



# **FINAL PROCESS EVALUATION FOR CON EDISON'S RESIDENTIAL ROOM AC PROGRAM**

**Prepared for:  
Con Edison**



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## Executive Summary

Navigant Consulting, Inc. (Navigant) is leading a series of process evaluations for energy efficiency programs that Consolidated Edison (Con Edison) is delivering as part of their Energy Efficiency Portfolio Standard (EEPS) Utility Administered programs, as ordered by the New York State Department of Public Service (NYSDPS). Navigant and its team (KEMA, Inc., APPRISE Inc., and SERA) were selected to complete process evaluations for all of the Companies' EEPS programs through a competitive bid process. This report is the process evaluation for the Residential Room Air Conditioner (RAC) Program administered by Con Edison.

The Residential Room Air Conditioner program promotes the replacement of old, inefficient room air conditioners, with new, Energy Star® units, by providing incentives to encourage their purchase. The program is open to customers in residential dwellings who are electric customers of Con Edison. The eligible units and incentive levels have been set per the NYSDPS's direction.

The program has the following objectives:

- Promote the purchase and installation of new Energy Star® high-efficiency room air conditioners;
- Coupled with the HVAC program, expand the opportunity in Con Edison's service area for energy efficiency gains in air conditioned space in the residential market.

Table ES1 summarizes the RAC program savings goals and accomplishments through the 2010 program year. The 2011 version of this program began on May 2<sup>nd</sup> 2011.

**Table ES1: RAC Program Savings Goals<sup>1</sup>**

2009/2010 Savings Goal (MWh)	2010 Savings Acquired (MWh)	Percent of Goal Acquired
591	757	128%

The overall objective of the RAC program process evaluation is to assess the effectiveness and efficiency of program design, delivery and implementation processes.

The process evaluation addresses the following six program processes:

- Program planning;
- Infrastructure development;
- Marketing and customer acquisition;

<sup>1</sup> The savings target was combined into a 3 year target (2009-2011) and the total target was adjusted to 2,442 kWh.

- Program delivery;
- Satisfaction with the program; and
- Interactions with other programs.

Within each of these categories, research questions specific to the RAC program were identified. Appendix A presents the research area, specific research questions within each area, and the section of the report that addresses each question.

The research and the findings expressed in this report are based upon the following evaluation activities:

- Review of program and marketing materials;
- Review of program tracking system, data, and other documents;
- In-depth interviews with:
  - Con Edison staff
  - Honeywell staff delivering the Con Edison RAC program
  - Participating retailers
- Customer telephone surveys with:
  - Program participants
  - Program non-participants

## ***Conclusions and Recommendations***

Overall, the Residential Room Air Conditioning program is well run and meeting its goals. There are some areas for improvements and opportunities to facilitate more efficient program oversight and impact evaluation. Also, changes in per-unit savings estimates may result in increased difficulty in meeting saving goals and cost-effectiveness requirements.

A concern identified in the evaluation was that many program participants indicated that they would have purchased the same appliance without the incentive from Con Edison ( i.e., free ridership). If further research confirms this finding, program design changes may be necessary for the program to cost effectively achieve its objectives.

More detailed findings are presented below.

### **Program Planning and Design**

Con Edison has been successful in meeting its 2010 savings targets.

Incentives do not appear to be an important factor in motivating customers to upgrade to Energy Star® room air conditioners. The majority of participants, 85%, indicated they would have purchased the same unit without a rebate (i.e., free riders). Similarly, only 18% of participants indicated the rebate was a major factor in their decision to purchase the Energy Star® air conditioner. This is consistent with anecdotal information provided to Navigant by retailers, who estimated that more than 80% of units in stores are Energy Star®. Free ridership represents a cost to the program without an apparent benefit. While free ridership should be studied more rigorously as part of the program's impact evaluation, these findings suggest that free ridership may be quite high and program design changes may be warranted for the program to cost effectively achieve its objectives.

#### Recommendations for Program Planning and Design

Con Edison should revisit the 2011 savings goals based on the updates to the Technical Reference Manual (TRM) provided by NYSDPS and on the survey results indicating possible high free ridership. The lower energy savings attributed to Room Air Conditioners in the updated TRM will require much higher participation than initially anticipated and will therefore alter the program's costs and, ultimately, its cost effectiveness. If early free ridership indications prove true, changes to the program should be considered (e.g., raising minimum efficiency thresholds for qualifying equipment).

#### Infrastructure Development

The information collected on the rebate applications and recorded in the program databases is generally adequate for program management, reporting, and evaluation. The program's quality control procedures in respect to customer eligibility and equipment eligibility are robust.

On average, the time between application submission and rebate payment is eight weeks. While this is not an uncommon timeframe for rebate processing for programs of this type, Navigant is aware that, for 2011, Con Edison asked Honeywell to explore a relationship with Helgeson, a supplier of utility rebate program services. Navigant understands that Helgeson has been engaged by Honeywell to provide rebate processing services for this program and a review of the 2011 processing time indicates that average rebate processing times have been cut during the 2011 program to 30 days for those applications without missing information and 46 days for those applications with some missing information.

The program has also benefited from the addition of an online rebate submission channel in 2011. During the 2011 program 8.3% of participants completed their rebate submission online.

#### Recommendations for Infrastructure Development

The robustness of Con Edison's data can be improved for the purposes of impact evaluation by capturing the housing type and square footage of the room being cooled on the rebate application, and tracking this data in the database. It would be helpful for evaluation purposes to have all parameters needed to calculate a unit's savings included in the participation database, so that confirmation of savings could be performed more accurately and easily. Navigant understands that a balance must be maintained between simplicity of the application documentation and the data required in order to



complete a robust evaluation of the program. In order to obtain as much information as possible, Navigant suggests that the additional fields noted above be included as optional fields which could be provided by participants but are not required in order to submit a valid application.

### Marketing and Customer Acquisition

Retail sales staff are an important driver of program participation to date. They were the most commonly cited means of awareness with 43% of program participants reporting that they heard about the program through sales staff.

The majority of participants (57%) are not aware of the program when entering the store. Retailers have suggested that running a larger mass marketing campaign (television and print ads) would help drive customers into stores to participate.

### Marketing Recommendations

Increased targeted cross-promotion of other Con Edison programs could help increase participation in Con Edison's energy efficiency programs.

More mass marketing could help promote participation in both the residential RAC program as well as other Con Edison programs. During 2011, some additional cross-program promotions have been conducted and are benefiting Con Edison programs.

### Program Delivery

Most participants indicated that they had no difficulty completing the application form for the rebate. However, the original rebate form led to a high number of rejected applications due to missing serial numbers. An updated version of the rebate form for 2011 made the required fields more visible to participants and led to lower rejection of applications.

Very few participants contacted the utility about the program and those who did indicated a high level of satisfaction with the interaction.

### Recommendations for Program Delivery

Con Edison should continue to monitor application rejection numbers to ensure that the updated rebate form is clear and being filled out accurately by customers.

Con Edison reports that the program's rebate form has been revised further in an effort to reduce rebate deactivations. The changes focus on removal of the 'Serial Number' field as associated validation, the more prominent placement of the 'Account Holder Signature' box and more prominent positioning of the 'Program Date' information. It is expected that these changes will significantly reduce application deactivation in 2011 and 2012.

The aforementioned online rebate process is also an excellent addition to the program's delivery model.

### Satisfaction with the Program

Participants indicated a high level of satisfaction with the measures they installed through the program and with the amount and timing of the rebate.

A high percentage of participants (88%) also indicated they would be likely to recommend the program to others in the future.

Retailers are satisfied with the program, reporting that it helps increase sales of Energy Star® air conditioner units. It should be noted, however, that none of the retailers interviewed were willing to provide sales data to corroborate this assertion.

### Recommendations to Enhance Satisfaction with the Program

To ensure continued high satisfaction with the program, Con Edison should work to reduce the average time between application submission and rebate payment – something that is being addressed through the engagement of Helgeson (as noted previously).

It is likely that the added convenience associated with the online rebate channel will also enhance program satisfaction.

### Interactions with Other Programs

Participant awareness of other programs which are offered by Con Edison is very low.

Participants are more likely to have heard of other non-utility programs, including those offered by the federal government, State of New York, National Grid, NYSEDA, and manufacturer rebate programs.

### Recommendations for Interactions with Other Programs

Increase cross promotion of other Con Edison programs to enhance participation in those programs and help build a Con Edison brand as the trusted advisor on energy efficiency. This recommendation has been implemented in the 2011 program and is expected to improve participant awareness of other Con Edison programs.

## Introduction

Navigant Consulting, Inc. (Navigant) is leading a series of process evaluations for energy efficiency programs that Consolidated Edison (Con Edison) is delivering as part of their Energy Efficiency Portfolio Standard (EEPS) Utility Administered programs, as ordered by the New York State Department of Public Service (NYSDPS). Navigant and its team (KEMA, Inc., APPRISE Inc., and SERA) were selected to complete process evaluations for all of the Companies' EEPS programs through a competitive bid process.

Con Edison (The Company) is committed to independent and transparent program evaluations. Con Edison's Section Manager for Measurement, Verification & Evaluation is administering the process evaluation. This Section Manager reports directly to the Director of Energy Efficiency Programs to maintain internal independence.

This report is a process evaluation for the Residential Room Air Conditioner (RAC) Program administered by Con Edison.

### **1. Background**

In May 2007, the New York State Department of Public Service (NYSDPS) initiated a proceeding to design an electric and natural gas energy efficiency portfolio standard (EEPS). This order was in response to then-Governor Eliot Spitzer's goal of reducing energy usage by 15% by 2015. Responsibility for administering the new programs was split between the investor-owned utilities and the New York State Energy Research and Development Authority (NYSERDA). On June 23, 2008, the PSC issued an order establishing the EEPS target, approving the EEPS programs, and requiring the utilities to file their program proposals within 90 days.

Con Edison filed its implementation plan for the Residential Room AC (RAC) program with the NYSDPS on September 22, 2008. The program was approved by the NYSDPS for three years (2009, 2010 and 2011) on January 1, 2010. Con Edison filed its Residential Room AC Program Implementation Plan with the NYSDPS on March 5, 2010 and the program was launched on May 14, 2010.

Con Edison awarded an implementation contract for the program to Honeywell on March 31, 2010.

### **2. Program Description**

Con Edison designed its RAC Program for rapid deployment of energy efficiency measures to existing residential customers. The program is open to customers in residential dwellings with one to four units as well as to customers who reside in multi-family dwellings who are responsible for their SBC charge (i.e., they pay the SBC charge on their electric utility bill). The 2009-2011 program provides a \$30 cash rebate to customers for the purchase of an Energy Star®-rated room air conditioner.

The program benefits from manufacturer and retailer awareness, but since the rebate process is consumer driven, consumer awareness is more critical – particularly since Energy Star® rated room air conditioners are already widely available.

The Program requires that purchasers of a qualifying room AC unit mail in a rebate form and proof of purchase to receive their \$30 (per unit) rebate. Online applications were available in 2011, and will continue going forward.

Con Edison has contracted with Honeywell to implement the program.

### Program Goals and Objectives

The RAC Program is designed to cost-effectively contribute to New York State's and New York City's energy efficiency goals.

The program has the following objectives<sup>2</sup>:

- Promote the purchase and installation of new Energy Star® high-efficiency room air conditioners;
- Coupled with the HVAC program, expand the opportunity in Con Edison's service area for energy efficiency gains in air conditioned space in the residential market.

Table 2-1 and Table 2-2 summarize the Program's participation and savings goals taken from the NYSDPS orders approving Con Edison's electric and gas programs<sup>3</sup>. Due to delays in program start-up, the Program Implementation Plan goals for 2009 and 2010 were combined into a single goal to be achieved by December 31, 2010. The 2011 goals remain unchanged.

**Table 2-1: Con Edison – RAC Program Savings Goals<sup>4</sup>**

Program Type	2009/2010	2011	Total
Electric (MWh)	591	1,719	2,310
Electric (MW)	1.0	3.9	4.9

**Table 2-2: Con Edison – RAC Program Participation Goals**

Program Type	2009/2010	2011	Total
Rebate Target	7,390	21,460	28,310

<sup>2</sup> The program objectives were adapted from the Con Edison Residential Room AC Program Implementation Plan filed with the NYPSC on March 5, 2010.

<sup>3</sup>NYPSC Order "Approving certain commercial and industrial; residential; and low-income residential customer Energy Efficiency programs with modifications" – December 16, 2009.

<sup>4</sup> The RAC program savings goals were subsequently combined for years 2009-2011 and increased to a total of 2,442 MWh.

Table 2-3 below shows that the savings achieved by the program in 2010 exceeded the initial goal for the program.

**Table 2-3: 2010 RAC Program Savings Goals**

2009/2010 Savings Goal (MWh)	2010 Savings Acquired (MWh)	Percent of Goal Acquired
591	757	128%

### **3. Evaluation Objectives**

The overall objective of the RAC Program process evaluation is to assess the effectiveness and efficiency of program design, delivery and implementation processes. The overall goal is to provide clear and actionable recommendations to support the program in improving operations and meeting its savings goals.

The process evaluation addresses the following six program processes:

- Program planning;
- Infrastructure development;
- Marketing and customer acquisition;
- Program delivery;
- Satisfaction with the program; and
- Interactions with other programs.

Program Goals are substantial. Con Edison is committed to meeting these goals and is most interested in process evaluation findings that will assist it in accelerating program activity and yield strong cross-program promotion and awareness.

### **4. Overview of Evaluation Methodology**

The research and the findings expressed in this report are based upon the following evaluation activities:

- Review of program and marketing materials;
- Review of program tracking system, data, and other documents;
- In-depth interviews with:
  - Con Edison staff
  - Honeywell staff delivering the Con Edison room air conditioning programs
  - Participating retailers

- Customer telephone surveys with:
  - Program participants
  - Program non-participants

A full description of the Evaluation Methodology is provided in Appendix B.

## **5. Organization of Report**

This report is organized around the six broad research areas. Two sections follow this introduction:

- » Key Findings - discusses the key findings of the research conducted.
- » Conclusions and Recommendations - provides recommendations for improving the program.

## Key Findings

### 6. Participation Summary

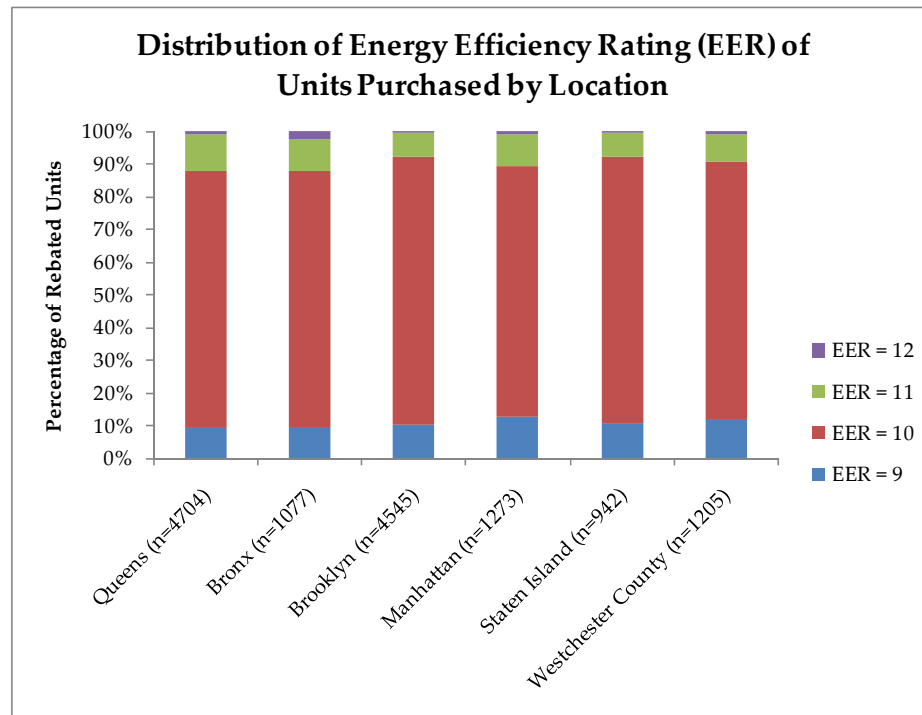
In 2010, Con Edison had a total of 11,843 participants who received rebates for 13,746 units through the RAC program. The average number of air conditioners purchased per program participant was 1.16. The breakdown by Energy Efficiency Rating (EER) rating of units rebated through the program is shown below in Table 6-1.

**Table 6-1: RAC Program Rebated Units by EER**

EER	Number of units	Proportion (%)
9	1,407	10
10	10,939	79
11	1,284	3
12	116	8

Participation varied by specific borough of New York City and Westchester County. Figure 6-1 illustrates that while total participation varied by location, the percentage of units which fall into each EER class was very similar across all areas with the majority of units having an EER of 10.

**Figure 6-1: EER of Participant RAC Units Purchased, by Location**



Con Edison had spent about 39% of its Room AC program budget as of February 2011. Table 6-2 shows a breakdown of where the spending occurred. The original implementation budget is almost exhausted, but budget remains in all other categories.

**Table 6-2: Con Edison RAC Program Costs**

Budget Category	Program Budget (2009-2011)	Program Expenditures (to Feb 2011)	Percent Incurred
Incentives	\$897,000 <sup>5</sup>	\$411,780	46%
Administration & Planning	\$336,203	\$75,283	22%
Implementation	\$228,026	\$212,071	93%
Marketing & Training	\$448,271	\$36,281	8%
Evaluation	\$100,500	\$56,674	56%
<b>Total Program Budget</b>	<b>\$2,010,000</b>	<b>\$792,089</b>	<b>39%</b>

Source: Con Edison EEPs Program Costs by Cost Component (Budget vs. Actual), Feb 2011.

<sup>5</sup> The incentives budget for the program was later increased to \$1,480,500, increasing the total budget to \$2,593,500. By February 2011, 28% of the revised incentives budget was spent and 31% of the revised total budget was spent.



### Demographics of Surveyed Participants and Non-Participants

Samples of those who purchased a rebated Energy Star® air conditioner through the Con Edison program (participants) and those who did not purchase a rebated Energy Star® air conditioner (non-participants) were surveyed as part of this evaluation. Table 6-3 provides a comparison of key respondent demographics for the 192 surveyed participants and the 209 surveyed non-participants. The high respondent refusal rate for the question asking about annual household income (i.e., the low number of respondents who were willing to provide their annual household income) means that conclusions cannot be drawn from this particular piece of data.

**Table 6-3: RAC Program Participant and Non-Participant Demographics**

	Participants (n=192)		Non-Participants (n=209)	
	Count	Percentage	Count	Percentage
<b>Gender</b>				
Male	86	45%	103	49%
Female	106	55%	106	51%
<b>Household Income*</b>				
Below \$80,000	79	41%	101	49%
Above \$80,000	57	30%	49	23%
<b>Education</b>				
University/College Degree	105	55%	119	57%

\*Does not sum to 100% due to the remaining sample giving a “prefer not to say” response.

Table 6-4 provides a comparison of key household demographics for the surveyed participants and non-participants. The data indicates that a higher proportion of non-participants had only room air conditioners rather than both room air conditioners and central air conditioning. Other household characteristics were similar between participants and non-participants.

