendees were given information on the low-interest financing opportunity either through auditors or the program materials, none of the attendees recalled having been offered financing or having been explained how to apply for financing. This suggests that, while the auditors may mention these opportunities to at least some HES participants, they are not discussing financing in a manner that makes it seem like an attractive or viable option to most attendees. In all four focus groups, only one of the respondents had any idea about the requirements of the financing programs, or the processes involved with enrolling in them; the one attendee who knew about the process had found out about financing on her own and applied for loan, only to have her application rejected. Some attendees also assumed that the installation contractors or auditors would have told them if they qualified for loans. In fact, during this portion of the focus group discussion, one non-user who had previously indicated that the auditor was not able to answer questions adequately became noticeably frustrated. Had the auditor explained the financing opportunity, the attendee noted that they likely would have been able to afford the improvements.

Despite their awareness of the existence of rebates, some non-users did not understand the rebate amounts, structures, or processes. Non-users explained they likely would have been convinced to make the improvements if they had had a better understanding of the rebate and financing opportunities. For example, one non-user planned to install insulation outside of the program because he did not believe that the rebate was not large enough; however, when another attendee noted that the rebate was fifty cents per square foot, the non-user quickly calculated that this represented about 50% off the price of insulation and voiced a lack of understanding of how extensive the incentive was.

3.2.2 Attitudes towards Rebates and Low-Interest Financing

In order to understand why HES participants are not making greater use of program resources to install insulation and heating measures, the focus groups explored attendees' attitudes about low-interest loans and financing as well as rebates. In addition, during the first focus group—which included both users and non-users—it became apparent that attendees were sensitive to the terminology of “loans” and “financing,” generally preferring the term “financing” over loans even though the processes involved in them were described in the same way. For this reason, the moderator switched terminology between the first and second groups—using financing instead of loans to describe the same process, offering an opportunity to test differential reactions to this term across groups.

Attendees appeared to be generally wary of loans. For the most part, users and non-users expressed reservations about enrolling in a low- or no-interest financing opportunity through the program. However, users were somewhat more open to the idea of financing than non-users, likely a result of their already demonstrated willingness and ability to spend money on insulation or heating measures. Attendees overall indicated their hesitancy in pursuing financing was a result of the following factors:

- Negative associations with the idea of borrowing
- Reluctance to take on or accrue debt
- Concerns about hidden fees or “catches”
- Not willing to pay interest
- Inability to pay back loans
- Greater comfort with alternative sources of funds (e.g., home equity loans)
- Poor perceptions of auditors’ understanding of financing

Despite a general wariness of loans, at least some attendees were more open to the idea of financing. As mentioned earlier, one non-user found information about program-sponsored low-interest loans on the internet and applied online; ultimately, however, her application was denied. While still voicing reservations about loans, nearly all members of the user-only group (6 of 7) said they would have used low-interest or no-interest financing for installing HP measures if their auditor had told them about the financing options or explained them more clearly than they did. Some non-user and user attendees thought they would have installed more measures through the program if they had been offered the loan to help fund the upfront costs.

The importance of rebates varied across attendees. On the one hand, for some users rebates afforded them the ability to make improvements that they would not have been able to make otherwise. They reported that they would not have been as motivated to act on the recommendations due to upfront costs or lengthy payback periods. On the other hand, more than one-half of attendees in the users group (4 of 7) stated that they would have installed the same measures without a rebate. Three of the four had installed heating equipment. Moreover, both users and non-users perceived that the amount of the rebate for many measures relative to the measure cost was negligible. One attendee decided to install a similar measure to one recommended but at a lower efficiency level, arguing that the level of efficiency required by the program was unnecessary.

Aspects of the rebate process may have deterred attendees from following through with the process or installing more measures through the program. Six attendees explained that they had to fix or redo rebate forms at the rebate vendor's insistence due to the lack of proper documentation or other concerns; some of these six attendees had to call the rebate vendor multiple times to check on the status of their rebate. The most frequently reported "fix" to forms involved the contractor providing inadequate or incorrect documentation in support of the application; this led the rebate vendor to deny the rebate initially, forcing the attendee to contact the contractor again to request that he correct the forms so the homeowner could receive the rebate. Other drawbacks mentioned also centered on the paperwork involved, noting that it was confusing or time-intensive.

3.3 Increasing Installation of Home Performance Measures

The third objective of the focus groups was to identify opportunities for the program to increase HP measure installation. We inquired not only about ways to increase the use of rebates and financing but also for other options that would increase installation rates. NMR identified the program's strengths, participants' motivations, and marketing and outreach opportunities that could potentially be leveraged for this purpose.

3.3.1 Program Strengths

As mentioned above, attendees were satisfied with the quality of the audit and the auditors. Nearly all attendees stated that the auditors were professional and thorough and noted how pleased they were with the audit process. This high level of satisfaction with the audit itself certainly stands as a program strength.

If they installed recommended HP measures, attendees generally were doing so through the program. Among non-users, only two installed the HP measures and did not go through the program. One installed attic insulation outside of the program, but, because the auditor had not made this recommendation, the non-user was ineligible for a rebate. The other installed fiberglass batts outside of the program so that it could be done over time, thereby spreading out payment of up-front costs; in this case, the attendee also recollected that the auditor made no specific recommendation for a quantity of insulation to be installed, but only said it was needed. Rebate users generally adopted the type of HP measure that was recommended to them, particularly for insulation work. Two users installed heating systems through the program, but had already selected the types they wanted prior to the inspection, suggesting at least some level of program free ridership.⁹

⁹ As a qualitative approach, it would be unwise to draw any conclusions about rates of free ridership and spillover from the focus group method. However, multiple attendees did note that they took part in HES specifically because they wanted the audit to conclude that they were eligible for rebates on a certain measure or because it was a requirement of their getting a measure (e.g., ground-source heat pumps).