**Table 6-4: Participant and Non-Participant Home Information**

	Participants (n=192)		Non-Participants (n=209)	
	Count	Percentage	Count	Percentage
<b>Homeownership</b>				
Own	98	51%	97	46%
Rent	93	48%	111	53%
<b>Household Type</b>				
Stand alone SF	58	30%	58	28%
MF home with 4 separate units or less	53	27%	43	20%
MF home with 5 or more units	80	42%	109	52%
<b>Hot Water Heater</b>				
Electric	10	5%	10	5%
Gas	81	42%	87	41%
Other/Don't know	101	53%	113	54%
<b>Heat Source</b>				
Natural gas	92	48%	101	48%
Electricity	8	4%	12	6%
Oil	50	26%	35	17%
Other/Don't know	42	22%	61	29%
<b>Air Conditioning Type</b>				
Central air conditioning	9	5%	0	0%
Room air conditioning	124	65%	197	94%
Both Room and Central air conditioning	60	31%	12	6%
No air conditioning	0	0%	0	0%

## 7. Program Planning and Design

This section discusses the planning and design of the RAC program. Sections 7.1 and 7.2 provide an overview of the program planning, design and goals. Section 7.1 discusses potential barriers to meeting program goals, followed by Section 7.2, which examines participation in the program. Finally, Section 7.3 summarizes the program incentive set by the NYSDPS, and compares it to the incremental cost of the rebated equipment.

Key findings from Section 7 include the following:

- Con Edison met its expected participation goals for 2009 - 2010.

- Changes to the NYSDPS Technical Reference Manual which affect the RAC savings may make it difficult for Con Edison to reach its MWh savings target for 2011<sup>6</sup>.
- The incentives offered cover approximately 60% of the incremental costs of buying a qualifying Energy Star® room air conditioning unit vs. a non-Energy Star® unit of similar capacity<sup>7</sup>.
- The majority of participants indicated that they would have purchased the same air conditioner if no rebate had been offered. Similarly the majority of non-participants who purchased a room air conditioner indicated that they purchased an Energy Star® unit without the rebate. Navigant's review of the room AC market suggests that Energy Star® units are widely available and represent a significant proportion of the total market. It is not surprising that Energy Star® units are favored by both program participants and non-participants.

### 7.1 Program Planning

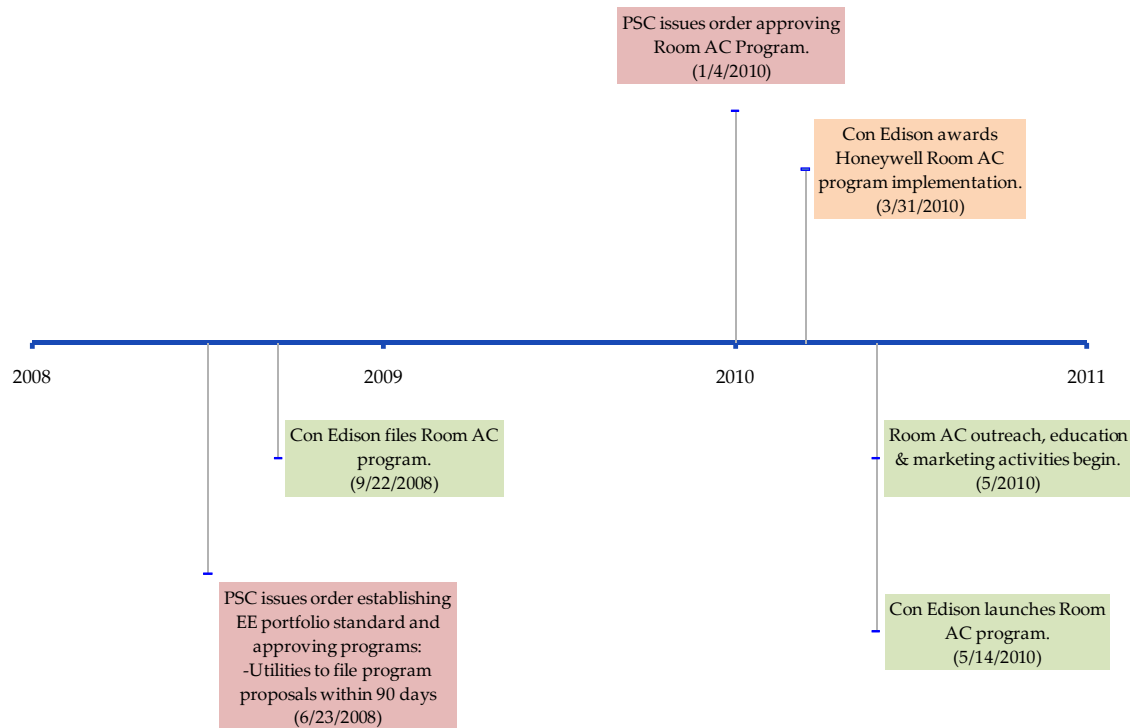
The Con Edison RAC program was approved by the NYSDPS in January 2010 and was required to launch in May of 2010. This required a quick program launch in order for Con Edison to offer the program in time for the cooling season. Figure 7-1 shows key dates along the program timeline, from the initial order to implement efficiency programs, to awarding Honeywell as Con Edison's implementation contractor, to launching the program.

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<sup>6</sup> Although changes to the TRM reduced per unit savings, Con Edison reports that it was able to reach 88.3% of its total 2009-2011 adjusted savings target.

<sup>7</sup> Con Edison and Honeywell believe that the percentage of the incremental cost covered by the program incentive has dropped significantly since 2010.

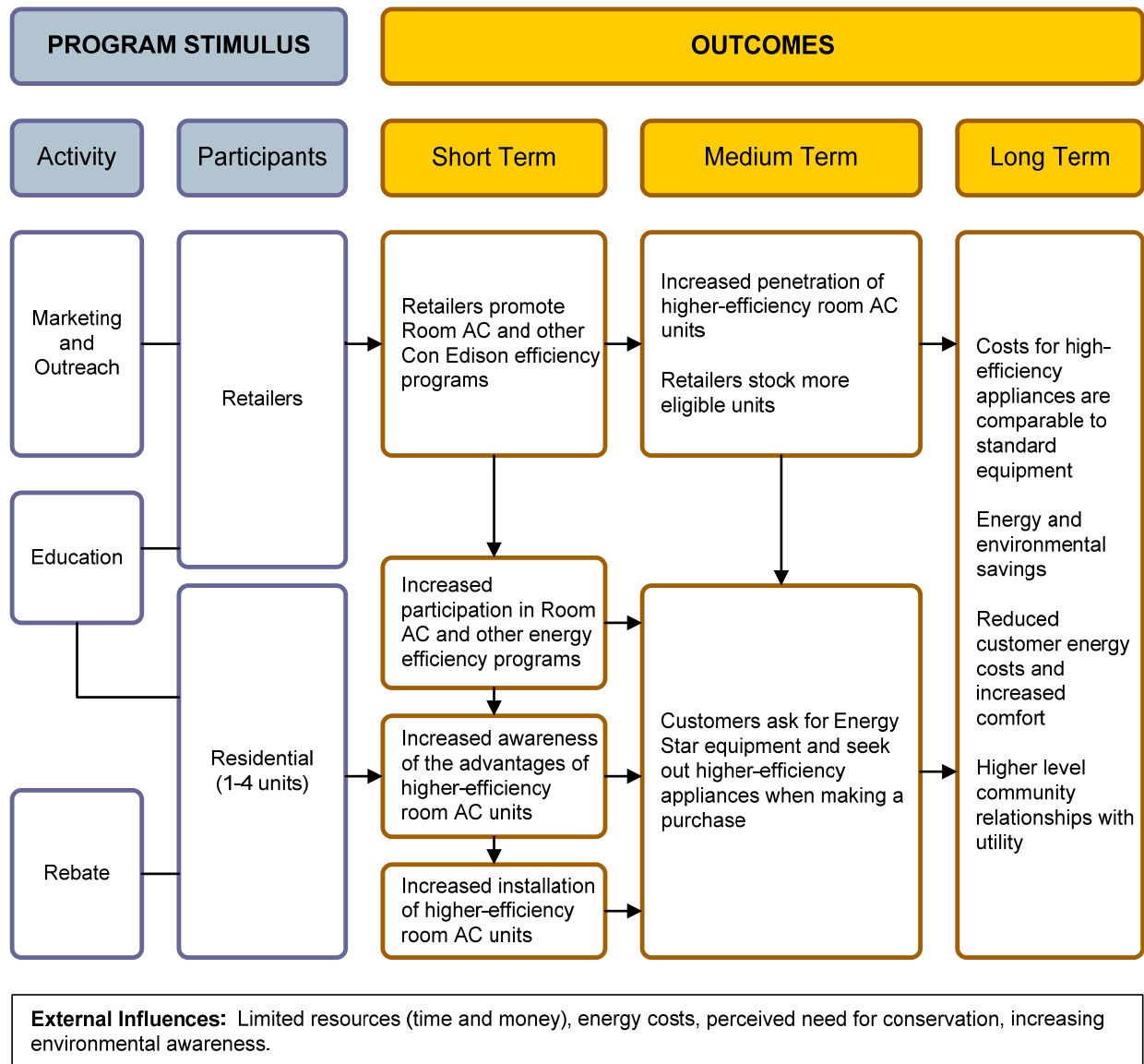
**Figure 7-1: RAC Program Timeline**



## 7.2 Program Design and Goals

The RAC program is designed to facilitate the purchase of higher efficiency Energy Star® air conditioners by providing financial incentives to offset the higher first costs of eligible units, and benefits from a robust pool of trade allies to create program awareness, facilitate the rebate application process and ensure the availability of eligible equipment. The RAC Program Logic Model (PLM) is presented in Figure 7-2, below. The PLM presents the goals of the program, the activities that are necessary to accomplish those goals, and causal relationships between the program activities and the effects.

**Figure 7-2: RAC Program - Program Logic Model**



One of the program goals defined in the program logic model is increased installation of high-efficiency equipment and the energy savings associated with it. Due to delays in program start-up, the Program Implementation Plan goals for 2009 and 2010 were combined into a single goal to be achieved by December 31, 2010. The 2009/2010 goals and program accomplishments are presented in Table 7-1 below. Con Edison achieved its 2009/2010 program goal.

**Table 7-1: RAC Program Savings Goals<sup>8</sup>**

2009/2010 Savings Goal (MWh)	2010 Savings Acquired (MWh)	Percent of Goal Acquired
591	757	128%

In October 2010 the NYSDPS approved an updated Technical Reference Manual (TRM) which includes a reduction in the assumed number of equivalent full load hours (EFLH) for room air conditioning cooling. The original EFLH used by Con Edison to establish savings targets was 649 and was obtained from a previous technical manual. This value had been reduced to 233 in the updated manual (10.15.2010 manual) which became effective as of January 2011. It was subsequently revised to 382 as a result of a petition filed by the company (1.20.2011 filing). Con Edison has submitted a petition to be allowed to adjust their savings targets based on the change in EFLH and the associated change in savings for room air conditioners.

### 7.3 Participation

In order to be eligible for participation in the program, Con Edison's customers must purchase an Energy Star<sup>®</sup> room air conditioner. Seventy-nine percent of 1- to 4-family households have room air conditioners<sup>9</sup>, or a total of 1,039,663 Con Edison customers. To generate a rough estimation of the number of room air conditioning units needing replacement each year (the size of the market for the program), the number of eligible households can be divided by the typical equipment life of 10 years. This leads to 103,996 units expected to 'turn over' each year. Planned participation for 2009/2010 was 7,390 units. Table 7-2 indicates that the targeted participation rate is about 7% of the total market size. This targeted participation rate is reasonable to achieve, given the total market size. During 2010, Con Edison increased the program participation period from one month to two months, and this period was sufficient to achieve the targeted participation.

**Table 7-2: Planned and Actual RAC Program Participation**

Number of Units Expected to Turn Over Each Year	Planned Participation for 2009/2010	Expected Participation as Percent of Total Annual Turnover	Actual Participation for 2009/2010	Actual Participation as Percent of Total Annual Turnover
103,996	7,390	7.1%	11,843	11.4%

<sup>8</sup> The program energy savings goal was combined for program years 2009-2011 and adjusted to 2,442 MWh.

<sup>9</sup> "Energy Efficiency Potential Study for Consolidated Edison Company of New York, Inc. Volume 2: Electric Potential Report", Global Energy Partners LLC, March 2010.

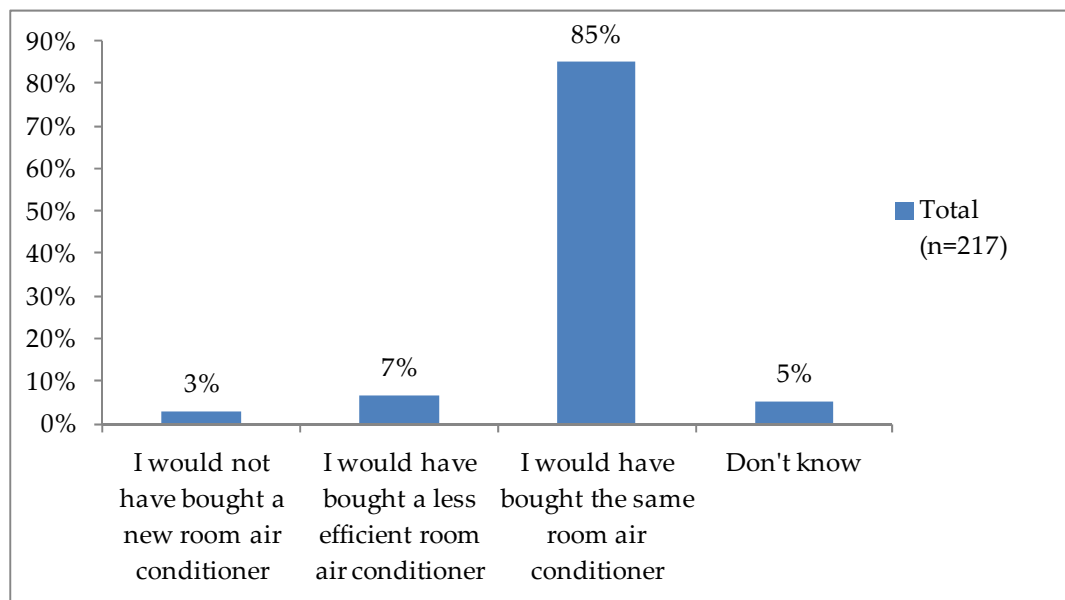
## 7.4 Program Incentives

The RAC program incentive level was set by the NYSDPS. The incentive was designed to be uniform for all utilities administering this program in their service territories.

In order to motivate participation, the rebate offered through the RAC program was designed to be high enough to absorb a significant portion of the incremental cost of the Energy Star® unit (vs. a non-Energy Star® unit of the same capacity). As part of this evaluation effort, participating retailer websites were reviewed to determine the incremental cost of an Energy Star® room air conditioner. The incremental cost was estimated to be \$50 while the rebate offered through the program was \$30, approximately 60% of the incremental cost.

Program participants were surveyed, to determine the influence of the incentive on their purchase. When asked to identify what they would have done if no rebate had been offered, the majority of participants (85%) indicated that they would have bought the same room air conditioner. This result, shown in Figure 7-3, suggests that customers are not as sensitive to price as originally thought (or perhaps more susceptible to appliance dealer suggestions). This free ridership issue was explored further by reaching out to retailers and to the NY State Energy Research & Development Authority to assess the percentage of room air conditioner units in stores which are Energy Star® compliant. Costco indicated that all air conditioner units sold in store are Energy Star® and the EBA retailer indicated that 85% of units are Energy Star®. The NY State Energy Research & Development Authority indicated that in June, July and August of 2011 greater than 80% of units sold were Energy Star®. These data support the initial indications of free ridership reported by surveyed participants.

**Figure 7-3: RAC Program Participants Purchasing Action if No Rebate Were Available**



Note: The question in Figure 7-3 was asked for each room air conditioner purchased (n = 217) rather than of each participant (n = 192). Some customers purchased multiple room air conditioners.

Participants received a \$30 rebate for purchasing qualifying units. Those who indicated that they would not have bought a new room air conditioner, or would have bought a less efficient one, if no rebate were offered, were also asked whether they would have purchased an Energy Star® room air conditioner if the rebate were \$20. As shown in Table 7-3, the majority of these individuals (72%) indicated that they would have purchased an Energy Star® air conditioner if the rebate were only \$20 instead of the current \$30.

**Table 7-3: Would Participant Have Purchased Energy Star® Unit Even If Rebate Was Only \$20?**

	Total (n=21)
Yes	72%
No	17%
Don't know	11%

Of the 209 non-participants surveyed, 32 purchased a room air conditioner during the program period but did not participate in the program. Eighty-four percent of this group (27) was unaware of the rebate being offered on Energy Star® room air conditioners. The 32 room air conditioner purchasers were asked whether the room air conditioning unit purchased was Energy Star® qualified. Table 7-4 indicates that the majority did purchase Energy Star® units, suggesting that price was not a significant factor for those individuals who did not use the rebate and supporting the anecdotal finding from retailers that most units sold were Energy Star® units.

**Table 7-4: Was Non-Participant's Room Air Conditioner Purchase an Energy Star® Unit?**

Energy Star Label	Con Edison (n=32)
Yes	86%
No	2%
Don't Know	12%

The few non-participants who had purchased non-Energy Star® room air conditioners were asked about the importance of the rebate in their purchase decision. On a scale of 1 to 10, where 1 is “not at all likely” and 10 is “extremely likely”, these respondents reported a 8.9 average level of likelihood when asked “how likely would you have been to purchase an Energy Star® room air conditioner if you had known about the rebate?”. For this small number of non-participants who did not purchase an Energy Star® unit, the rebate appears to be important.



## 8. Infrastructure Development

This section reviews several aspects of the infrastructure developed by Con Edison and Honeywell to implement the program. Section 8.1 assesses the data collection and tracking infrastructure by reviewing the program data from several angles. Section 8.2 looks at each program's quality control procedures relative to customer and equipment eligibility and equipment verification. Lastly, Section 8.3 reviews the program's staffing levels.

Key findings from Section 8 include the following:

- The information collected on the rebate applications and recorded in the program databases is generally adequate for program management, reporting, and evaluation.
- On average, the time between application submission and rebate payment is eight weeks. This time was reduced to 5.5 weeks in the 2011 program by contracting with Helgeson to process rebate applications.
- The program's quality control procedures in respect to customer eligibility and equipment eligibility are robust.
- In the future the electronic forms completed by participants should allow participants to save their entries while completing the form.

### 8.1 Database Review

Navigant conducted a review of program data in the Con Edison tracking systems to assess their accuracy and effectiveness for use in recording, tracking, and reporting the process and impact of the program. The data review was completed on the 2010 database and included only participants in the 2010 program. This review included an assessment of the key processing timeframes, review of the project data for outliers and missing information, and assessment of the data collected on the rebate applications and recorded in the tracking systems.

#### Processing Time Frames and Data Integrity

Honeywell extracted measure installation information from its Back Bone Client Server (BBCS) tracking database, in response to Navigant's data request. The records analyzed in this report were received on June 10, 2011. It is important to note that because the dataset reviewed by Navigant is an extract from a much larger relational database, it is possible that some data elements are recorded in the database but not included in the query that resulted in the dataset that Navigant reviewed. This assessment and the resulting recommendations should be taken in that light.

Honeywell also provided spreadsheets with information on room air conditioner applications that were rejected and copies of a sample of project files. Files provided included the following:

- **2010 RAC Records 6.2.11.xls** This document contains 13,746 records. The file contains project level details including information on the customer, contractor, and measure, installation dates, and energy savings for each participating project. This file contains only rebates which have been approved.

- **2010 RAC Current Status Report 6.9.11.xlsx** This document provided information on all the applications, both those completed and those which have been rejected by the program. The file contains 20,769 records (6,792 Rejected or cancelled rebates).
- **Project files** Twelve rebate application files.