Attendees appreciated the ability to choose an installation contractor that was not the auditor. Attendees were skeptical of auditors who “showed up trying to sell me insulation” as one expressed it. They admitted to wondering whether the auditor’s own contracting specialty area biased the recommendations given for HP measures. There was a general feeling across the groups that if the auditor appeared trustworthy, the attendee would be more likely follow-through on the recommendations. Most users installed HP measures with an eligible contractor who was not their auditor. Of those asked, only two users (of 7) and no non-users (of 10) said it would have been more convenient for them to have the auditor do the work rather than securing a different contractor.

3.3.2 Rebate Program and Low-Interest Financing Participation Motivators

Upon consideration of alternative financing opportunities, attendees remained hesitant to enroll. When asked if they would enroll in a financing program with unique characteristics (e.g., if the period was a set number of months or could be told they were eligible for financing during the kitchen-table wrap up), as opposed to going through a more traditional loan application process, the majority of users who were asked (6 of 7) said they would have used the financing. Nevertheless, most non-users were less enthusiastic about financing and reported that there were few changes that could be made to the program component that would compel them to take advantage of financing. Some of the few situations in which non-users would consider using financing included essential upgrades (e.g., broken equipment), fixed interest rates for the life of the loan, zero-percent financing, or projects with a considerably large price tag (costing greater than \$10,000). The focus group results suggest that these approaches may in fact boost use of the financing package for a subset of HES participants.

Attendees overall were split on the attractiveness of on-bill repayments. Of the 17 respondents providing a direct answer to a question about their reaction to the idea of on-bill repayments, twelve said they find it an appealing option and noted that having all the payments on one bill would be more convenient than having to pay a separate one for energy and one for financing. However, the other five stated that on-bill repayment would not make them more inclined to use financing. They explained that the option was still a loan (“a bill is still a bill,” as one attendee put it) or expressed some skepticism of the approach, indicating that perhaps there are hidden fees or that it is a “mind-game.”

The rebate process was challenging for some attendees to navigate. As mentioned in Section 3.2.2, some attendees described challenges that they had with completing the paperwork required for the rebate either related to the contractor or their own ability to complete the forms correctly on or prior to deadlines. These attendees suggested streamlining the process by making it electronic or making the contractor’s portion of the application distinct from the end-user’s. Overall, however, the attendees who used rebates generally acknowledged that the rebate process was simple and quick.

3.3.3 Marketing and Outreach Opportunities

Attendees believed that the program was a valuable one to the people of Connecticut and thought that the auditors were doing a good job. They did make a number of suggestions to help increase the installation of HP measures:

- Contact participants after the home assessment to discuss financing and payback
- Advertise the program more and through different media (e.g., using local newspapers or Facebook)
- Provide tax incentives
- Offer no-interest financing
- Reduce upfront costs
- Increase the amount of the rebates
- Provide more information on the energy and non-energy benefits
- Offer certificates for those that make installations to use for home resale purposes
- Offer incentives for those that refer others to the program
- Develop case studies to use as advertising tools

4 Conclusions and Recommendations

NMR had developed the following overall conclusions and recommendations stemming from the focus groups. We highlight the conclusions and recommendations directly related to financing and insulation first, as understanding barriers to their use and installation, respectively, served as the primary purpose for performing the focus groups. We then address other conclusions and recommendations that touch on rebates and the installation of heating and other measures.

Conclusion 1: Based on the responses of the focus group attendees, participants are reluctant to borrow money. While referring to the process as “a payment plan” or “financing” as opposed to “a loan,” offering zero-percent interest, and approving eligibility during the audit improved opinions of borrowing money, attendees remained wary of enrolling. They split in their opinions on whether they liked the idea of on-bill financing. Rebate users seemed more amenable to financing than non-users and expressed that they may have installed additional measures had they been better informed about the financing option.

Recommendation 1: The program should proceed with its efforts to offer zero-percent financing and approval of financing during the audit. Given attendees’ generally more negative response to the word “loan,” the program should take a cue from retail stores and adopt language such as “payment plans” or “zero-interest” or similar phrasing when describing the opportunity. Vendors should be directed to avoid the word “loan” so as not to deter customers from choosing the financing option. On-bill financing may be preferred by some participants, but not universally so. The additional uptake in use of this option may be minimal and limited to households that were already inclined to use rebates, but it is likely that these households may install more measures through the financing program than they would with rebates alone.

Conclusion 2: Based on the responses from the attendees, it appears that the auditors give very little attention to the financing option during the kitchen-table wrap-up. Attendees noted that the auditor may have mentioned the loan but did not provide a detailed discussion of the financing option or how to apply for it. It is unclear why auditors might have conducted limited promotion of the opportunity. However, changes in the financing structure and approach (e.g., zero-interest, immediate approval, on-bill financing) may increase participant interest compared to other versions of the financing option.

Recommendation 2: The program should instruct contractors to discuss the financing option in more detail with all eligible participants. Auditors must be willing and able to describe the financing package accurately and enthusiastically to all eligible participants, rather than relying solely on printed program materials to promote the option. NMR will explore the issue of how vendors promote the financing option in more detail in planned vendor interviews to be conducted in 2013 for another study.

Conclusion 3: All attendees were aware that they could have used rebates to install insulation, heating, and other HP measures through the HES program. However, the focus group discussion

made clear that many attendees had only a cursory understanding of the rebate amounts, structure, and processes. In fact, some attendees were surprised to learn in the discussion about the depth of rebates for measures they had been recommended. In short, the focus group results suggest that participants have a fairly low level of understanding of the rebate process.

Recommendation 3a: To increase rebate participation, the auditors must make certain that they are explaining the rebate process thoroughly and emphasizing the depth of rebate for some measures, particularly of insulation which in many cases can cover up to 50% of the entire cost of installing the measures.

Recommendation 3b: NMR concurs with the recommendation of an attendee who suggested that the program conduct follow-up communication with participants after the audit to discuss the opportunities. While NMR believes that a follow-up call should not replace discussion of rebates and financing during the kitchen-table wrap-up, a call could provide the participant an opportunity to ask questions about rebates and financing and clarify information provided in the audit report. Such follow-up may serve to increase use of rebates and financing to install HP measures.

Recommendation 3c: Attendees also suggested that participants receive an incentive of some sort for recommending the HES program to other customers. It is NMR understands that the program already provides this or a similar incentive, but we recommend stressing its availability more to participants.

Likewise, auditors should make certain to promote the non-energy benefits of recommended HP measures such as increased home comfort and the high-tech and convenience features of some advanced HP equipment that participants may not immediately associate with energy efficient measures.

Recommendation 3d: NMR also believes the program should consider adopting other attendees' suggestions to provide certificates verifying improvements that homeowners could then present when selling the home.

Conclusion 4: Having a clear understanding about the payback period seems to be associated with increased measure installation. Attendees that noted that they seriously considered payback were also most likely to have installed measures. While most attendees say their auditor discussed payback and immediate savings, attendees desired more clarity regarding the amount of energy the program measures may save.

Recommendation 4: Given the significance of payback in rebate users' decision-making process, the program should emphasize payback through program materials and the auditor wrap-up dialogue. Moreover, every effort should be made to inform participants of likely energy savings they could expect, providing realistic ranges of savings for major measures from comparable households. The program may also want to consider future research, through a quantitative effort, to better understand what type of payback period is essential in most participants' decision-making processes.

Conclusion 5: Nearly one-half of attendees who used rebates initially had their applications denied, most frequently because the information supplied by their contractor was not accurate or adequate for receiving the rebate. Attendees also made mistakes on the forms, which some found to be confusing and time consuming.

Recommendation 5: The program should provide additional training to qualified HP contractors on how to supply the correct information to participants for filling out the rebates. The program may also want to provide online or other forms of assistance to help participants understand the application. The program may consider identifying ways to streamline the rebate application process.

Conclusion 6: Participants are largely pleased with their home energy assessment experiences. However, a few attendees expressed some level of dissatisfaction which could be construed as barriers to further involvement with the program. Some, for example, mentioned that their auditors did not or were unable to answer their questions.

Recommendation 6: The program might benefit from providing more detailed information to participants prior to the initial visit regarding the scope of program offerings. Additionally, auditors and other technicians associated with the program should be required to undergo training that clarifies the program's expectations of their professionalism as program representatives. This would include mandating that all team members be introduced to the participant and that the team leader receives explicit permission to begin the audit before any team member starts the assessment. Moreover, if auditors cannot answer questions, they should explain this to the participant and provide their own contact information and that for the program should the participant wish to follow-up about the question.

Appendix A: CT HES Focus Groups Screener

Hello, my name is _____ and I am calling from _____ on behalf of the Connecticut Energy Efficiency Fund with the cooperation of Connecticut Light and Power and The United Illuminating Company. We are conducting focus groups in your area about energy efficient equipment. We are offering a \$100 incentive to focus group participants to compensate them for their time. May I ask you a few short questions to see if you are eligible to participate in the focus groups?

[IF NECESSARY, READ: THE CONNECTICUT ENERGY EFFICIENCY FUND IS SPONSORING THIS PROGRAM AND STUDY. THE CEEF CONTACT PERSON IS TIM COLE. IF YOU HAVE QUESTIONS, YOU CAN REACH HIM AT (860) 874-5813. IF YOU PREFER EMAIL, timothy.cole@ctenergyinfo.com.

- S1. Have you taken part in any focus groups in the past 12 months?
1. Yes [**THANK AND TERMINATE**]
 2. No [**CONTINUE**]
 96. REFUSED [**THANK AND TERMINATE**]
 97. DON'T KNOW [**CONTINUE**]
- S2. Our records indicate that you participated in the Home Energy Solutions program. Someone would have come to your home to assess the energy efficiency of your home, given you some free energy-savings devices like light bulbs, and might have recommended additional ways that you could save energy. Do you remember participating?
1. Yes [**CONTINUE**]
 2. No [**ASK IF ANYONE ELSE IN THE HOUSEHOLD MIGHT REMEMBER; IF SO, TALK TO THEM; IF NOT, THANK AND TERMINATE**]
 3. Don't know/refused [**THANK AND TERMINATE**]
- S3. Did the Home Energy Solutions visit occur at your own home, homes or apartments that you rent out, or some other location, such as the home of a family member? [**MARK ALL THAT APPLY**]
1. My own home [**SEE INSTRUCTIONS BELOW S3**]
 2. A unit or building that I rent out [**IF ALSO S3=1 "OWN HOME", SEE INSTRUCTION BELOW S3; OTHERWISE, THANK AND TERMINATE**]
 3. Another location [**IF ALSO S3=1 "OWN HOME" CONTINUE AS DIRECTED ABOVE, OTHERWISE THANK AND TERMINATE**]
 4. Don't know/refused [**THANK AND TERMINATE**]

[IF S3=MY OWN HOME BUT NOT RENTAL UNIT OR ANOTHER LOCATION, CONTINUE TO S4; IF S3 ALSO EQUALS RENTAL OR ANOTHER LOCATION, READ “FOR THE REST OF MY QUESTIONS, PLEASE ANSWER ONLY FOR THE HOME IN WHICH YOU ACTUALLY LIVE” AND CONTINUE TO S4.]