The program dataset provided by Honeywell for the Con Edison programs was very complete. All of the 13,746 rebates were in the “complete” status and none were “payment in progress” status. All projects in the “complete” status had populated fields for install date, application date and rebate payment date. The review also determined that no customers received more than 2 rebates.

However, the data did contain a few anomalies. In nineteen records the rebate date came before the application date. This issue was identified as a data entry error. Creating a column in the tracking database which tracks the time period between the application date and rebate date and highlights entries where the rebate date comes first, would allow for easy identification and correction of data entry issues. This recommendation has been shared with Honeywell’s IT group for review/consideration and to ensure that all data entry safeguards are employed.

#### Analysis of Con Edison Processing Timeframes

Figure 8-1 breaks down the time period between application submission and rebate payment further by showing the cumulative number of weeks between application and rebate payment over time. Though the average time from application submission to rebate payment is eight weeks (from Table 8-1 below), 31% of rebates are paid within six weeks and 66% within eight weeks.

**Table 8-1. Con Edison RAC Program Application Processing Timeframe Analysis**

Time Period	Average Number of Weeks	Average Number of Days	Min Number of Days	Max Number of Days	Number of Projects
Application date to Rebate date	8	54	9	194	13,727

Source: 2010 RAC Records 6.2.11.xls

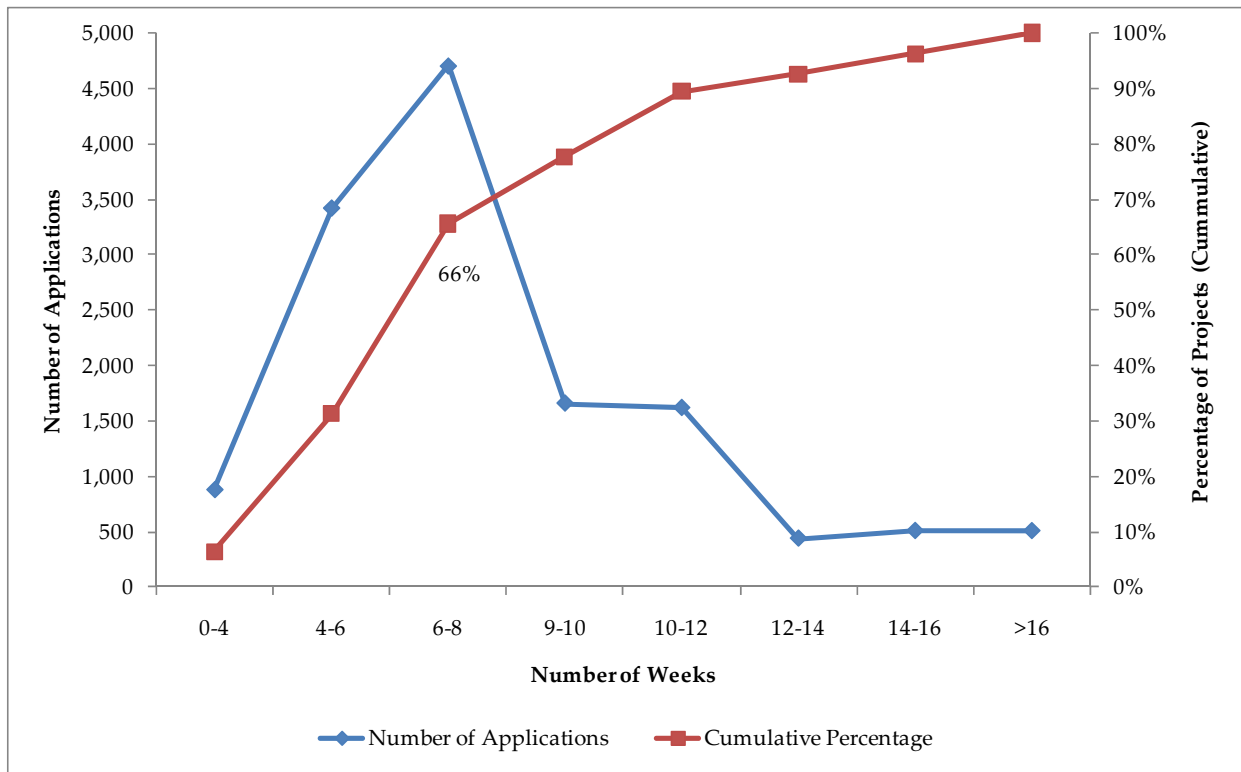
Note: 19 projects had a rebate date prior to an application date (received rebate before applying for it). These were removed from the timeline analysis.

Con Edison sets an expectation with their customers that rebate payments will be made within six to eight weeks of the inspection or receipt of complete documentation.

Figure 8-1 breaks down the time period between application submission and rebate payment further by showing the cumulative number of weeks between application and rebate payment over time. Though the average time from application submission to rebate payment is eight weeks (from Table 8-1 above), 31% of rebates are paid within six weeks and 66% within eight weeks.<sup>10</sup>

<sup>10</sup> Navigant understands that Helgeson has been engaged by Honeywell to provide rebate processing services for this program and a review of the 2011 processing time indicates that average rebate processing times have been cut

**Figure 8-1: Cumulative Number of Weeks between RAC Program Application and Rebate Payment**



#### Rebate Application Rejection Analysis

Con Edison provided a dataset of applications that were rejected by the program. The records indicate 6,792 applications were rejected, while 13,746 measures were approved and paid. This indicates that the program rejected approximately 33% of the measure applications applied for during the initial year of the program.

Table 8-2 summarizes the reasons for application rejection. The table lists 6,792 rejected records as of January 2011.

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during the 2011 program to 30 days for those applications without missing information and 46 days for those applications with some missing information.

**Table 8-2. Summary of Rejected RAC Program Applications**

Reason for Rejecting the Installation	Frequency	Percent	Cumulative Frequency	Percent of Total Records
Application Missing Information/Incomplete	4,086	58%	58%	20%
Unit not Energy Star® rated	656	9%	68%	3%
Invalid receive date	631	9%	77%	3%
Blank	331	5%	81%	2%
Invalid date of purchase	296	4%	85%	1%
Missing serial number	207	3%	92%	1%
Missing receipt	163	2%	94%	1%
Duplicate serial number	160	2%	96%	1%
More than two units purchased	115	2%	98%	1%
Missing signature	113	2%	100%	1%
Customer name different on application	15	0%	100%	0%
Not a Con Edison customer	8	0%	100%	0%
Commercial account	5	0%	100%	0%
Unit not rated combination	5	0%	100%	0%
Not a participating contractor	1	0%	100%	0%

A significant proportion of applications (33%) were rejected through the first year of the program.

Table 8-2 indicates that the most common reasons for rejecting an application were missing information. The high percentage of individuals who did not correctly complete the rebate application form resulted in Honeywell making changes to the rebate application form. During 2010, the form was adjusted so that the required fields were more visible, with the intent of enhancing clarity and reducing the number of rejected applications. This should help eliminate rejections due to invalid purchase date (which accounted for 9% of rejections) as this important piece of information was moved to the top of the application. Also, the 2011 application form does not require that participants enter the serial number of the unit, which further simplifies the process for participants and is likely to lead to lower application rejections. A review of the 2011 deactivation information indicates that the rejection rate has been lowered to 7%. This is a significant reduction from the 2010 rejections and indicates that the changes implemented were successful in decreasing application rejections.

Navigant also observed that the reason for rejecting one application was listed as “Not a participating contractor”. Because there are no requirements for contractors in the program, this appears to be a mislabeled rejection.

For a significant number of rejected applications, 331, the reason for rejecting the application was left blank. This should be corrected going forward to ensure appropriate tracking of rejections and to help inform remediation activities<sup>11</sup>.

## 8.2 Project File Review

Navigant selected a random sample of 12 database records for which to obtain hard-copy applications, and then checked the data on these applications against the data in the database. Con Edison provided PDF documents of the 12 applications requested.

Information in each PDF file included:

- Customer Information
  - Con Edison account number
  - Name
  - Address information
  - Phone numbers (home and work)
  - Email address
- Air Conditioner Information
  - Manufacturer
  - Model number
  - Serial Number
- Application Date
- Sales receipt

All 12 applicants in the PDF files were located in the tracking system. The data on all rebate application forms matched the data in the tracking system.

## 8.3 Quality Control

This section provides the results of a review of the quality control procedures for the program. The review is organized around two areas: customer eligibility and equipment eligibility. The purpose of these reviews is to determine whether the procedures are sufficient to ensure that the reported savings are real and verifiable.

As is common for most prescriptive rebate programs, participants in the program submit their program applications and supporting documentation after the purchase of the eligible room AC. Program applications are available in electronic form but these must be completed and submitted via US mail in hard copy but are available for online submission for the 2011 program. The information can be typed into the form and then printed out, or a blank form can be printed out and all information inputted by hand. However, the electronic application forms will not allow the user to save any information that is

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<sup>11</sup> Con Edison reports that it is fully aware of this issue, and has implemented steps to ensure that these data are entered.

typed into the form. This would be a beneficial feature to add to the electronic form in the future. Applicants are required to provide the Energy Star® AC model number on the application form.

#### Customer Eligibility

When an application is received, the program software determines eligibility based on the applicant's rate tariff; eligible customers must be on a residential rate tariff. The software locates the customer record in the utility customer information system (CIS) using the account number provided on the application, verifies that the name and address matches that on the application, and that the customer is on a residential gas or electric rate tariff, for gas and electric measures respectively.

No issues were identified surrounding the determination of customer eligibility.

**Assessment:** Verifying customer eligibility through their electric rate tariff is the most direct method for determining whether the customer is eligible to participate in the programs. Verifying that the name and address on the application match as well provides assurance that the account number was not falsified or mistyped, or that the program staff did not misread the information provided. If any of the name, address or account number are inaccurate, a red flag will be raised.

#### Equipment Eligibility

The Con Edison programs require that the application form include the model number for the Energy Star® room AC unit. Honeywell's BBCS database is programmed to automatically check that the model number is a valid Energy Star® unit<sup>12</sup>. If the applicant does not provide a model number, Honeywell will send an e-mail and fax indicating that the rebate cannot be processed until the missing information is provided.

**Assessment:** Verifying that the installed equipment meets the program requirements by model number is sound.

In 2010, unit serial numbers were required to be entered on the application. Honeywell checks the serial numbers of new applications against the existing projects in the program database. This program requirement was removed for the 2011 program making applications simpler for participants to complete.

### 8.4 Program Staffing

Con Edison has contracted program implementation to Honeywell. However some of the program administration is still completed by Con Edison staff. While the number of hours spent on the project by individuals in certain groups such as marketing are not tracked and attributed specifically to the project

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<sup>12</sup> The equipment tables within BBCS are regularly updated to include new unit listings and equipment combinations.

it's estimated that the RAC program requires 3.8 FTEs. This includes 1.3 FTEs from Helgeson as well as 2.5 FTEs between Honeywell and Con Edison.

**Assessment:** As a “rule of thumb,” residential energy efficiency programs require 1 FTE for every \$1-3 million in program funding. With a project budget of 2 million the RAC program has higher FTEs than generally required.

## 9. Marketing and Customer Acquisition

Con Edison designed its RAC Program for rapid deployment of Energy Star® room air conditioners to existing residential customers. The program counts on the “market pull” of residential homeowners seeking to reduce energy consumption and monthly bills.

This section presents an overview of current marketing efforts to promote the program and details the results of a survey conducted with program participants and non-participants, and in-depth interviews with participating retailers, to summarize program marketing effectiveness and customer and retailer motivation to participate in the program. Section 9.1 discusses various aspects of the program marketing and its effectiveness at building awareness among customers. Section 9.2 discusses marketing activities conducted by retailers and their perceptions of program delivery, and Section 9.3 is a review of the program website.

Key findings from Section 9 include the following:

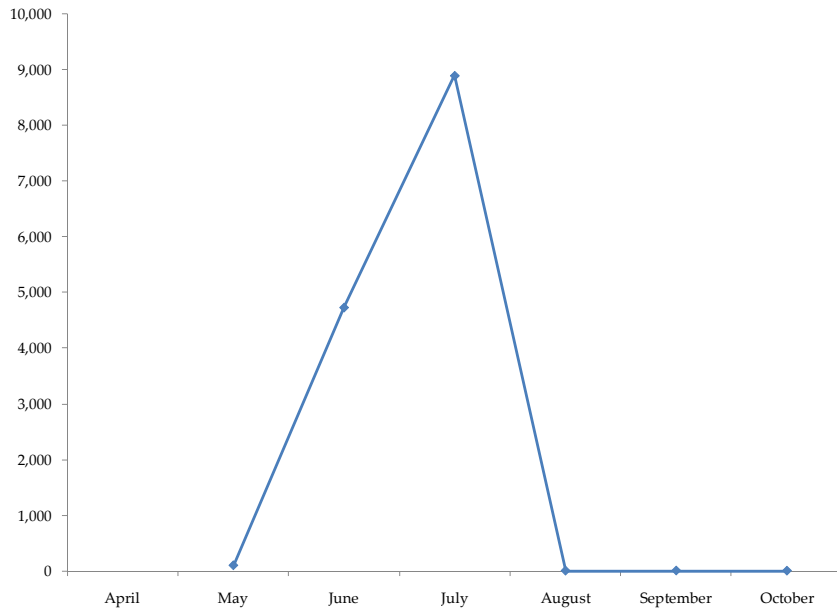
- Sales staff at participating retailers are a key source of program awareness and are influential in the consumer’s decision to participate in the program.
- Participating customers generally report that the cash incentive/rebate was not a main factor in their decision to purchase an Energy Star® air conditioner.
- Retailers suggested that additional mass marketing (television, radio or print ads) would help drive customers into stores to participate. This suggestion was addressed in the 2011 program by additional newspaper and television advertisements within the Green Team campaign.
- While few customers visited the program website, those that did were generally very satisfied with the information provided. This is consistent with what was found in the website review.

### 9.1 Program Marketing

Due to the seasonality of room ACs, the program marketing was designed to focus on the time periods prior to and during the summer peak season. Customers are likely to think about replacing their air conditioners just before the summer or during the summer when they determine that their current units need to be replaced. Increasing customer awareness of the benefits of Energy Star® room AC units and the program rebate prior to the summer season should provide impetus to buy new air conditioning units if needed.

The RAC program’s marketing budget was concentrated on the months between May and September. Figure 9-1 shows the trajectory of the number of applications received over the course of the program. Purchases had to be made within a two-month period (May 14 through July 14, 2010).

**Figure 9-1: Effect of Marketing on the Submission of Applications for the RAC Program**



Marketing materials include point-of-sale advertising as seen below in Figure 9-2. These materials are effective in advertising the rebate available on Energy Star® room air conditioner units and clearly indicate Con Edison is the program sponsor but they do not inform the customer of energy savings which will occur as a result of purchasing the Energy Star® units. Retailers have indicated that they spoke to customers about this value-added proposition. According to the participant survey, retailer sales staff were the main influence in customers' decision to purchase the Energy Star® air conditioners. It is possible that providing more information about the energy/dollar savings achievable by purchasing the Energy Star® AC units would further increase participation. Marketing materials also included direct mail to customers to describe all residential Con Edison programs, which included information about the energy savings advantages of switching to an Energy Star® air conditioner. For 2011, Con Edison has placed Green Team advertisements in newspapers and online to drive customers to the Con Edison website where they are able to find more information about the program. Some retailers have also created their own marketing materials as shown below in Figure 9-3.



Figure 9-2: RAC Program Point of Sale Materials




Figure 9-3: Lowes RAC Program Marketing Materials



During the 2011 program year Con Edison also completed targeted cross promotion of their other programs by sending Residential Room Air Conditioner and HVAC participants direct mail information about other opportunities as shown below in Figure 9-4.

Figure 9-4: RAC and HVAC Participant Targeted Cross Promotions



Dear CUSTOMER NAME:

The Con Edison Green Team thanks you for participating in the PROGRAM NAME Program.

**Did you know there are **even more** ways you can **save energy** in your home?**

**Request a home energy survey**

Let the savings come to you when you request a Home Energy Survey! For just \$50, a Con Edison Green Team energy specialist will analyze your home and provide a customized report with tips for reducing your energy expenses further. While we're there, we'll also install free energy-saving products that add even more value:

- Compact fluorescent light bulbs
- Smart strip power strip\*
- Weather stripping/sweeps for doors
- Hot water pipe insulation\*\*
- Low flow faucet aerators\*\*
- Low flow massaging showerhead\*\*

**Recycle your refrigerator**

Have a second refrigerator that's old or taking up space? We'll haul it away at a convenient time for you and recycle it for free! Plus we will reward your smart decision to use less energy with a check for \$30. At the time we pick-up your refrigerator, we will also collect and recycle any old, inefficient window or wall air conditioners. You'll get \$35 for window units and \$100 for wall air conditioners.

**The Con Edison Green Team wants to help you save energy, money, and the environment.**

**For more information or to schedule your home energy survey or appliance pick-up, call the Green Team at 1-800-430-9505 or visit [conEd.com/greenteam](http://conEd.com/greenteam).**

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Refrigerators and air conditioners must be in working condition to qualify for recycling. Customers must provide clear and safe access to the appliance for pick-up. Air conditioners should be removed from windows or wall installation locations. Water hoses should be disconnected from refrigerators.

\* A smart strip is a power strip with a control device outlet and switched outlets that automatically shut down when the control device is shut down. Con Edison will provide each customer one smart strip that can be used for equipment such as computers and entertainment systems.

\*\* For customers with electric water heating equipment.