- S4. Were you directly involved in making decisions about the energy-efficiency assessment of your home, such as deciding whether to purchase and install any of the efficiency measures recommended by the technician?
1. Yes [CONTINUE]
 2. No [ASK TO SPEAK TO THE PERSON IN THE HOUSEHOLD WHO DID MAKE DECISIONS; OTHERWISE, THANK AND TERMINATE]
 3. Don't know/refused [THANK AND TERMINATE]
- S5. [IF INSULATION = YES] Our records indicate that the energy expert who came to your home for the Home Energy Solutions evaluation recommended that you install **insulation**; you might also have been offered a rebate or low-interest financing to help with the cost. Do you remember **insulation** being recommended for your home?
1. Yes [IF RECORDS DO NOT INDICATE THAT HVAC EQUIPMENT WAS RECOMMENDED, SKIP TO S7. OTHERWISE, CONTINUE.]
 2. No [IF RECORDS DO NOT INDICATE THAT HVAC EQUIPMENT WAS RECOMMENDED, SKIP TO S7. OTHERWISE, CONTINUE.]
 3. Don't know/refused [IF RECORDS DO NOT INDICATE THAT HVAC EQUIPMENT WAS RECOMMENDED, SKIP TO S7. OTHERWISE, CONTINUE.]
- S6. [IF HEATING = YES] Our records indicate that the energy expert who came to your home for the Home Energy Solutions evaluation recommended that you install **heating equipment**; you might also have been offered a rebate and low-interest financing to help with the cost. Do you remember **heating equipment** being recommended for your home? Examples include heat pumps, boilers, and furnaces.
1. Yes [SKIP TO S9]
 2. No [IF S5=YES, CONTINUE. OTHERWISE, THANK AND TERMINATE]
 3. Don't know/refused [IF S5=YES, CONTINUE. OTHERWISE, THANK AND TERMINATE]

QUOTAS FOR THE BELOW:

New Haven: We need at least 7 of the 13 recruits to answer “Yes” to either S7 or S8. The remaining 6 recruits can answer “Yes” to S7, S8, S9, or S10.

All Other Areas: We need at least 7 of the 13 recruits to answer “No” to S8. The remaining 6 recruits can answer “No” to S8 or S10.

- S7. **[IF S5=YES]** Did you use the **low-cost financing** to purchase and install the **insulation** you were recommended?
1. Yes **[SKIP TO D1; Eligible for USER focus group]**
 2. No **[CONTINUE]**
 3. Don't know/refused **[CONTINUE]**
- S8. **[IF (S5=YES) AND (S7 = NO OR DON'T KNOW)]** Did you use the **rebate** to purchase and install the **insulation** you were recommended?
1. Yes **[SKIP TO D1; Eligible for USER focus group]**
 2. No **[IF S6 = YES, CONTINUE TO S9; OTHERWISE SKIP TO D1; Eligible for NON-USER focus group]**
 3. Don't know/refused **[IF S6 = YES, CONTINUE TO S9; OTHERWISE, THANK AND TERMINATE]**
- S9. **[IF S6=YES]** Did you use the **low cost-financing** to purchase and install the **heating equipment** you were recommended?
1. Yes **[SKIP TO D1; Eligible for USER focus group]**
 2. No **[CONTINUE]**
 3. Don't know/refused **[CONTINUE]**
- S10. **[IF (S6=YES) AND S9 = NO OR DON'T KNOW)]** Did you use the **rebate** to purchase and install the **heating equipment** you were recommended?
1. Yes **[SKIP TO D1; Eligible for USER focus group]**
 2. No **[SKIP TO D1; Eligible for NON-USER focus group]**
 3. Don't know/refused **[THANK AND TERMINATE]**

NOTE TO RECRUITERS: IN ADDITION TO MEETING HOME ENERGY PERFORMANCE CRITERIA, WE ALSO WANT TO HAVE A MIX OF DEMOGRAPHICS. THESE QUOTAS ARE SECONDARY TO THOSE SET FOR S7, S8, S9, or S10 ABOVE.

- D1. **[DO NOT READ]** Sex **[NO MORE THAN 8 RECRUITS OF EITHER SEX PER GROUP]**
1. Female
 2. Male
- D2. What is your age? Are you . . .
1. Under 18 years of age **[THANK AND TERMINATE, NOT ELIGIBLE]**
 2. 18-35 years old **[QUOTA=1-2]**
 3. 35-54 **[QUOTA=6-7]**
 4. 55 years old or older **[QUOTA=4-5]**
 5. (Refused) **[THANK AND TERMINATE, NOT ELIGIBLE]**
- D3. In which of the following categories was your total household income in the year 2011? Was it . .

1. Under \$60,000 [QUOTA=1-2]
2. 60 – 89 thousand [QUOTA=3-5]
3. 90-124 thousand [QUOTA=3-5]
4. 125 thousand or more [QUOTA=3-5]
5. (Refused) [FIRST TIME, REASSURE THEM WE JUST NEED THE CATEGORY;
SECOND TIME, THANK AND TERMINATE, NOT ELIGIBLE]

IF RECRUITED, COLLECT NAME, PHONE NUMBER, ADDRESS; HAVE THEM SHOW UP 20 MINUTES EARLY TO EAT A LIGHT DINNER.

Appendix B: CT HES Non-User Focus Groups Discussion Guide

Instruct that while waiting to write down the thing they remember the most from their recent Home Energy Assessment.

Moderator Introduction – 5 Minutes

Thank you for participating

- I'm _____ and I'll be moderating tonight.
- Assure on first name basis and information will be confidential beyond this session. We will not use any names or otherwise identify individuals and their responses in the report.

Tonight's focus group is sponsored by the Connecticut Energy Efficiency Fund, (CEEF) and the Connecticut electric and natural gas utilities.

- We will be discussing some of the recommendations that came out of the recent home energy assessment you had conducted on your home by your electric or gas utility.

This focus group will last 90 minutes

- There will be no breaks
- If you need to get up, please do so quietly
- Bathroom is...
- We are being audio and video recorded for transcription purposes only
- [READ] Behind this mirror is an observation room and it includes [FILL IN NUMBER] observers from the CEEF and the electric and gas utilities who are interested in the kind of information you will provide tonight. They're interested in your feedback, and the mirror prevents us from being distracted by movement and noise from any observers.
- Feel free to write on the notepads in front of you if you want to use them.

I'd like to go over some guidelines with you:

- Please stay on topic so we can complete the focus group on time.
- Please do not have side conversations. It is difficult to record side conversations, and they make it hard to hear the other speaker.
- Please speak one at a time. Again, I have to write a report on what you all say, and I won't be able to hear if there are multiple voices at the same time. Use the notepads to write down any thoughts that you want to add to someone else's comments after they are finished speaking.
- Please answer the questions that are asked. If you do not understand a question, just let me know.
- We are interested in hearing all opinions—there are no right or wrong answers.
- Please turn off all cell phones.

Participant Warm up – 10 minutes

1. Please briefly state your FIRST name, the town where you live, and most memorable thing about the Home Energy Assessment.

Kitchen Table Wrap-up – 20 minutes

2. Thinking about the day on which your initial Home Energy Assessment occurred, how many of you talked with the inspector at the end of the assessment to discuss the results? [SHOW OF HANDS]
 - a. [IF NO] Did the inspector leave you a report or any other information about the results of your assessment?
3. What did you and the inspector discuss at the end of the assessment? Or, for those who did not get the wrap-up, what types of information did the report or materials discuss?
 - a. [IF NOT MENTIONED, PROBE] Did the technician discuss how much energy you could save if you purchased and installed measures he or she was recommending for your home? I'm talking here about measures that would be installed at a later date; not those they installed during the initial assessment.
 - b. [IF NOT MENTIONED, PROBE] Did the technician discuss the idea of a "payback" period for the measures he or she was recommending that you purchase and install? **Payback period** refers to how long something takes to "pay for itself". For example, if a measure costs \$100 but saves you \$10 per year on your energy bill, the payback period is 10 years.
4. Tonight's group focuses on a few measures – heating systems and insulation, but especially attic and wall insulation.
 - a. How many of you specifically remember being recommended a new heating system?
 - b. How about insulation? [PROBE FOR WALL OR ATTIC; PROBABLY WILL BE A FEW THAT DID NOT GET EITHER]
 - c. Were you recommended any other measures that you would have to purchase and install at a later date? These might have included such things as appliances, central air conditioning, or a water heater.
5. Heating, attic, and wall insulation—and some other measures—are usually eligible for rebates or low-interest loans from the program.
 - a. Did the technician or materials left with you discuss rebates for heating systems, wall insulation, or attic insulation with you? [NOTE WHICH]
 - b. How about low-interest loans for these measures? [NOTE WHICH]
 - c. How about rebates or loans for other measures? [PROBE FOR OTHER MEASURES, BUT TAKE ONLY A FEW ANSWERS]

6. Thinking about **all** of the measures that were recommended
 - a. Which ones were most attractive to you? Why those? Why not others? [PROBE FOR SPECIFICS; IF NEEDED, EXPLAIN THAT ATTRACTIVE MEANS YOU WERE MOST INTERESTED IN INSTALLING THEM, EVEN IF YOU HAVEN'T ACTUALLY DONE SO]
 - b. Did the technician or materials left with you explain the reasons for any recommendation to purchase and install other measures? Did you have any questions about these recommendations? What questions did you have?
 - c. Which of the measures recommended do you think would have saved you the most money? Why do you think this? What did the technician tell you would save the most money? [PROBE FOR SPECIFICS]

General Decision to Install – 10 minutes

7. Still thinking about **all** the measures you were recommended, have you installed any of them? If so, which ones?
 - a. [FOR THOSE WHO DID INSTALL SOME MEASURES] Why did you decide to install these measures? [PROBE, BUT OKAY TO KEEP GENERAL FOR NOW]
 - b. How hard was it to actually get the measures installed? [PROBE – DID YOU RUN INTO ANY PROBLEMS WITH THE EQUIPMENT, CONTRACTOR, ETC.]
 - c. Were there any recommended measures you did not install? Why didn't you install them? [IF COST IS THE ONLY THING MENTIONED, PROBE] Other than the upfront cost, what other things kept you from installing some/all of the measures recommended? [PROBE FOR PROBLEMS WITH CONTRACTOR, COMPLICATED PROCESS, PROGRAM REQUIREMENTS, ETC. DEFER REBATE/LOAN FOR LATER.]
 - d. How would you describe the process or key decisions you considered in deciding which measures – if any – to install?
8. I'd like to spend a few minutes talking about payback period.
 - a. Before I read you the description earlier [REPEAT IF NECESSARY], how many of you were familiar with the concept of payback period? [SHOW OF HANDS]
 - b. When deciding whether or not to install measures, how many of you considered the payback period? Why or why not?
 - c. How important is the payback period in deciding whether or not to install the measures recommended during the Home Energy Assessment? What other things are more important than payback period? [PROBE FOR SPECIFICS]

Decision to Install Targeted Products – 10 minutes

9. I'd like us to focus only on heating equipment and attic and wall insulation for the next questions.
 - a. How many of you have actually installed heating, attic insulation, or wall insulation? [PROBE FOR EACH]
 - b. Did you install the heating model or type of insulation recommended by the technician or did you choose a different heating model or type of insulation? If you chose a different one, why?
10. [INSTALLED RECOMMENDED HEATING OR INSULATION MEASURE]
 - a. What did you see as the main reasons to install the heating equipment and/or insulation?
 - b. What, if any, were the drawbacks you considered about installing the measure(s)?
11. [DID NOT INSTALL THE HEATING OR INSULATION MEASURE]
 - a. What were the main reasons you did not install the heating equipment and/or insulation?
 - b. What, if any, were the benefits you considered about installing the measure(s)?
 - c. What, if anything would have convinced you to install the measures?