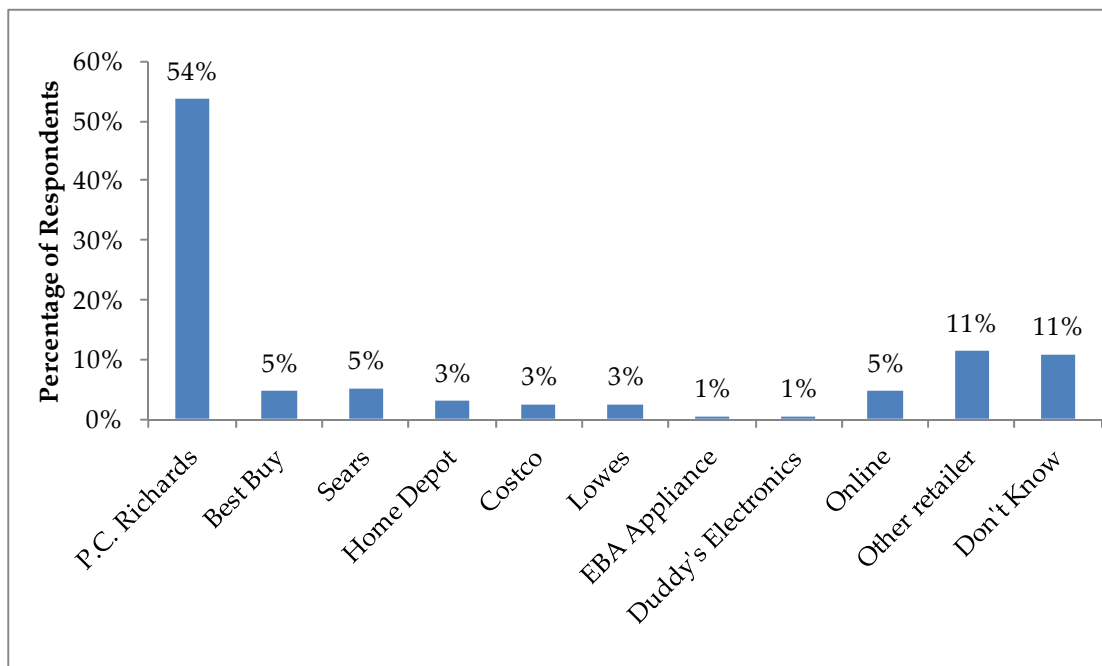


Con Edison Energy Efficiency Programs - c/o Honeywell - 145 Route 46 West - Wayne, NJ 07470

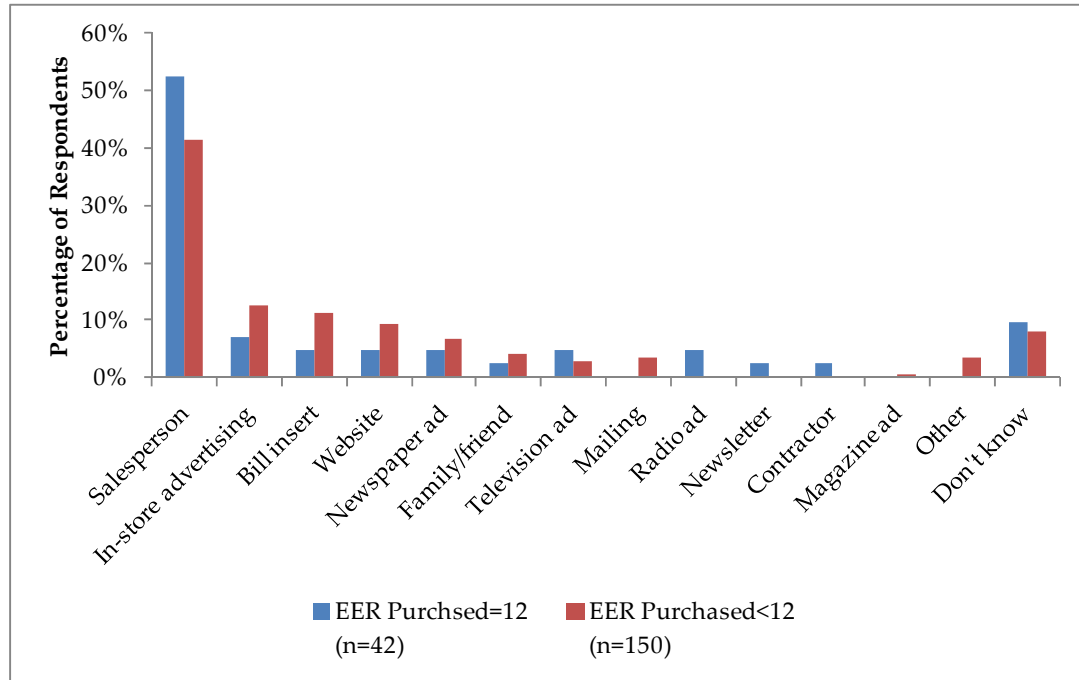
Surveyed participants were asked to identify where they purchased their Energy Star® room air conditioner. The most common store was PC Richards. Significantly more participants purchased their room air conditioner at this retailer than at any others. PC Richards had a large number of participating stores and it is possible that the marketing activities they engaged in drove participation. During the

interview with PC Richards head office they indicated that individual stores had discretion to set up Energy Star® room air conditioner pallet displays. These displays may have contributed to high participation of PC Richards customers. PC Richards also ran advertisements in their flyers promoting the program which may have drove customers in store to purchase the Energy Star® room air conditioners.

**Figure 9-5: RAC Program Participant Air Conditioner Purchase Location (n=192)**

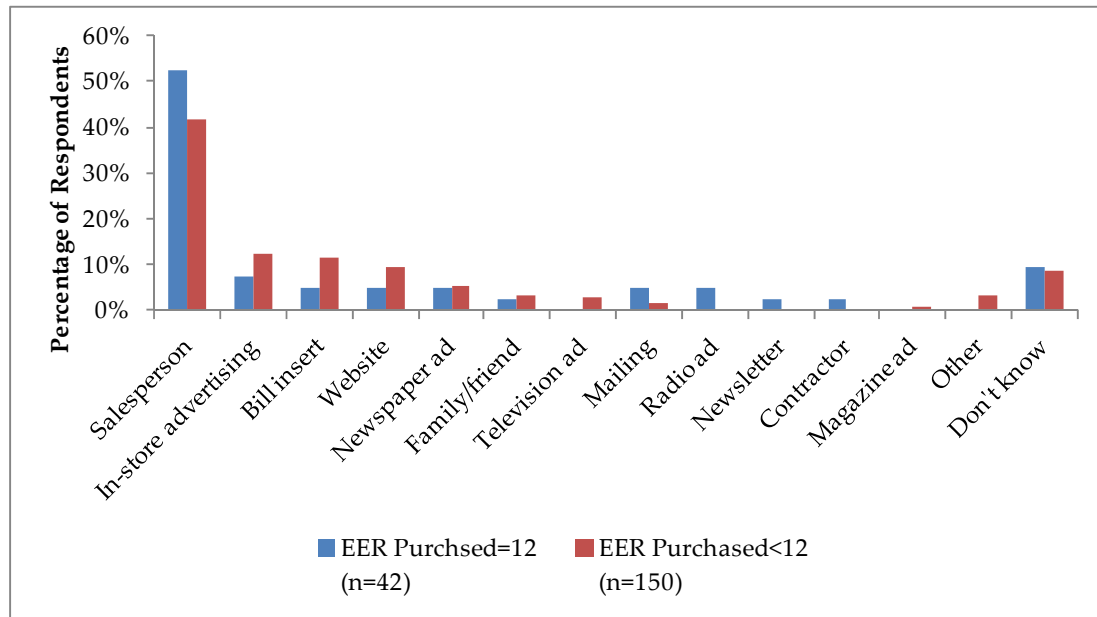


**Figure 9-6: How RAC Program Participants Heard About Program**



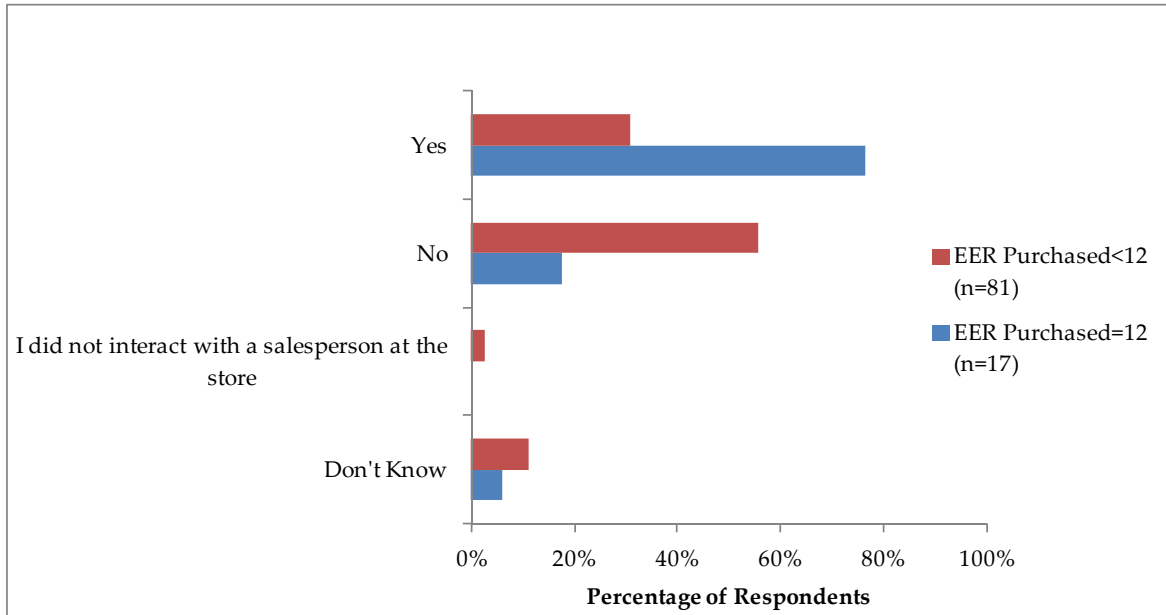
Participants were also asked to identify which of these sources was the most influential in their decision to participate in the program. As shown in Figure 9-7, interaction with a salesperson had the greatest influence on the decision to participate in the program. This suggests that if sales staff were even more engaged in the program, higher participation would occur and an even higher proportion of room air conditioners with an EER of 12 would be sold.

**Figure 9-7: Influence on Decision to Participate in RAC Program**



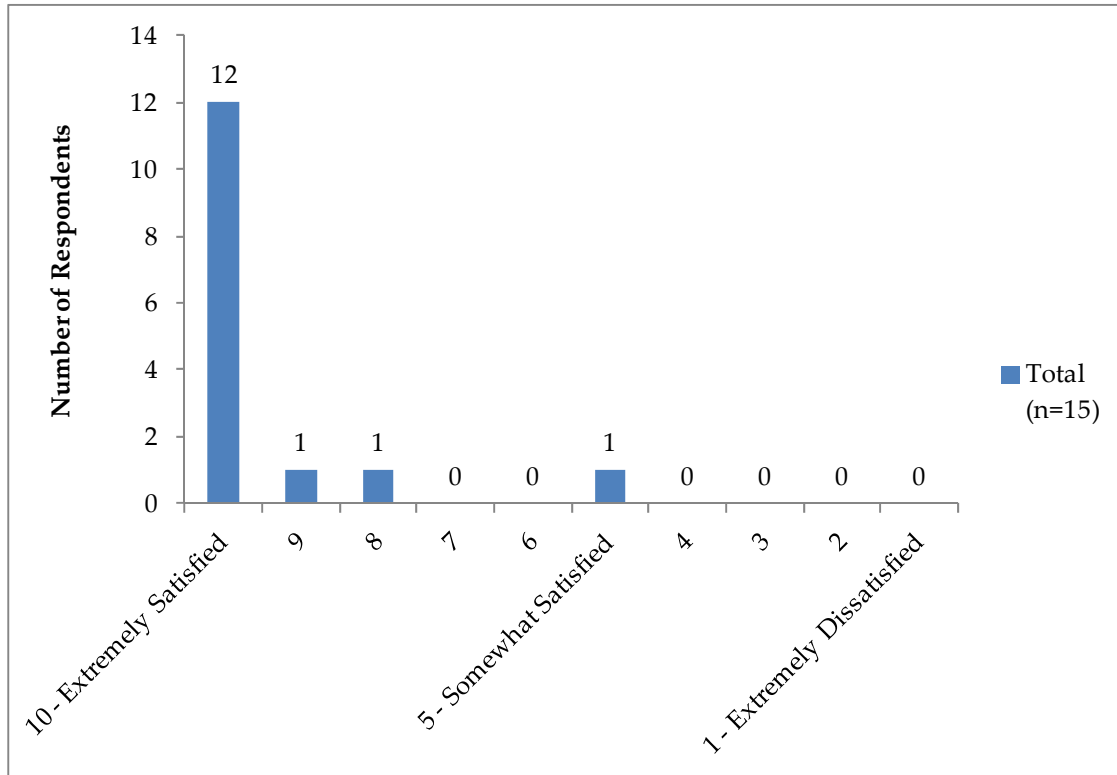
Program participants who purchased their air conditioner(s) in a physical retail store (as opposed to online) were asked if the store salesperson who helped them told them about the Energy Star® room air conditioner program. Figure 9-8 demonstrates that significantly more people who purchased an air conditioner with an energy efficiency rating of 12 were told about the program by salespeople than those who purchased an Energy Star® air conditioner with a rating less than 12. This supports the earlier suggestion that sales staff are influential in the decision to purchase the more efficient Energy Star® room air conditioners. Overall, 35% of participants indicated that the salesperson who helped them with their purchase told them about the program.

**Figure 9-8: Did In-Store Salesperson Tell Participant about RAC Program?**



A small percentage of participants, 8%, indicated that they contacted a Con Edison representative during their participation in the program. The average (mean) satisfaction with this experience was rated to be 9.5, which indicates that participants who did contact the utility were very satisfied with the information that was provided to them. This is illustrated below in Figure 9-9.

**Figure 9-9: RAC Program Participant Satisfaction with Con Edison Call Center (n=15)**



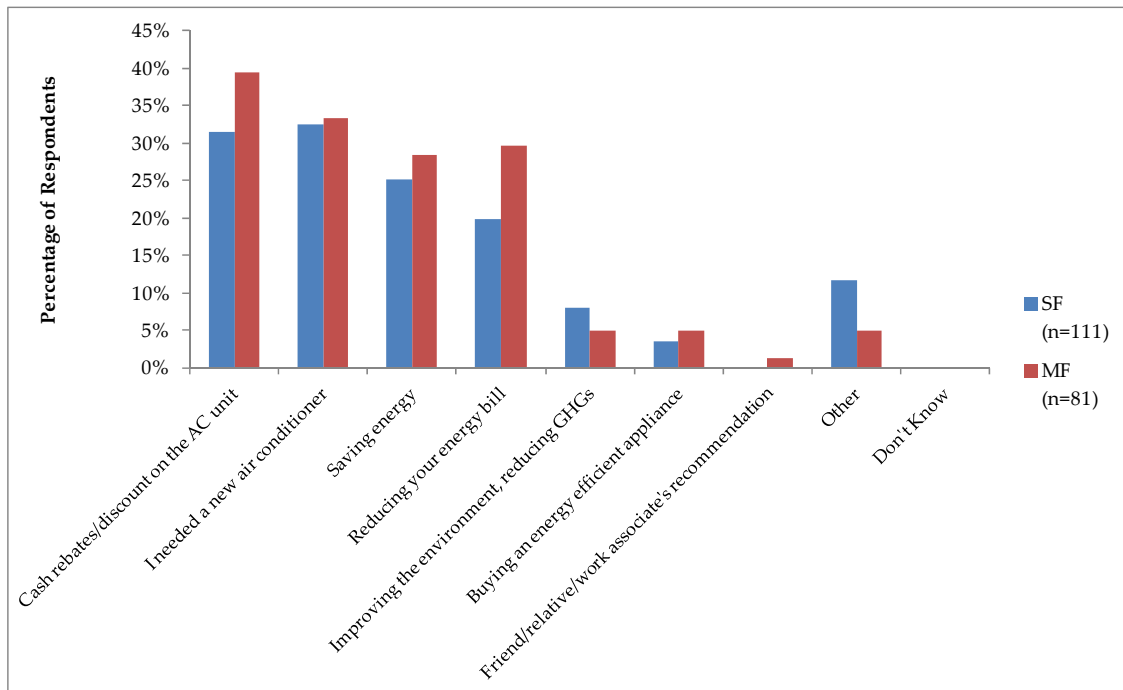
When asked to identify reasons for purchasing their Energy Star® room air conditioner, many participants indicated “cash incentives/rebate” or “needing a new air conditioner”.

Figure 9-10 and Figure 9-11 illustrates the reasons given participants for purchasing the Energy Star® room air conditioner and participating in the program, first for single- versus multi-family customers, and then for purchasers of 12 EER purchasers versus those who purchased units with EERs of less than 12. Figure 9-10 reveals that the rebate/discount is most important to individuals in multifamily dwellings than those in single dwelling homes. Figure 9-11 illustrates that providing cash rebates was the most commonly cited reason for purchasing an Energy Star® room air conditioner and participating in the program by both participants who purchased units with an EER=12 and those who purchased a unit with an EER<12. While the cash rebate was the most commonly cited reason for purchase and participation, only 18 percent of participants reported the cash rebate as the **most important** reason for participating.<sup>13</sup> Further, the reasons provided were for buying the qualifying unit *and* participating in the program. It is therefore possible that respondents saying the rebate could have been indicating that it was important for participating in the program but not for buying the qualifying unit.

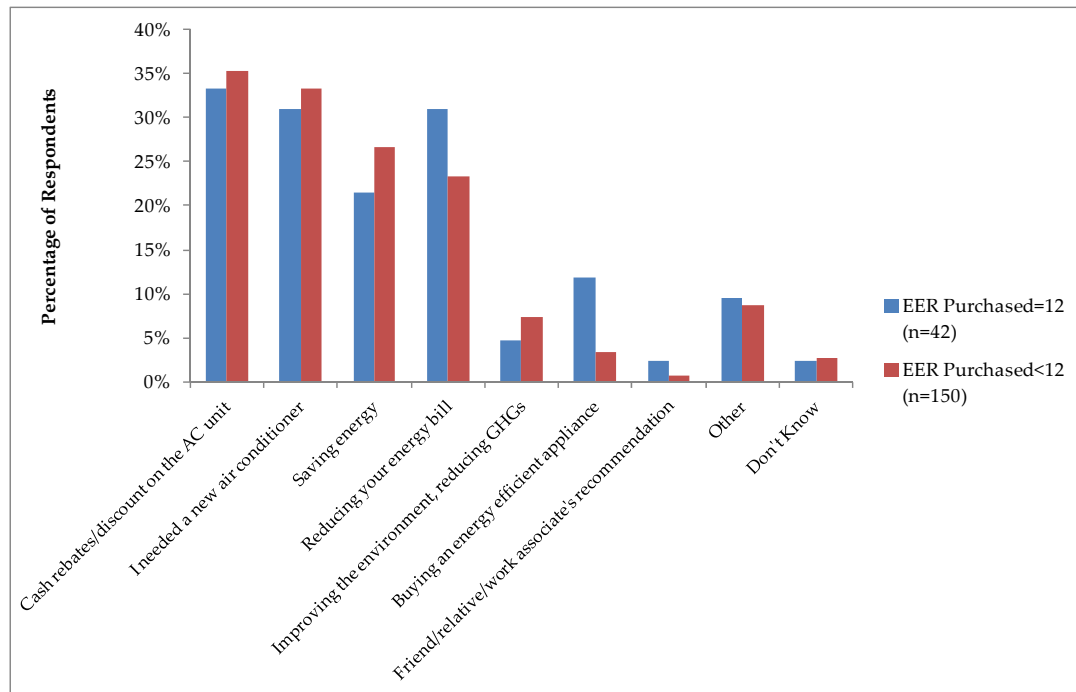
<sup>13</sup> The majority of participants, 85%, indicated they would have purchased the same unit without a rebate. Similarly, only 17% of participants indicated the rebate was a major factor in their decision to purchase the Energy Star® air conditioner. This is consistent with information provided to Navigant by retailers who indicated that more than 80% of units in stores are Energy Star®. This free ridership issue should be considered in future program design.



**Figure 9-10: RAC Program Participant Reasons for Purchasing Energy Star® Room AC and Participating in Program (Home Type)**

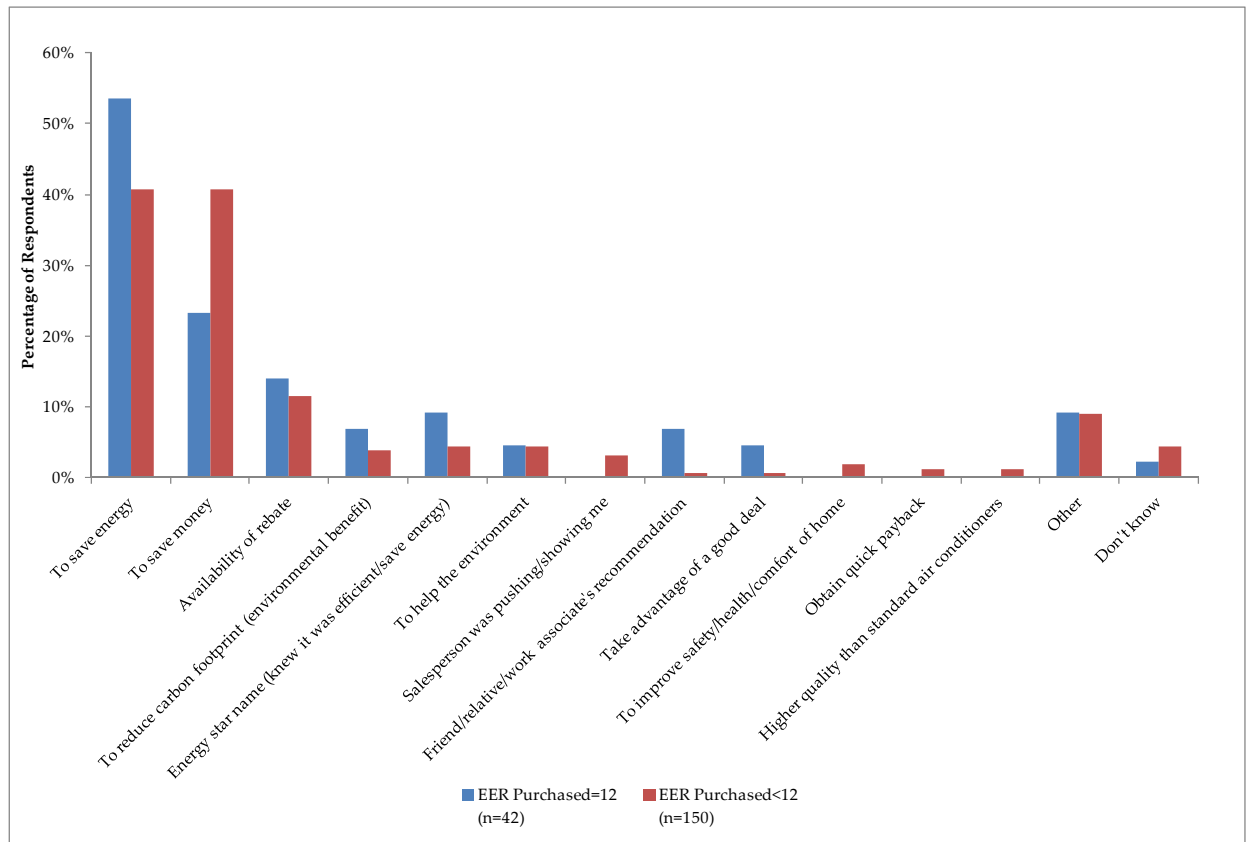


**Figure 9-11: RAC Program Participant Reasons for Purchasing Energy Star® Room AC and Participating in Program (EER Purchased)**



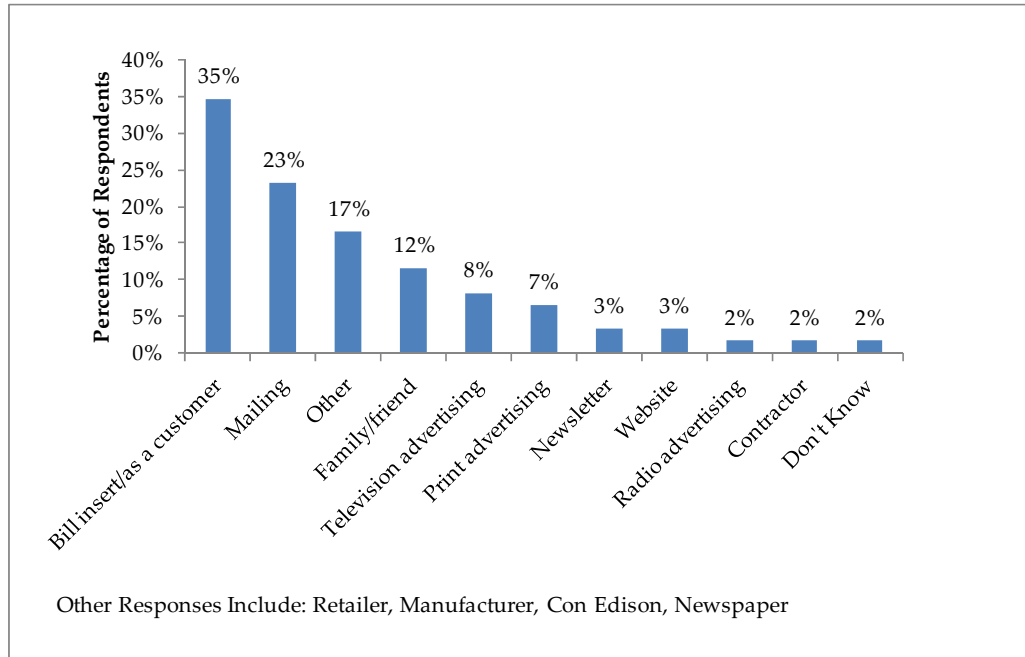
Participants were also asked to identify the reason they purchased an Energy Star® room air conditioner rather than a standard room air conditioner. The most common reason identified by participants who purchased a unit with an EER =12 was “To Save Energy” while individuals who purchased a unit with an EER <12 identified “To Save Energy” and “To Save Money” as the top reasons for purchasing an Energy Star® room air conditioner. These results are shown graphically in Figure 9-12.

**Figure 9-12: RAC Program Participant Reasons for Purchasing Energy Star® Model versus a Standard Model**



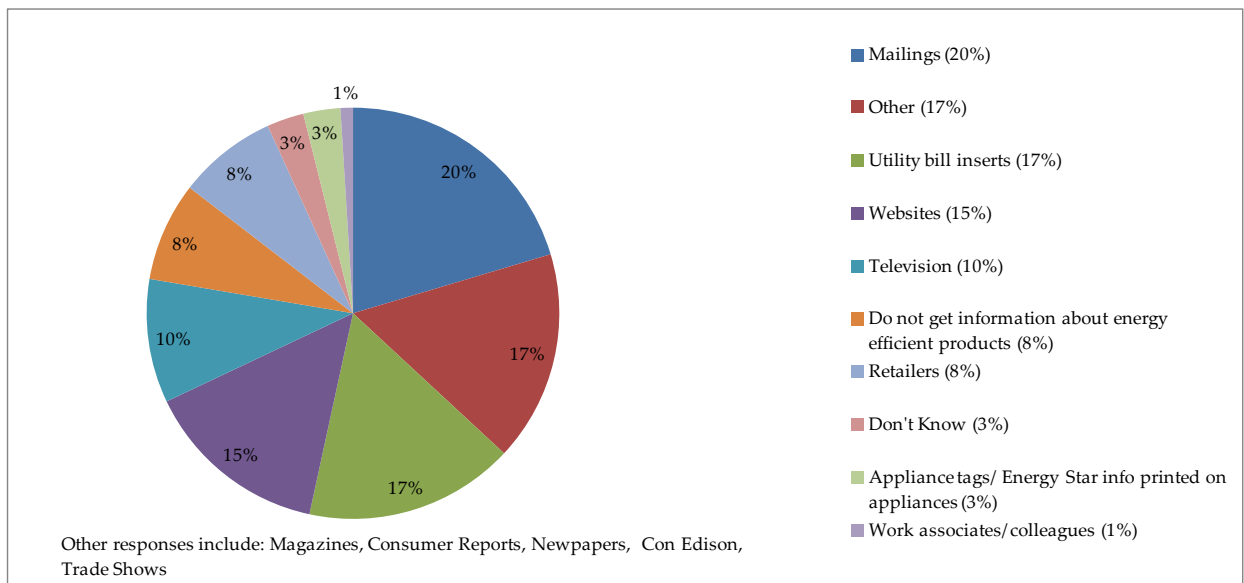
Twenty-one percent of surveyed non-participants indicated that they were aware of Con Edison's RAC program but are not currently participating. This may be the result of not needing a new room air conditioner during the program period. As seen in Figure 9-13, the majority of these individuals indicated that they heard of the program from bill inserts or from mailings. Seventy-seven percent of the individuals who heard about the program through "mailing", "newsletter", "website", "any advertising" or through a "community event", knew that the program was offered by Con Edison. The remaining 23% did not know who offered the program.

**Figure 9-13: How Non-Participants Heard About Program (n=45)**



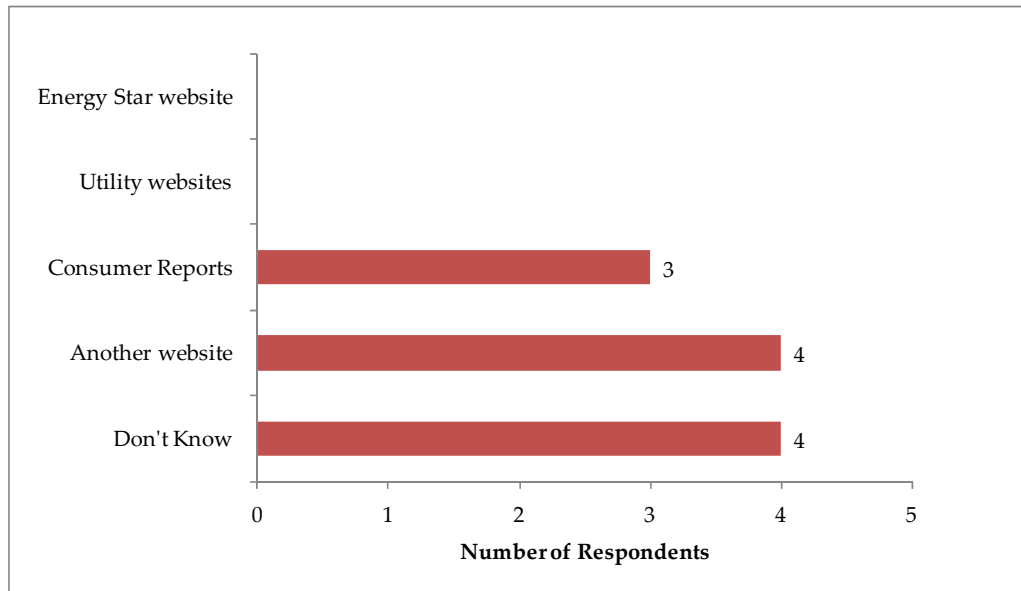
In order to learn how best to target non-participants in future campaigns, these individuals were asked to identify where they typically obtain information about energy efficiency products. From Figure 9-14, “websites”, “utility bill inserts” and “mailings” were cited as the most frequent sources of information.

**Figure 9-14: Where Non-Participants Get Energy Efficient Product Information (n=86)**



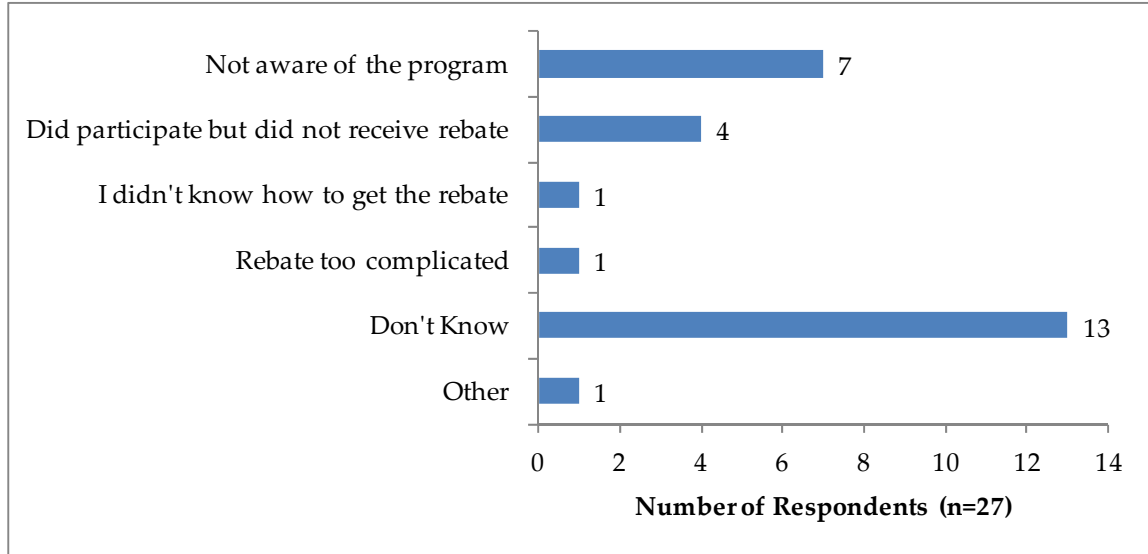
As demonstrated in Figure 9-15, the majority of non-participants who indicated that they obtain information about energy efficient products from a website indicated that they do not know who sponsored the website or that it is not a website sponsored by a utility or Energy Star®.

**Figure 9-15: Energy Efficient Product Information Website Owner/Sponsor (n=11)**



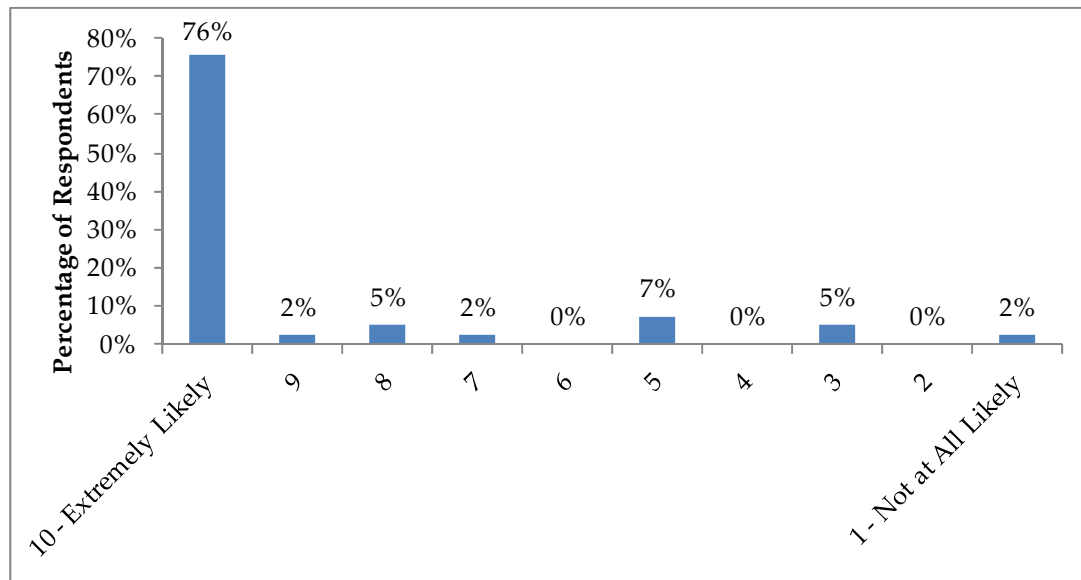
Twelve percent of non-participants (n=32) purchased a new room air conditioner for their home during the program period and 86% of these room air conditioners (n=27) were reported to have had an Energy Star® label on them. Only 4 of the individuals who purchased a new air conditioner were aware of the rebate which was available for the purchase of an Energy Star® room air conditioner. When individuals who purchased an Energy Star® room air conditioner were asked why they did not do so through the program, many reported that they did not know about the program. These results are summarized below in Figure 9-16.

**Figure 9-16: Non-Participants' Reasons for Not Enrolling Eligible Purchases in RAC Program (n=27)**



Individuals who did not know about the rebate and did not purchase an Energy Star® room air conditioner were asked to identify how likely they would have been to purchase an Energy Star® model if they had known about the rebate at the time of purchase. Only 5 individuals fell into this category; 3 indicated that they would have been “extremely likely” (10 on a scale of 1-10) to purchase an Energy Star® model and 2 respondents selected a 6 on the scale of 1-10 where 1-“not at all likely” and 10 – “extremely likely”. The remaining non-participants who purchased a room air conditioner were asked how likely they would be to purchase an Energy Star® model through the program the next time they need one. Figure 9-17 illustrates that the majority of non-participants would be “extremely likely” to participate in the future. This indicates that lack of awareness was likely a strong driver in non-participation and, consequently, in decisions to purchase units that were not Energy Star® rated.

**Figure 9-17: Non-Participants Likelihood of Enrolling Future Eligible Energy Star® Room Air Conditioner Purchases in Program (n=32)**



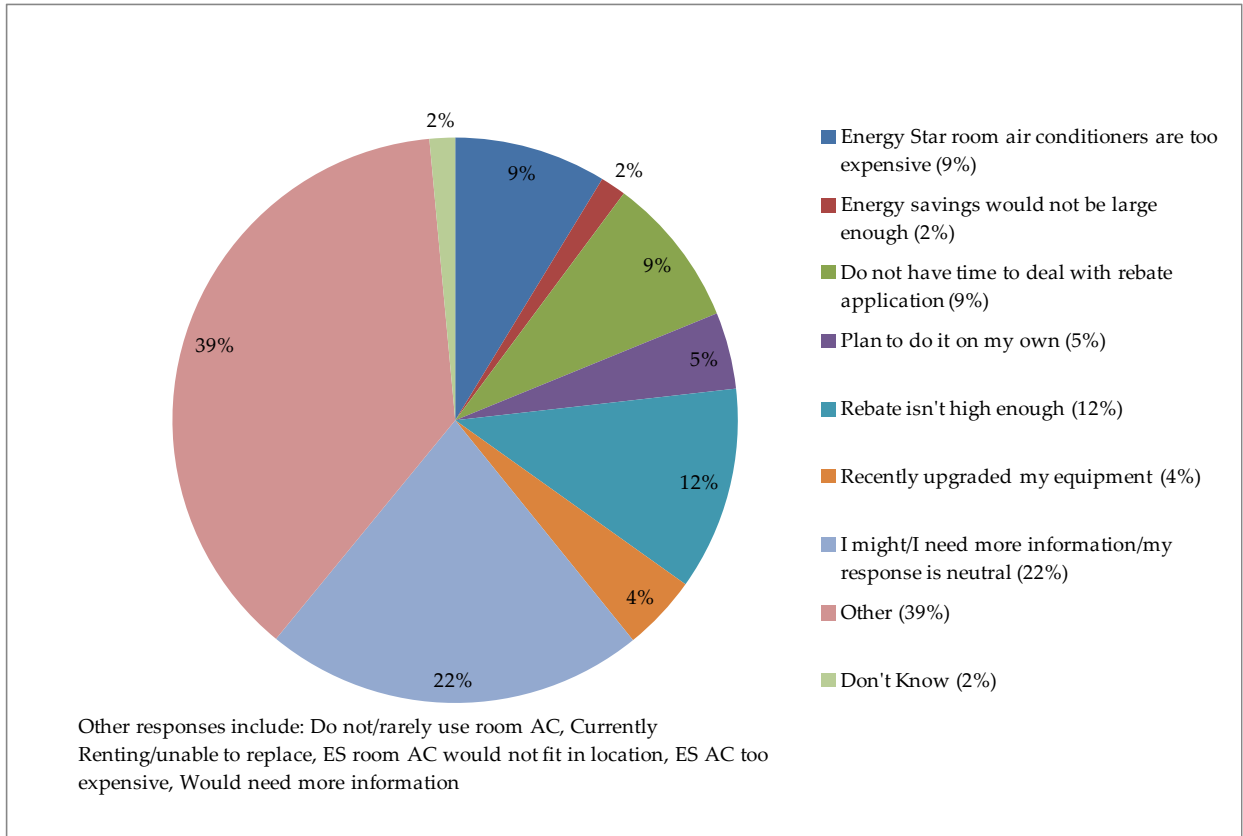
Five individuals were identified as not being likely to participate in the program in the future (likelihood<8). These individuals were then asked to name the circumstances under which they would be likely to participate in the program in the future, with the following results:

- Two of these individuals indicated that there were no circumstances under which they would participate.
- One individual indicated that they would participate if the program period were longer.
- One individual indicated that they may participate if their current equipment breaks.
- One individual indicated that the equipment offered through the program would determine whether or not they participated.