SEE LAST PAGE FOR POSSIBLE BUT UNLIKELY SCENARIOS FOR THIS GROUP

Decisions Regarding Rebates and Financing – 30 minutes

12. When we called to recruit you for this group, you said that you didn't use any rebates or low-interest loans offered by the program to install heating or insulation. I just want to verify that this is the case. Did anyone **use** the program rebates or low-interest loans to install heating or insulation?
13. [FOR USERS] Which did you use? Rebate? Financing? Both?
14. [FOR USERS] For which equipment? Heating? Wall insulation? Attic insulation?
15. Now I'd like to talk with you more about the low-interest loans and rebates offered on the measures recommended during the Home Energy Assessment.
 - a. Can someone describe the low-interest loan process to me? That is, how would you go about securing a low-interest loan to install one of the measures recommended by the Home Energy Assessment? [TAKE A COUPLE ANSWERS]
 - b. What about the low-interest rebate process? [TAKE A COUPLE ANSWERS]
 - c. AVOID GIVING DETAILS ON HOW IT ACTUALLY OCCURS
16. [REFER BACK TO NOTES ON WHICH PEOPLE WERE OFFERED REBATES OR FINANCING FOR THESE MEASURES]

- a. For those who were offered the rebate but not the low-interest loan, what do you think you might have done if you had instead been offered the loan instead of the rebate? Would you have used the loan to install the measure?
 - b. For those who were offered the loan but not the rebate, what do you think you might have done if you had been offered the rebate instead of the loan? Would you have used the rebate to install the measure?
17. Other than heating and insulation, did you use the **low-interest** loans or financing offered by the program to install other measures recommended during the assessment? [AVOID REPEATING TOPICS DISCUSSED IN THE GENERAL INSTALL SECTION]
- a. [IF YES] For which measures did you use the low-interest loans?
18. Again, other than heating and insulation, did you use the **rebates** offered by the program to install measures recommended during the assessment? [AVOID REPEATING TOPICS DISCUSSED IN THE GENERAL INSTALL SECTION]
- a. [IF YES] Which rebates did you use?
19. [IF NO HEATING/INSULATION SUPPORT BUT DID USE REBATES OR FINANCING FOR OTHER MEASURES] Why did you decide to use the financing or rebates for other measures **but not** use them for heating or insulation?
- a. [PROBE FOR THOSE USING FINANCING AND THEN PROBE FOR THOSE USING REBATES]
20. [FOR THOSE NOT USING REBATES OR LOANS TO INSTALL TARGETED MEASURES. WRITTEN IN A GENERAL SENSE TO GET ALL PERSPECTIVES, BUT MAKE SURE TO PROBE FOR ANSWERS FROM THOSE WHO INSTALLED SOMETHING DIFFERENT THAN RECOMMENDED, THOSE WHO INSTALLED ON THEIR OWN, AND THOSE WHO DID NOT INSTALL AT ALL]
- a. Did you consider using the **loan** to install heating or insulation measures? Why did you not use the loan? [PROBE FOR SPECIFICS]
 - b. What, if anything, would have made the loan more appealing to you? [PROBE FOR DIFFERENCES IN THOSE WHO INSTALLED IT IN SOME FORM VERSUS THOSE WHO DIDN'T INSTALL AT ALL]
 - c. Did you consider using the **rebate** to install heating or insulation measures? Why did you not use the rebate [PROBE FOR SPECIFICS]
 - d. What, if anything, would have made the rebate package more appealing to you? [PROBE FOR DIFFERENCES IN THOSE WHO INSTALLED IT IN SOME FORM VERSUS THOSE WHO DIDN'T INSTALL AT ALL; PROBE BEYOND DEEPER REBATE/MORE MONEY]
21. [INSTALLED RECOMMENDED HEATING OR INSULATION MEASURES BUT DID NOT USE REBATE OR FINANCING] Why did you decide to install the measures as recommended by the technician but not to use the rebate? [PROBE FOR SPECIFICS] Why not the loan? [PROBE FOR SPECIFICS]

Conclusion – Other Resources (10 minutes)

22. The electric and gas utilities currently offer rebates and/or financing to help offset the upfront cost of energy efficiency measures. Are there things the utilities could offer instead of rebates and loans to increase the number of customers purchasing and installing things like insulation measures? [PROBE BEYOND “MAKE THE REBATE LARGER”; PERHAPS PROBE FOR WAYS TO SIMPLIFY THE PROCESS, ETC.]
 - a. Why do you think these other things might work better than loans? Than rebates?
23. What other things might the electric and gas utilities do to increase installation of heating and insulation measures? These might be things that could be offered along with rebates and loans, rather than instead of them.

Possible but Unlikely Scenarios***Decision to Install Targeted Products***

1. [INSTALLED DIFFERENT MEASURE, NO REBATE OR FINANCING]
 - a. Did you consider installing the measure as recommended by the technician?
 - b. Why did you go with a different heating model or type of insulation? [PROBE FOR SPECIFICS]

Decision to Use Rebates or Financing

1. [USED REBATES OR LOANS JUST IN CASE]
 - a. For those of you who used low-interest loan to install heating equipment or insulation, why did you decide to use the financing? Would you have installed the measures without the financing? Why or why not?
 - b. What do you consider to be the benefits of using low-interest loan? The drawbacks?
 - c. What works best about the loan process? What needs to be improved?
 - d. For those of you who used the rebate to install heating equipment or insulation, why did you decide to use the rebate? Would you have installed the measures without the rebate? Why or why not?
 - e. What do you consider to be the benefits of using the rebate? The drawbacks?
 - f. What works best about the rebate process? What needs to be improved?

Appendix C: CT HES User Focus Groups Discussion Guide

Instruct that while waiting to write down the thing they remember the most from their recent Home Energy Assessment.

Moderator Introduction – 5 Minutes

Thank you for participating

- I'm _____ and I'll be moderating tonight.
- Assure on first name basis and information will be confidential beyond this session. We will not use any names or otherwise identify individuals and their responses in the report.

Tonight's focus group is sponsored by the Connecticut Energy Efficiency Fund, (CEEF) and the Connecticut electric and natural gas utilities.

- We will be discussing some of the recommendations that came out of the recent home energy assessment you had conducted on your home by your electric or gas utility.

This focus group will last 90 minutes

- There will be no breaks
- If you need to get up, please do so quietly
- Bathroom is...
- We are being audio and video recorded for transcription purposes only
- [READ] Behind this mirror is an observation room and it includes [FILL IN NUMBER] observers from the CEEF and the electric and gas utilities who are interested in the kind of information you will provide tonight. They're interested in your feedback, and the mirror prevents us from being distracted by movement and noise from any observers.
- Feel free to write on the notepads in front of you if you want to use them.

I'd like to go over some guidelines with you:

- Please stay on topic so we can complete the focus group on time.
- Please do not have side conversations. It is difficult to record side conversations, and they make it hard to hear the other speaker.
- Please speak one at a time. Again, I have to write a report on what you all say, and I won't be able to hear if there are multiple voices at the same time. Use the notepads to write down any thoughts that you want to add to someone else's comments after they are finished speaking.
- Please answer the questions that are asked. If you do not understand a question, just let me know.
- We are interested in hearing all opinions—there are no right or wrong answers.
- Please turn off all cell phones.

Participant Warm up – 10 minutes

24. Please briefly state your FIRST name, the town where you live, and most memorable thing about the Home Energy Assessment.

Kitchen Table Wrap-up – 20 minutes

25. Thinking about the day on which your initial Home Energy Assessment occurred, how many of you talked with the inspector at the end of the assessment to discuss the results? [SHOW OF HANDS]
- b. [IF NO] Did the inspector leave you a report or any other information about the results of your assessment?
26. What did you and the inspector discuss at the end of the assessment? Or, for those who did not get the wrap-up, what types of information did the report or materials discuss?
- a. [IF NOT MENTIONED, PROBE] Did the technician discuss how much energy you could save if you purchased and installed measures he or she was recommending for your home? I'm talking here about measures that would be installed at a later date; not those they installed during the initial assessment.
 - b. [IF NOT MENTIONED, PROBE] Did the technician discuss the idea of a "payback" period for the measures he or she was recommending that you purchase and install? **Payback period** refers to how long something takes to "pay for itself". For example, if a measure costs \$100 but saves you \$10 on your energy bill per year, the payback period is 10 years.
27. Tonight's group focuses on a few measures – heating systems and insulation, but especially attic and wall insulation.
- a. How many of you specifically remember being recommended a new heating system?
 - b. How about insulation? [PROBE FOR WALL OR ATTIC; PROBABLY WILL BE A FEW THAT DID NOT GET EITHER]
 - c. Were you recommended any other measures that you would have to purchase and install at a later date? These might have included such things as appliances, central air conditioning, or a water heater.
28. Heating, attic, and wall insulation—and some other measures—are usually eligible for rebates or low-interest loans from the program.
- a. Did the technician or materials left with you discuss rebates for heating systems, wall insulation, or attic insulation with you? [NOTE WHICH]
 - b. How about low-interest loans for these measures? [NOTE WHICH]
 - c. How about rebates or loans for other measures? [PROBE FOR OTHER MEASURES, BUT TAKE ONLY A FEW ANSWERS]

29. Thinking about **all** of the measures that were recommended

- a. Which ones were most attractive to you? Why those? Why not others? [PROBE FOR SPECIFICS; IF NEEDED, EXPLAIN THAT ATTRACTIVE MEANS YOU WERE MOST INTERESTED IN INSTALLING THEM, EVEN IF YOU HAVEN'T ACTUALLY DONE SO]
- b. Did the technician or materials left with you explain the reasons for any recommendation to purchase and install other measures? Did you have any questions about these recommendations? What questions did you have?
- c. Which of the measures recommended do you think would have saved you the most money? Why do you think this? What did the technician tell you would save the most money? [PROBE FOR SPECIFICS]

General Decision to Install – 10 minutes

30. Still thinking about **all** the measures you were recommended, have you installed any of them? If so, which ones?

- e. [FOR THOSE WHO DID INSTALL SOME MEASURES] Why did you decide to install these measures? [PROBE, BUT OKAY TO KEEP GENERAL FOR NOW]
- f. How hard was it to actually get the measures installed? [PROBE – DID YOU RUN INTO ANY PROBLEMS WITH THE EQUIPMENT, CONTRACTOR, ETC.]
- g. Were there any recommended measures you did not install? Why didn't you install them? [IF COST IS THE ONLY THING MENTIONED PROBE] Other than the upfront cost, what other things kept you from installing some/all of the measures recommended? [PROBE FOR PROBLEMS WITH CONTRACTOR, COMPLICATED PROCESS, PROGRAM REQUIREMENTS, ETC. DEFER REBATE/LOAN FOR LATER.]
- h. How would you describe the process or key decisions you considered in deciding which measures – if any – to install?

31. I'd like to spend a few minutes talking about payback period.

- a. Before I read you the description earlier [REPEAT IF NECESSARY], how many of you were familiar with the concept of payback period? [SHOW OF HANDS]
- b. When deciding whether or not to install measures, how many of you considered the payback period? Why or why not?
- c. How important is the payback period in deciding whether or not to install the measures recommended during the Home Energy Assessment? What other things are more important than payback period? [PROBE FOR SPECIFICS]

Decision to Install Targeted Products – 10 minutes

32. I'd like us to focus only on heating equipment and attic and wall insulation for the next questions.
- a. How many of you have actually installed heating, attic insulation, or wall insulation [PROBE FOR EACH]
 - b. Did you install the heating model or type of insulation recommended by the technician or did you choose a different heating model or type of insulation? If you chose a different one, why?
33. [INSTALLED RECOMMENDED HEATING OR INSULATION MEASURE]
- a. What did you see as the main reasons to install the heating equipment and/or insulation?
 - b. What, if any, were the drawbacks you considered about installing the measure(s)?