Non-participants who did not purchase a room air conditioner during the program period (n=176) were asked on a scale of 1-10, where 1-represented “not at all likely” and 10 – “extremely likely”, how likely they would be to purchase an Energy Star® room air conditioner when it comes time to buy their next unit if a rebate of \$30 were available. The average (mean) likelihood was reported to be 7.61.

Individuals who indicated that they would not be likely to purchase an Energy Star® room air conditioner when they needed one (likelihood < 7) (n=50) were asked to specify why they would not take advantage of the rebate. Figure 9-18 illustrates that the main reasons for not purchasing an Energy Star® air conditioner in the future is lack of information, level of rebate is not high enough, and that Energy Star® air conditioners are too expensive.

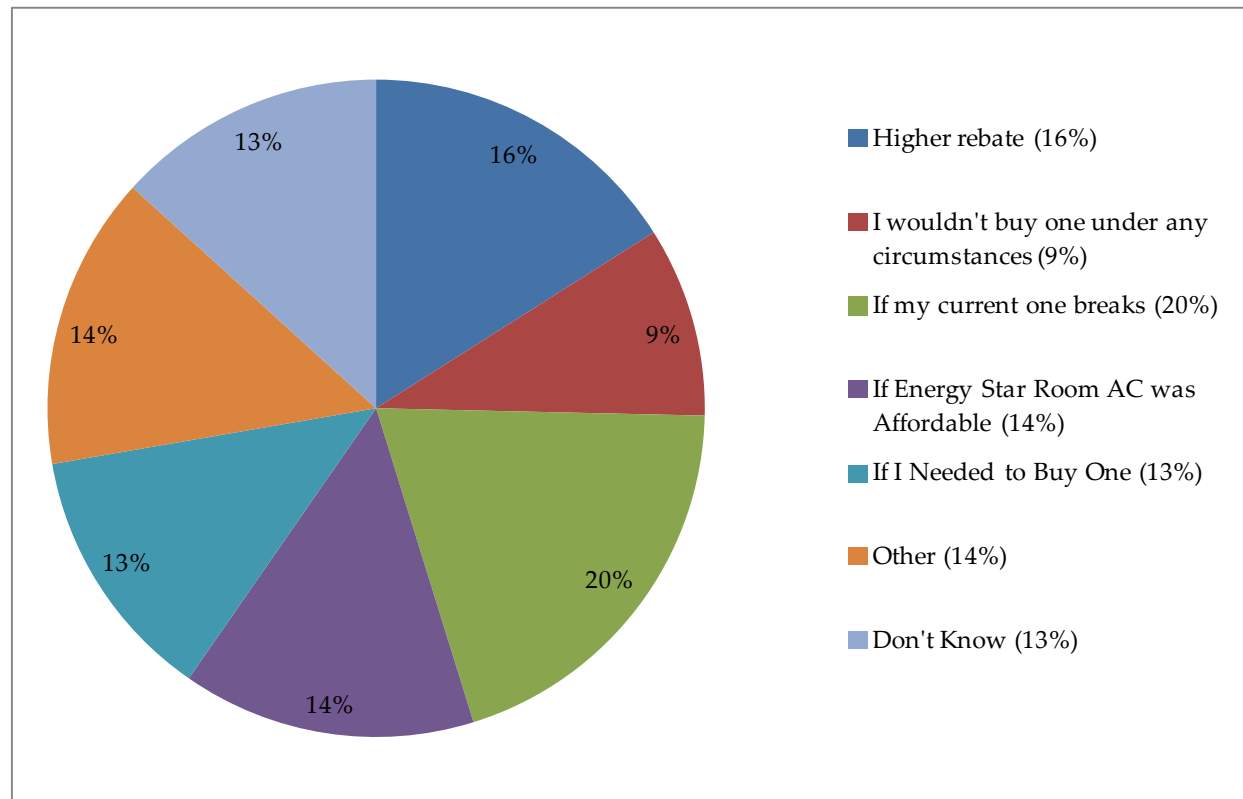
**Figure 9-18: Non-Participants Reasons for Not Purchasing Energy Star® Room Air Conditioner (n=50)**



Non-participants who indicated they would not be very likely to participate in the future (<8) were asked to indicate the circumstances under which they would be very likely to participate in the future. As shown in Figure 9-19, 20% of respondents indicated that they would participate if their current room air conditioner breaks, 16% indicated they would participate if a higher rebate were offered and the remaining individuals did not know what under circumstances they would participate or indicated another circumstance.



**Figure 9-19: Circumstances under Which Non-Participants would be Very Likely to Participate (n=56)**



## 9.2 Retailer Marketing

Contacts from the head offices of two of the participating retailers, PC Richards and Lowes, and two PC Richards store managers were interviewed to obtain program feedback relating to various areas including marketing and customer acquisition. All retailers indicated that the main barrier in motivating customers to purchase high efficiency equipment is the price point. They also indicated that the incentive level offered by the program is appropriate compared to the incremental cost of an Energy Star® unit and that the incentive is effective in driving customers toward the Energy Star® units.

Very little sales staff training was reported by retailers. However, most indicated that the program delivery does not require a high level of training as a result of being a mail in rebate and as a result of being very easy to implement. One retailer indicated that additional training by utility/implementer representatives would help motivate staff to promote the program. Both head offices and store managers indicated that their staff are not necessarily directing customers toward the program website<sup>14</sup>.

<sup>14</sup> Con Edison reports that in order to promote the program at a store level, participating retailers were provided POP sales materials in advance of the program and Honeywell representatives visited retailers to explain the program.

While some customers will access the website to complete the rebate form, it would be beneficial to have staff suggesting that customers visit the website as it contains information relating to other Con Edison programs which would provide an opportunity for enhanced program awareness and cross promotion of programs.

All retailers were satisfied with the Point of Purchase (POP) sales material provided by Con Edison. One store manager indicated that additional POP material may help raise program awareness. One store manager also indicated that more lead time for program set-up would be beneficial. In some cases, retailers noted that the POP arrived at the stores “late<sup>15</sup>”.

Retailers indicated that the majority of customers are not aware of the program before entering the store. They also indicated that those who are aware of the program became aware through flyers or materials provided by the retailers. It was suggested that more mass marketing for the program may help drive customers into the stores to participate. This suggestion was being addressed by television and print advertisements during the 2011 program year.

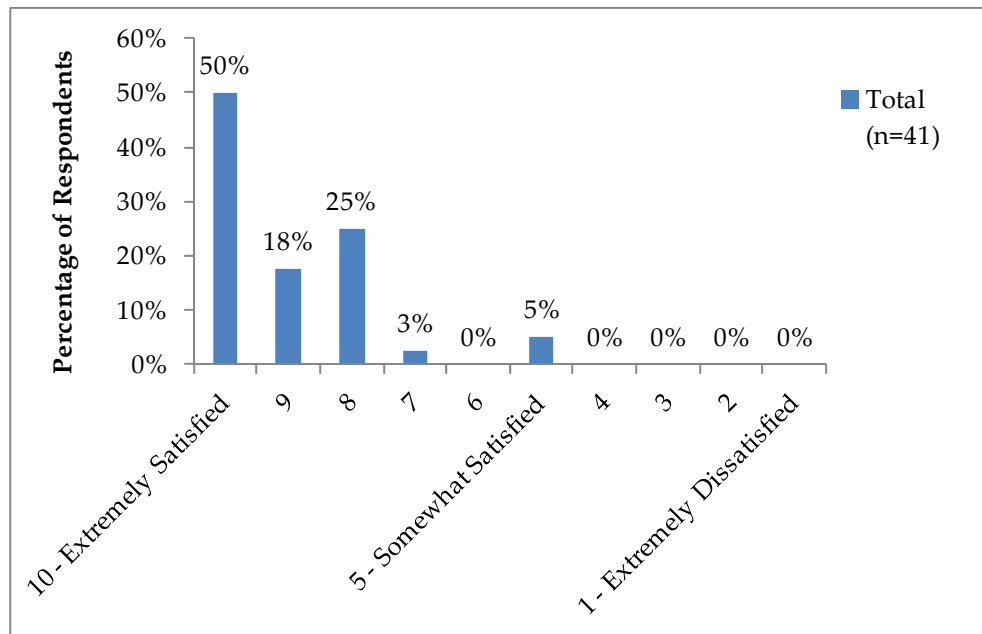
### 9.3 Program Website

Only 21% of respondents indicated that they had visited the Con Edison Energy Star® room air conditioner rebate program website. Figure 9-20 illustrates that 93% of these individuals rated their satisfaction with the website between 8 and 10, indicating a high level of satisfaction with the website.

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<sup>15</sup> Honeywell has indicated it had a policy in place during the program through which retailers were able to order POP with a 1 day turn around time. The initial POP materials were distributed the weekend before the program began. While some retailers want materials further in advance, Con Edison has indicated that some retailers reported issues with storage space and knowing when to put up POP materials when they arrive too far in advance.

**Figure 9-20: Participant Satisfaction with Program Website (n=41)**



Con Edison has multiple channels through which RAC program information is provided to customers. These include:

- Retailer involvement and, for 2011, promotional collateral (window clings, sidekicks)
- Bill inserts
- Direct mail
- Program website and linkages to other related sites/pages
- Email campaigns
- Local mailers (ValPak and Red Plum)

It should be noted that for 2011, Con Edison and Honeywell decided to enhance program visibility through the use of retailer collateral, as noted above.

As key program information sharing and enrollment tool, the program's website (and linkage to other websites) is of great importance to the program's customer positioning, understanding, enrollment and satisfaction. Navigant conducted a review of the program's website and assessed it from a number of perspectives including:

- Structure and Navigation – Is the website well laid out (i.e. intuitive structure, easy to navigate, etc.)?
- Functionality – Does the website load quickly and run smoothly?
- Visual Design – Does the website's visual design connect the target audience to the underlying message or information being presented?

- Consistency – Do the various pages of the website and any associated links match and conform to a common visual and informational theme?
- Content – Is the presented information relevant, easy to understand and consistent with that presented elsewhere?
- Interactivity – Does the website engage visitors and provide them with adequate tools to locate the information they are looking for or a means to request that information (e.g. searches, request forms, database queries, online chat).
- Customer Relations – Does the website provide the necessary contact information (i.e. address, customer help-line, email)
- Search – Is the website easy to find from various browsers (Google Yahoo! Bing Ask AOL Search) using various key words?

Con Edison provides the information necessary to engage customers and make it easy for customers to participate in the RAC program. The website content is generally easy to navigate and is consistent in look and feel. A welcome addition for 2011 is the provision of online rebate submission capabilities. Table 9-1 provides a summary of our findings.

**Table 9-1. Summary of findings for Con Edison's RAC program related websites**

<b>Web addresses reviewed:</b> <a href="http://www.coned.com/Default.asp">http://www.coned.com/Default.asp</a> <a href="http://www.coned.com/energyefficiency/">http://www.coned.com/energyefficiency/</a> <a href="http://www.coned.com/energyefficiency/residential.asp">http://www.coned.com/energyefficiency/residential.asp</a> <a href="http://www.coned.com/energyefficiency/energystar.asp">http://www.coned.com/energyefficiency/energystar.asp</a> <a href="http://www.coned.com/thepowerofgreen/index.asp">http://www.coned.com/thepowerofgreen/index.asp</a> <a href="https://www.conedhvacrebates.com/window-rebate-online-app.aspx">https://www.conedhvacrebates.com/window-rebate-online-app.aspx</a> <b>Date review conducted: June 17, 2011</b>		
<b>Assessment Category</b>	<b>Findings</b>	<b>Overall Assessment (Poor, Acceptable, Good, Excellent)</b>
Overall Structure and Navigation	<ul style="list-style-type: none"> <li>Unintuitive navigation between Con Edison's <a href="http://www.coned.com/thepowerofgreen/residential.asp#">http://www.coned.com/thepowerofgreen/residential.asp#</a> and <a href="http://www.coned.com/thepowerofgreen">http://www.coned.com/thepowerofgreen</a> pages and the RAC rebate page</li> <li>Good use of images and prominent linkages to residential programs on <a href="http://www.coned.com/energyefficiency/">http://www.coned.com/energyefficiency/</a></li> </ul>	Acceptable/Good
Structure and Navigation (RAC rebate related pages)	<ul style="list-style-type: none"> <li>Good links between various pages and easy access to rebate forms and associated information.</li> <li>Text and graphics support intuitive navigation</li> </ul>	Good
Functionality	<ul style="list-style-type: none"> <li>Various pages load quickly and cleanly.</li> </ul>	Good
Visual Design	<ul style="list-style-type: none"> <li>Homepage uses graphics to assist user in locating relevant information, e.g. "Green Team" logo and moniker used to direct users to energy efficiency programs.</li> <li>Good use of interactive tools – videos and Flash</li> </ul>	Excellent
Consistency	<ul style="list-style-type: none"> <li>Consistent use of graphics, colors, language and navigation.</li> </ul>	Good
Content	<ul style="list-style-type: none"> <li>Adequate information provided to determine eligibility and support participation – consider noting program dates more prominently (to lower application rejection rates)</li> <li>Online rebate submission functionality is a good addition for 2011.</li> </ul>	Good
Interactivity	<ul style="list-style-type: none"> <li>Con Edison's online audit tool is very interactive and easy to use.</li> <li>Use of video is engaging</li> <li>RAC specific pages are not especially interactive, but they do not need to be.</li> </ul>	Good
Customer Relations	A number is provided for follow-up inquiries on all program related rebate documentation and is easy to locate on the associated web pages. An online query form is also available.	Excellent
Search	Program information was easy to locate via all web	Excellent

	browsers.	
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## 10. Program Delivery

This section of the report provides participant and non-participant feedback on the delivery of the RAC program. Bottlenecks in participation and opportunities for program streamlining have been investigated and are presented herein.

Con Edison designed its RAC program for rapid deployment of energy efficiency measures to existing residential customers. The program is open to customers in residential dwellings with one to four units as well as to customers who reside in a multi-family dwelling but who are responsible for their SBC charge (i.e., they pay the SBC charge on their electric utility bill). The program provides cash rebates to customers for the purchase of an Energy Star®-rated room air conditioner.

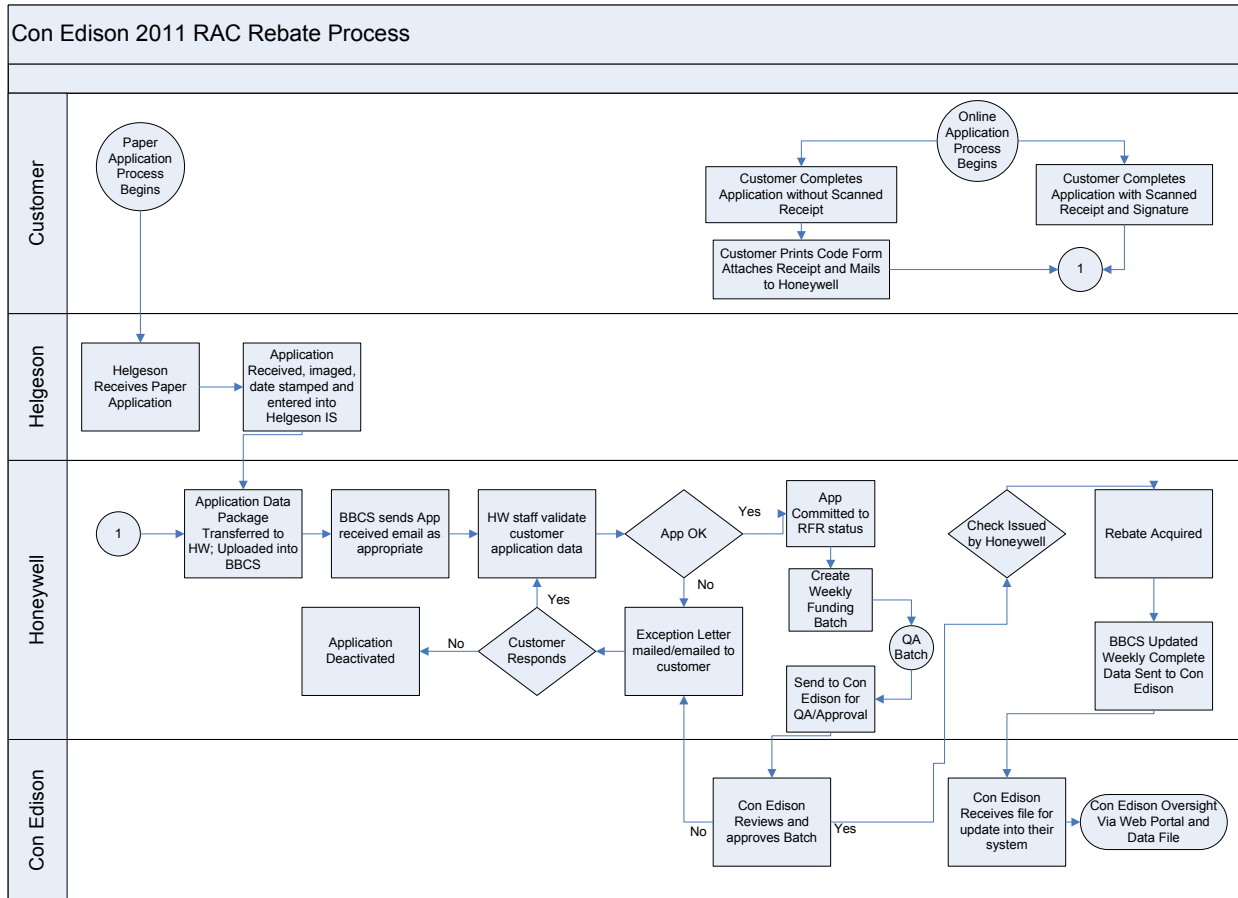
The program benefits from manufacturer and retailer awareness, but since the rebate process is consumer driven, consumer awareness is more critical – particularly since Energy Star® rated room air conditioners are already widely available.

The Program requires that purchasers of a qualifying room AC unit mail in or apply online and submit a rebate form and proof of purchase to receive their \$30 (per unit) rebate.

Con Edison has contracted with Honeywell to implement the program.

Figure 10-1 summarizes the program process flow for Con Edison's RAC program, showing the customer intake and flow through the program participation process.

**Figure 10-1: Con Edison RAC Program Process Flow**



The following sections provide opinions on the RAC program delivery from the perspective of the program stakeholders, specifically participating and non-participating customers and retailers. Section 10.1 addresses the retailer's feedback on program processes, while Section 10.2 addresses the customer feedback.

Key findings from Section 10 include the following:

- Most retailers suggest that a longer lead time for program awareness (6 months) would be helpful in planning.
- Participants were satisfied with the level of effort required to participate in the program and very few indicated any difficulties completing the rebate application form.

### 10.1 Retailer Program Feedback

Retailer feedback was collected relating to program delivery. While the interviewed retailers were generally satisfied with the program, one retailer indicated that a direct POP incentive is preferred to a mail in rebate as it is easier to track and easier for the customer to obtain.

Retailers were asked to indicate whether they provided additional shelf space for the Energy Star® room air conditioners. The retailers contacted stated that Energy Star® room air conditioners received prominent placement in stores but indicated that this was not necessarily a result of the program (rather due to seasonal demand for these units). They also indicated that no additional stock was ordered as a result of the program.

Both of the head office retailer contacts interviewed indicated that additional notification of the program would be beneficial. One retailer indicated that planning occurs approximately 6 months in advance and this type of lead time would be beneficial. Due to a late program approval in 2010 Con Edison and Honeywell were not able to proactively pre-market the program to the buying groups and/or big box retailers with significant advance notice. Similarly, the late start hampered Honeywell from visiting stores and educating retailer sales staff prior to the first heat wave of Memorial Day weekend. These issues were addressed during the 2011 program implementation.

One retailer indicated that they have the capability to print out the rebate form along with the receipt. This would allow the retailer store location of purchase to also be tracked which would be helpful for retailers. It may also provide customers a touch-point to the program which may reduce the likelihood of forgetting to apply for the rebate or making data entry errors as they complete the form<sup>16</sup>.

### 10.2 Program Process

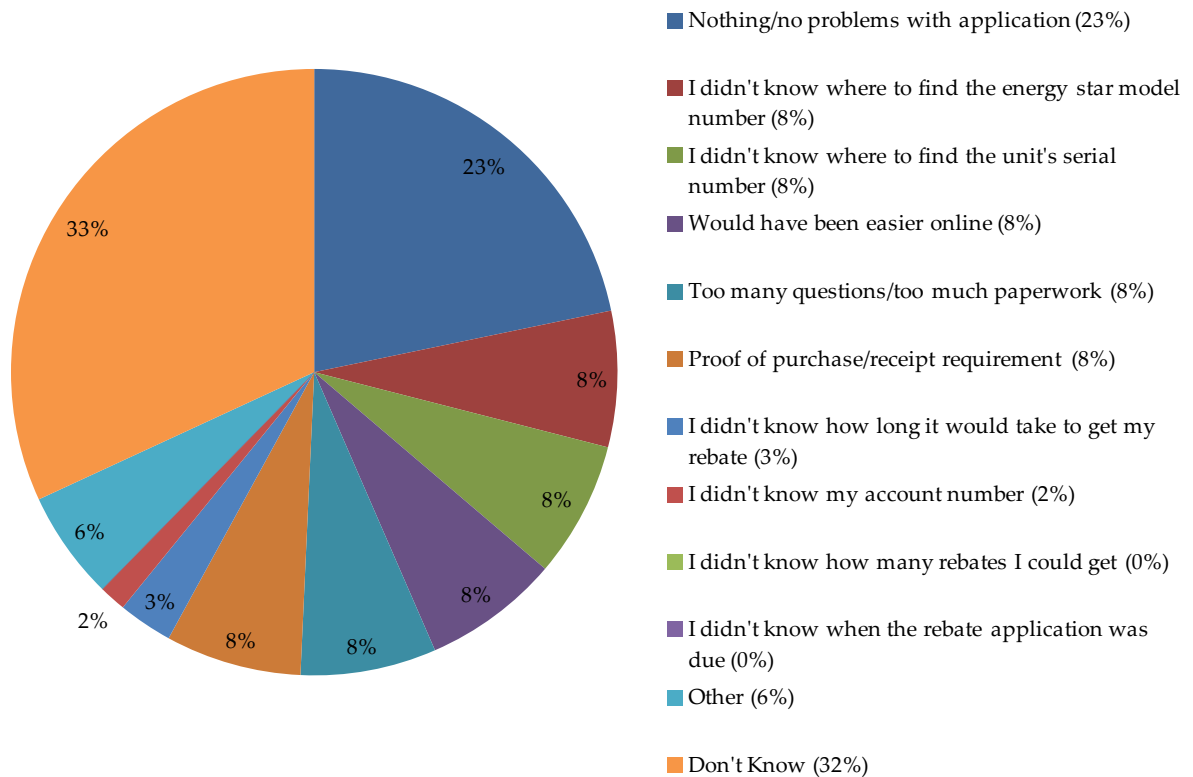
In order to determine ease of participating in the program, participants were asked how easy it was to complete the rebate application form, on a scale of 1-10, where “10” means “extremely easy” and “1” means “extremely difficult”. The average (mean) response was 9.21 indicating that the majority of participants felt it was extremely easy to complete. Participants who did not select 10 were asked what was unclear or complicated about the rebate application form. Figure 10-2 illustrates that the majority of people either indicated that there were no problems with the application or that they did not know what the problem was. This indicates that completion of the rebate application was likely not a barrier to participation.

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<sup>16</sup> Con Edison reports it has added a process through which store location is tracked and application forms are now available online.



**Figure 10-2: Participant Perceptions Regarding Difficulties with Completion of RAC Program Rebate Application Form (n=66)**



A second aspect of program delivery is interactions with Con Edison staff. Only 7.8% of individuals indicated contacting Con Edison staff during participation in the program. Of those who did contact Con Edison the average (mean) level of satisfaction with their contact, on a scale of 1-10 where '10' is "extremely satisfied" and '1' is "not at all satisfied", was 9.5. While very few individuals contacted the utility during their participation, those who did were satisfied with their interaction.

Just over 21% of participants indicated that they had visited the Con Edison RAC program website. On average (mean), these individuals rated their satisfaction with the website a 9.0 on a scale of 1-10.

A major aspect of program delivery for the RAC program was in-store program awareness/delivery. As shown in Table 10-1, 53% of the surveyed population indicated that sales staff helped identify which units were Energy Star® qualified. Twenty-eight percent of these individuals indicated that the salesperson showed them only air conditioners that qualified for the rebate.

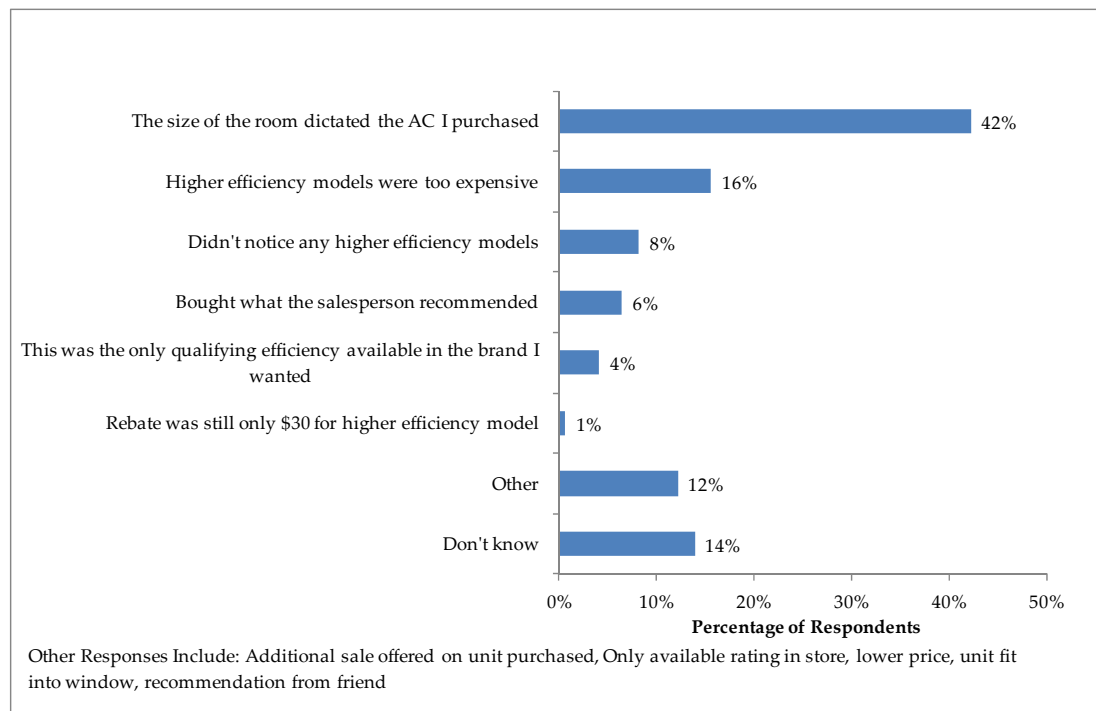
Individuals were also able to participate by purchasing their room air conditioner online. Half of the 8 individuals who made their purchase online indicated that it was easy to determine which units were Energy Star® qualified. While individuals who purchased their units online were able to complete the form and apply for the rebate, the program website was not designed to allow customers to purchase an air conditioner unit directly.

**Table 10-1: Did Salesperson Help Identify Which Air Conditioners Were Energy Star® Qualified?**

	Total (n=188)
Yes	53%
No	40%
Don't know	7%

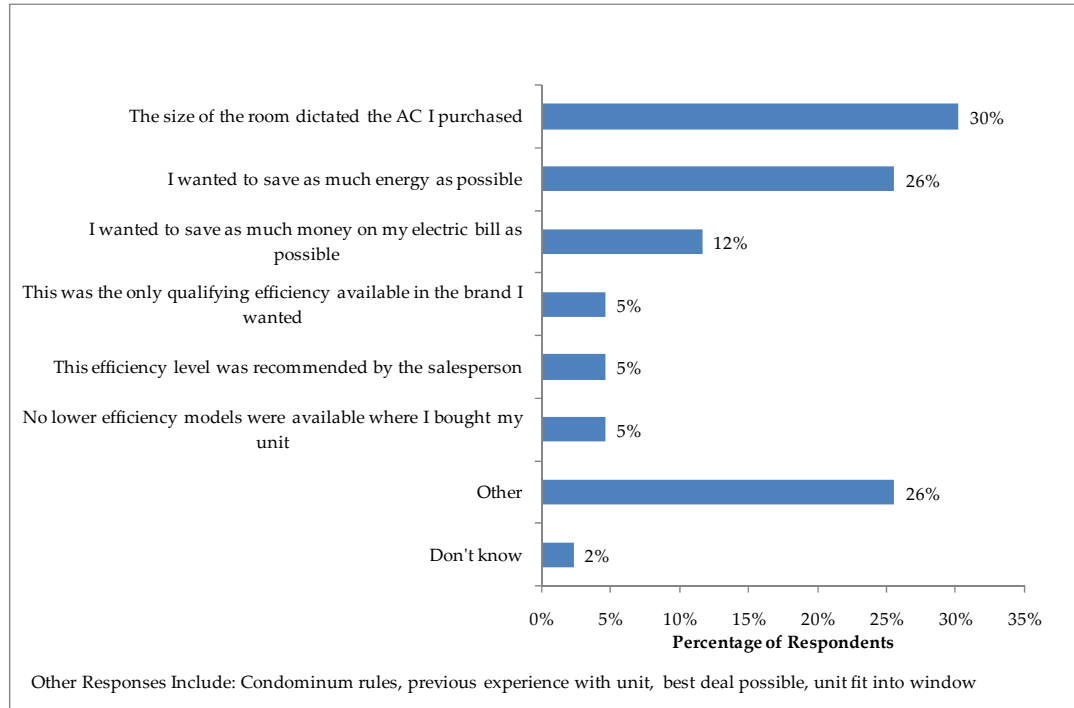
Participants were able to purchase a room air conditioner with the highest EER, 12, or one with a lower EER. Individuals who purchased a model with an EER<12 were asked to indicate why they selected this unit over a unit with an EER=12 while individuals who purchased a unit with an EER=12 were asked why they selected this over the less efficient units. Figure 10-3 and Figure 10-4 indicates that the size of the room strongly affects the unit purchased. Individuals who purchased units with an EER<12 indicated that higher efficiency models were too expensive and individuals who purchased units with an EER=12 indicated that they wanted to save as much energy as possible.

**Figure 10-3: Reason for Purchasing Unit with EER<12 (n=172)**



Note: The question in Figure 10-3 was asked for each EER<12 room air conditioner purchased (n = 172) rather than of each participant (n = 150). Some customers purchased multiple room air conditioners.

**Figure 10-4: Reason for Purchasing Unit with EER=12 (n=43)**

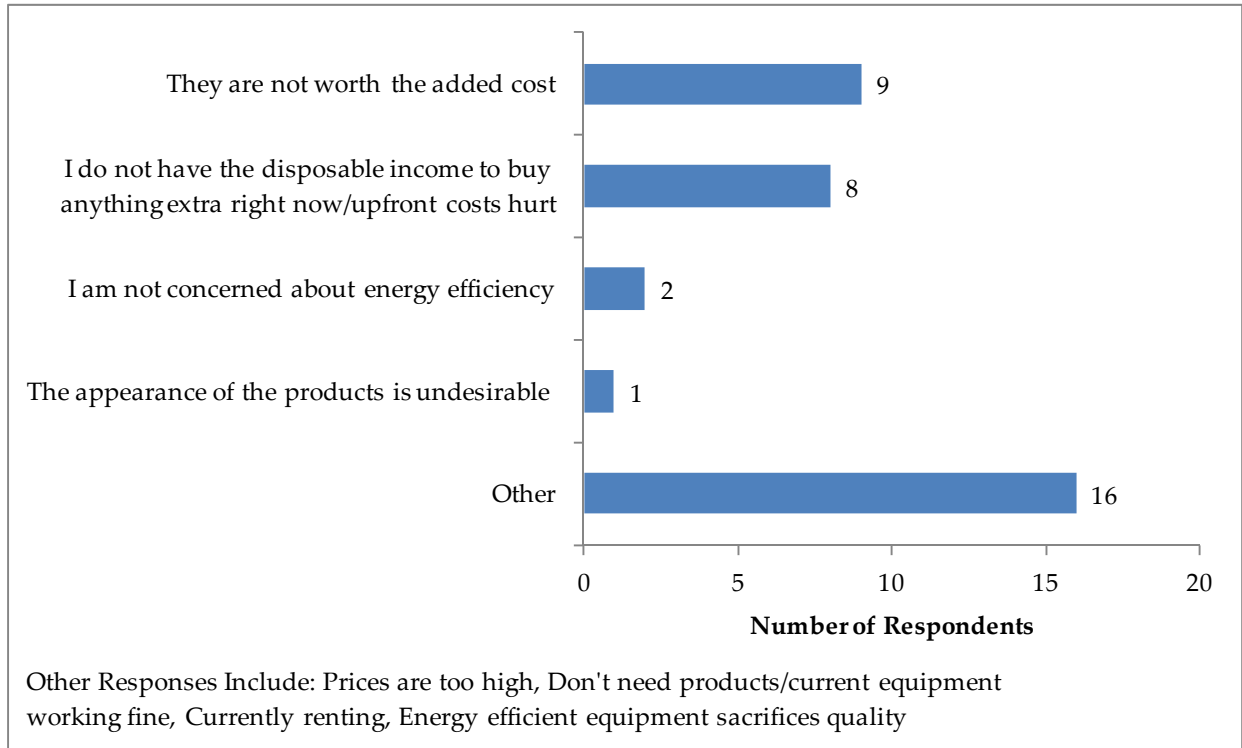


Note: The question in Figure 10-4 was asked for each EER 12 room air conditioner purchased (n = 43) rather than of each participant (n = 42). One customer purchased multiple room air conditioners.

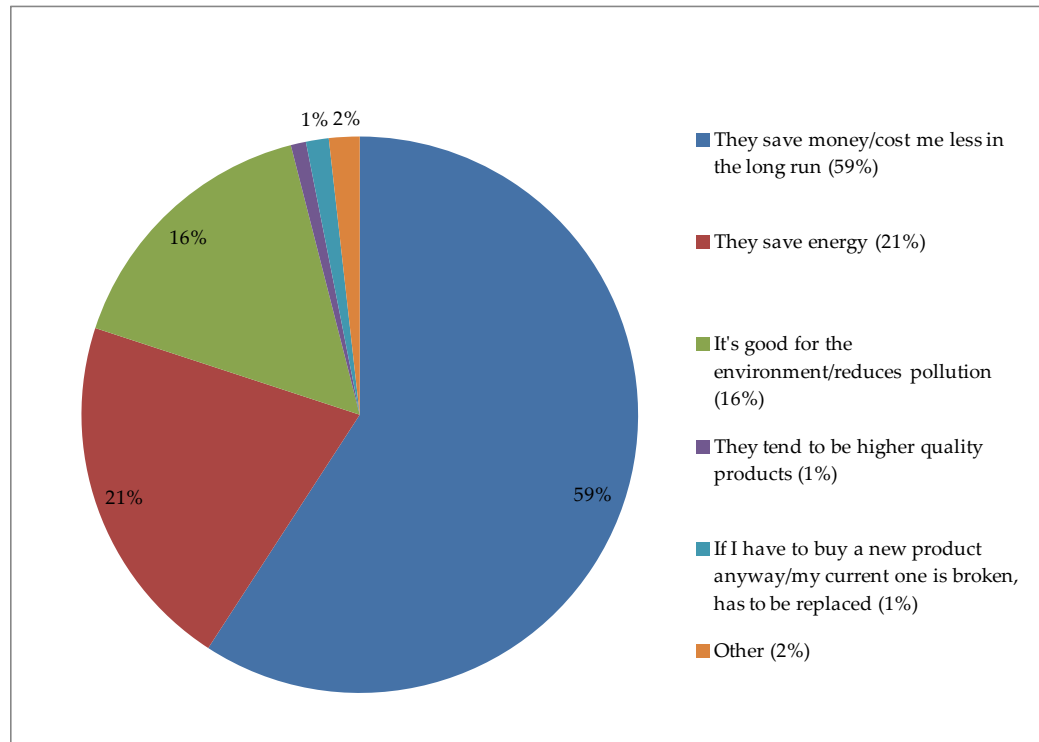
Non-participants were asked to identify how important the availability of rebates was in their decision to purchase Energy Star® air conditioners. Only 45% of non-participants rated the importance of rebates an 8 – 10 on a scale of 1 – 10 where 1- “Not at all important” and 10 – “Extremely important”. This indicates that while some non-participants would be influenced to participate if they had known about the rebate there are still many who would not be influenced by the rebate.

Eighty percent of non-participants indicated that they regularly purchase energy efficient products, 6% indicate that they sometimes purchase energy efficient products and 13% indicated that they do not regularly purchase energy efficient products. Those who do not regularly purchase energy efficient products do not do so because they feel that the more efficient units are not worth the added cost or that they do not have the disposable income, as shown below in Figure 10-5. Non-participants who do purchase energy efficient products do so in order to save money or to save energy as seen in Figure 10-6.

**Figure 10-5: Non-Participant Reasons for Not Purchasing Energy Efficient Products (n=27)**



**Figure 10-6: Non-Participants Reasons for Purchasing Energy Efficient Products (n=167)**



## 11. Satisfaction with the Program

In order to assess program satisfaction, participants and non-participants were asked several questions relating to their perceptions of the program. This section provides an assessment of customer satisfaction with the program including the timing of rebate payments and the likelihood of recommending the program to others.