SEE LAST PAGE FOR POSSIBLE BUT UNLIKELY SCENARIOS FOR THIS GROUP

Decisions Regarding Rebates and Financing – 30 minutes

34. When we called to recruit you for this group, you said that you used rebates or low-interest loans offered by the program to install heating or insulation. I just want to verify that this is the case. Did anyone **not use** the program rebates or low-interest loans to install heating or insulation? [ASSURE IT'S OKAY IF ANSWER IS DIFFERENT THAN ON THE PHONE]
35. [FOR USERS] Which did you use? Rebate? Financing? Both?
36. Now I'd like to talk with you more about the low-interest loans and rebates offered on the measures recommended during the Home Energy Assessment.
- a. Can someone describe the low-interest loan process to me? That is, how would you go about securing a low-interest loan to install one of the measures recommended by the Home Energy Assessment? [TAKE A COUPLE ANSWERS]
 - b. What about the rebate process? [TAKE A COUPLE ANSWERS]
 - c. AVOID GIVING DETAILS ON HOW IT ACTUALLY OCCURS

37. [USED REBATES OR LOANS TO BUY HEATING EQUIPMENT OR INSULATION]

- a. For those of you who used the low-interest loan to install heating equipment or insulation, why did you decide to use the financing? Would you have installed the measures without the financing? Why or why not?
- b. What do you consider to be the benefits of using low-interest loan? The drawbacks?
- c. What works best about the loan process? What needs to be improved?
- d. For those of you who used the rebate to install heating equipment or insulation, why did you decide to use the rebate? Would you have installed the measures without the rebate? Why or why not?
- e. What do you consider to be the benefits of using the rebate? The drawbacks?
- f. What works best about the rebate process? What needs to be improved?
- g. For those who were offered the rebate but not the low-interest loan, what do you think you might have done if you had instead been offered the loan instead of the rebate? Would you have used the loan to install the measure?
- h. For those who were offered the loan but not the rebate, what do you think you might have done if you had been offered the rebate instead of the loan? Would you have used the rebate to install the measure?

38. Other than heating and insulation, did you use the low-interest loans or financing offered by the program to install other measures recommended during the assessment? [AVOID REPEATING TOPICS DISCUSSED IN THE GENERAL INSTALL SECTION]

- a. [IF YES] For which measures did you use the low-interest loans?

39. Again, other than heating and insulation, did you use the **rebates** offered by the program to install measures recommended during the assessment? [AVOID REPEATING TOPICS DISCUSSED IN THE GENERAL INSTALL SECTION]

- b. [IF YES] Which rebates did you use?

SEE LAST PAGE FOR POSSIBLE BUT UNLIKELY SCENARIOS FOR THIS GROUP

Conclusion – Other Resources (10 minutes)

40. The electric and gas utilities currently offer rebates and/or financing to help offset the upfront cost of energy efficiency measures. Are there things the utilities could offer instead of rebates and loans to increase the number of customers purchasing and installing things like insulation? [PROBE BEYOND “MAKE THE REBATE LARGER”; PERHAPS PROBE FOR WAYS TO SIMPLIFY THE PROCESS, ETC.]

- b. Why do you think these other things might work better than loans? Than rebates?

41. What other things might the electric and gas utilities do to increase installation of the heating and insulation measures? These might be things that could be offered along with rebates and loans, rather than instead of them.

Possible but Unlikely Scenarios

Decision to Install Targeted Products

1. [INSTALLED DIFFERENT MODEL OR TYPE OF INSULATION AS NOTED IN QUESTION ab., NO REBATE OR FINANCING; SHOULDN'T HAVE THESE]
 - a. Did you consider installing the measure as recommended by the technician?
 - b. Why did you go with a different heating model or type of insulation? [PROBE FOR SPECIFICS]
2. [DID NOT INSTALL ANY HEATING EQUIPMENT OR INSULATION; SHOULDN'T HAVE THESE]
 - a. What were the main reasons you did not install the heating equipment or insulation?
 - b. What, if any, were the benefits you considered about installing the measure?
 - c. What, if anything, would have convinced you to install the measures?

Decision to Use Rebates or Financing

1. [IF NO HEATING/INSULATION SUPPORT BUT DID USE REBATES OR FINANCING FOR OTHER MEASURES] Why did you decide to use the financing or rebates for other measures **but not** use them for heating or insulation?
 - a. [PROBE FOR THOSE USING FINANCING AND THEN PROBE FOR THOSE USING REBATES]
2. [FOR THOSE NOT USING REBATES OR LOANS TO INSTALL TARGETED MEASURES. WRITTEN IN A GENERAL SENSE TO GET ALL PERSPECTIVES, BUT MAKE SURE TO PROBE FOR ANSWERS FROM THOSE WHO INSTALLED SOMETHING DIFFERENT THAN RECOMMENDED, THOSE WHO INSTALLED ON THEIR OWN, AND THOSE WHO DID NOT INSTALL AT ALL]
 - a. Did you consider using the **loan** to install heating or insulation measures? Why did you not use the rebate? [PROBE FOR SPECIFICS]
 - b. What, if anything, would have made the loan more appealing to you? [PROBE FOR DIFFERENCES IN THOSE WHO INSTALLED IT IN SOME FORM VERSUS THOSE WHO DIDN'T INSTALL AT ALL]
 - c. Did you consider using the rebate to install heating or insulation measures? Why did you not use the rebate [PROBE FOR SPECIFICS]
 - d. What, if anything, would have made the rebate package more appealing to you? [PROBE FOR DIFFERENCES IN THOSE WHO INSTALLED IT IN SOME FORM VERSUS THOSE WHO DIDN'T INSTALL AT ALL; PROBE BEYOND DEEPER REBATE/MORE MONEY]

3. [INSTALLED RECOMMENDED HEATING OR INSULATION MEASURES BUT DID NOT USE REBATE OR FINANCING] Why did you decide to install the measures as recommended by the technician but not to use the rebate? [PROBE FOR SPECIFICS]
Why not the loan? [PROBE FOR SPECIFICS]