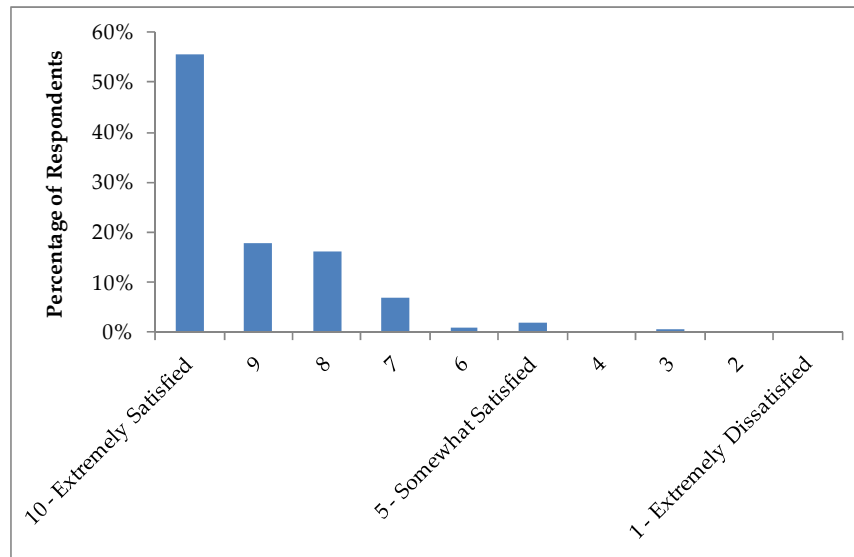
Key findings from Section 11 include the following:

- Participants indicated a high level of satisfaction with the room AC unit they purchased through the program.
- Participants' satisfaction with the timing of receiving their rebate was relatively high, an average of 8.2 on a 10 point scale.
- A high percentage of participants (77%) indicated that they are extremely likely to recommend the program to others in the future and 56% of individuals already have recommended the program to others.
- Overall participant satisfaction with the program was very high with an average rating of 8.99 on a 10 point scale.

## Participant Satisfaction

Participants' satisfaction with their Energy Star® room air conditioner was very high. Figure 11-1 illustrates that 89% of individuals rated their satisfaction with their room AC unit between 8 and 10. The average (mean) satisfaction was reported as 9.1.

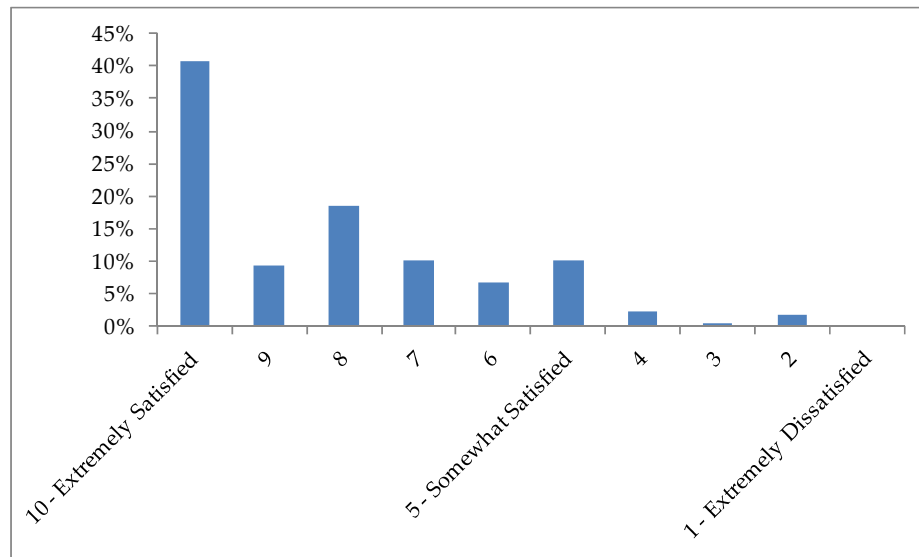
**Figure 11-1: RAC Program Participants Satisfaction with Energy Star® Room AC (n=192)**



Satisfaction with the rebate amount was also high with an average satisfaction rating of 8.2.

The average time between the application date and the rebate payment date was initially 8 weeks. When asked to indicate their satisfaction with this timing the majority of participants illustrated a high level of satisfaction as shown in Figure 11-2 below. The average satisfaction was reported to be 8.2.

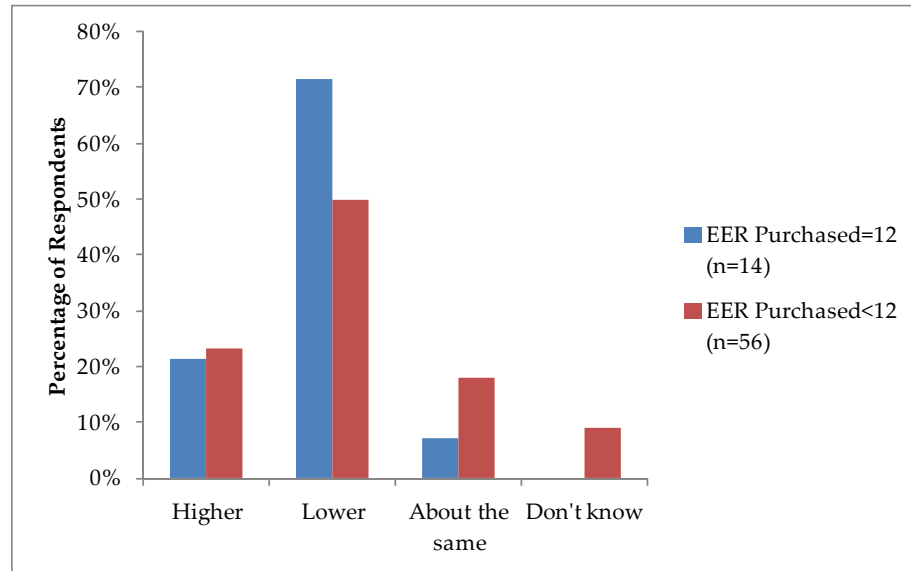
**Figure 11-2: RAC Program Participant Satisfaction with Timing of Rebate (n=192)**



One expectation of the program is that using higher efficiency room AC units will result in utility bill savings. Thirty-eight percent of participants indicated that they noticed a difference in their monthly bill after installing their Energy Star® air conditioner. Of those who indicated that they noticed a difference in their monthly bill, the majority indicated that their bill was lower than they expected. This is likely a result of the fact that these units are more efficient and consume less. Those who indicated that their bill went up reported an average overall program satisfaction of 9.10 which is not statistically different from the overall satisfaction of 8.95 reported by the entire sample.

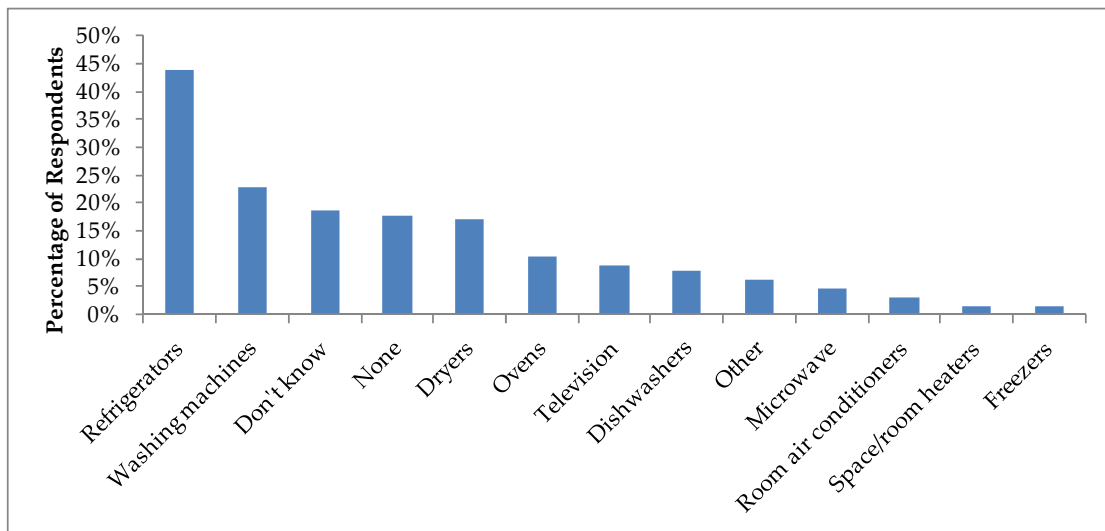


**Figure 11-3: Post RAC Unit Installation, Was Monthly Electricity Bill Higher/Lower than Participant Expected?**



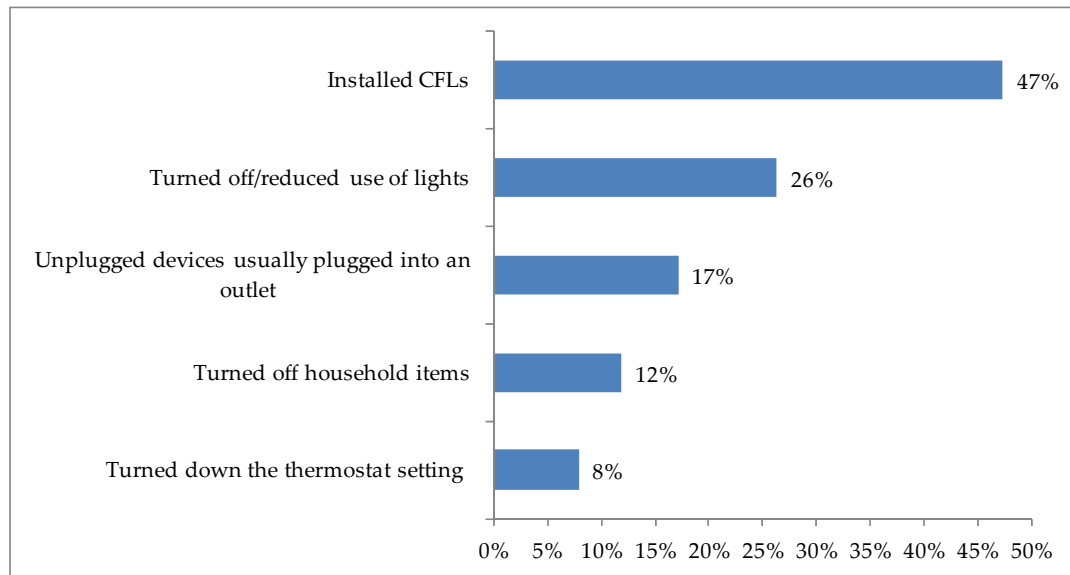
The type of equipment rebated through the program will also affect participant satisfaction. Similar to Con Edison's Res HVAC participants, Figure 11-4 indicates that participants in the RAC program suggest that refrigerators, washing machines and dryers should also be rebated through utility programs.

**Figure 11-4: Suggested Additional Program Measures (n=192)**



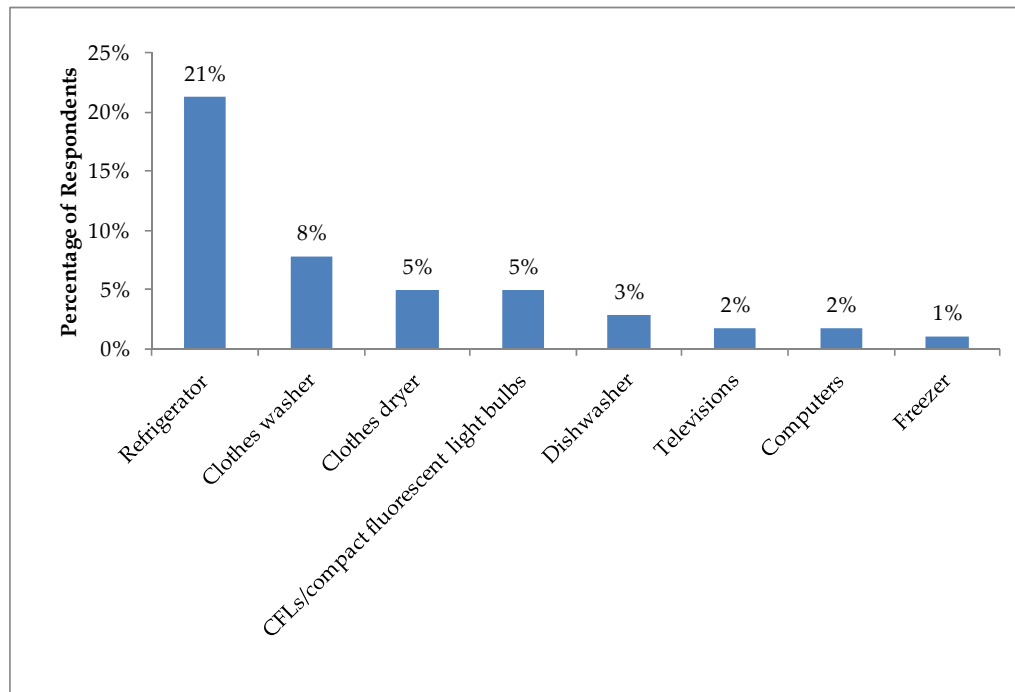
A significant proportion of participants (40%) also indicated that they have taken additional energy savings actions since participating in the program. The top energy savings actions reported are shown below in Figure 11-5.

**Figure 11-5: Top 5 Additional Energy Savings Actions Participants Have Taken Since Participating in RAC Program (n=76)**



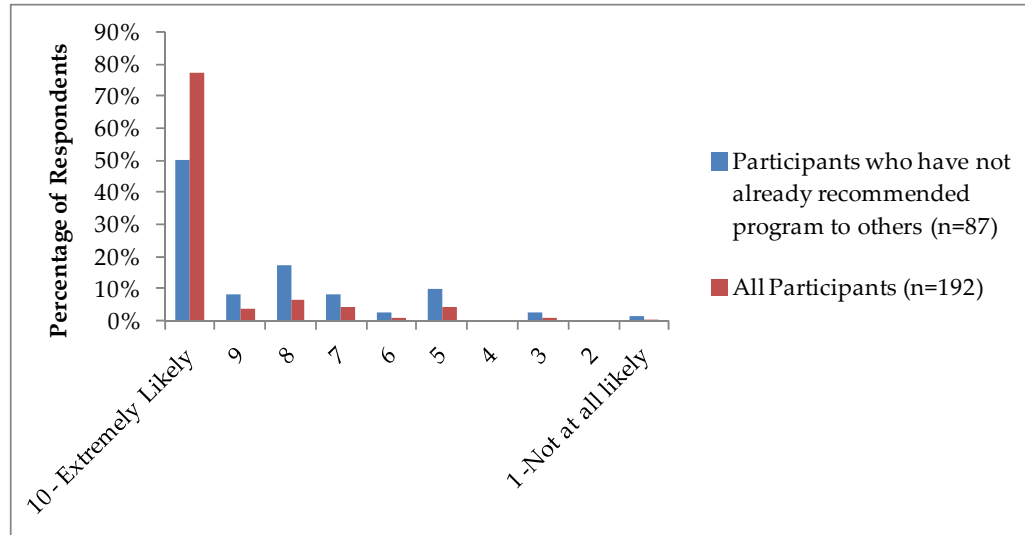
Individuals who did not participate in the program were asked to indicate whether they had any suggestions for additional equipment. Over half of the non-participating respondents (52%) indicated that they had no suggestions for additional equipment. Figure 11-6 illustrates that among those who did make suggestions, refrigerators, clothes washers and clothes dryer were most commonly suggested.

**Figure 11-6: Non-Participant Suggested Additional Program Measures (n=209)**



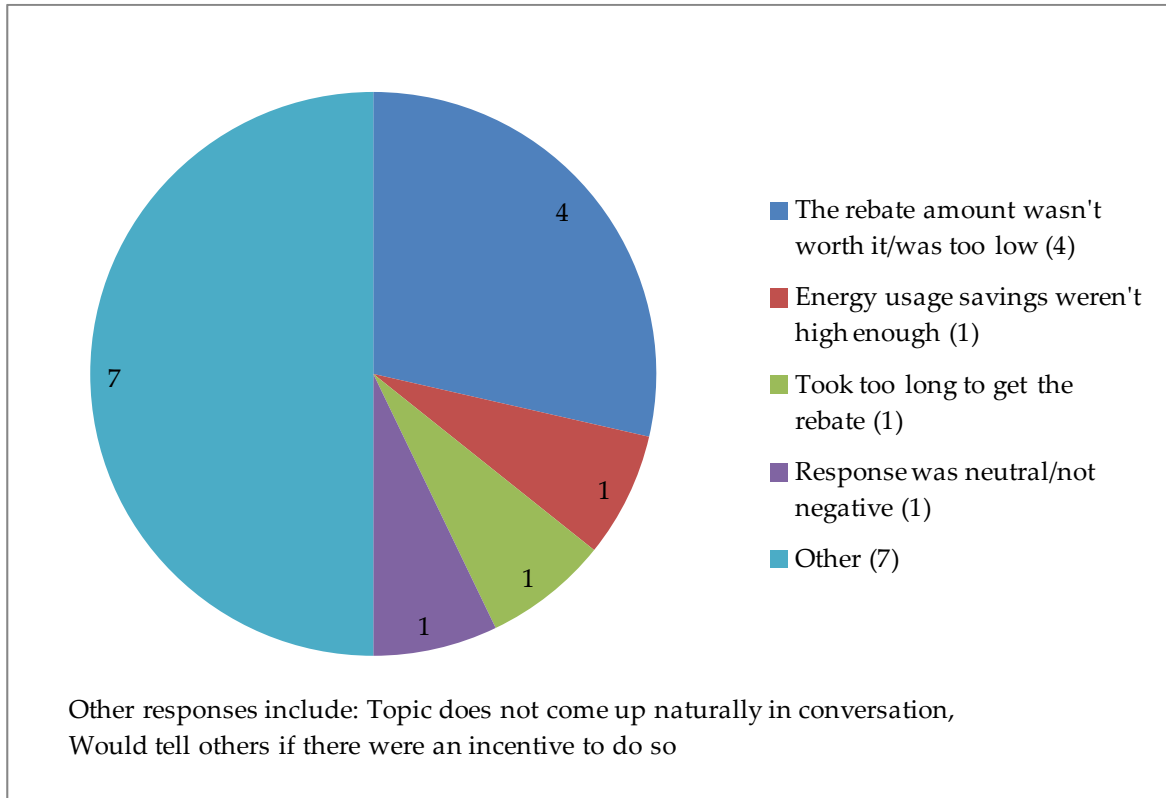
Participant satisfaction can also be gauged by determining how likely participants are to recommend the program to friends, neighbors or colleagues. More than half (56%) of participants indicated that they have already recommended the program to others. Further, Figure 11-7 demonstrates that half of participants who have not already recommended the program to others are extremely likely to do so in the future. Of the total sample, 77% of program participants are extremely likely to recommend the program to others in the future.

**Figure 11-7: Likelihood of Recommending RAC Program to Others in Future**



Individuals who indicated that they would not be likely to recommend the program to others in the future (Likelihood <7) were asked to identify the reason they would not make the recommendation. Only 13 surveyed participants fell into this category. As seen in Figure 11-8, the main reason given by these participants was that the rebate amount was too low.

**Figure 11-8: Reasons for Not Recommending RAC Program to Others in Future (n=13)**



Overall satisfaction with the program was also high. Table 11-1 indicates that the average (mean) program satisfaction was 8.99. There was little variation between satisfaction reported by single family and multifamily participants and between participants who purchased a room air conditioner with an EER of 12 and those who purchased a room air conditioner with an EER < 12.

**Table 11-1: Overall RAC Program Satisfaction**

	Mean Program Satisfaction
Total Sample (n=192)	8.99
Single Family (n=91)	9.08
Multi-Family (n=68)	8.85
EER=12 (n=42)	8.90
EER<12 (n=151)	8.99

Participating retailers were also asked questions relating to their satisfaction with the program. All retailers indicated that delivery of the program had been a positive experience that allowed them to offer customers the best products at a better price.

## **12. Interactions with Other Programs**

Several programs are available to customers in the same region and customer class as the Con Edison RAC program. Participating and non-participating customers were asked if they knew about these other programs and if they have participated in them. In some cases these programs are complimentary to the Con Edison program, but some programs are focused on the same measures which causes overlap between the programs. Sections 12.1 and 12.2 discuss participant and non-participant awareness of other efficiency programs, respectively.

A key finding of Section 12 is that participant awareness of other programs which are offered through Con Edison is very low. This may improve during 2011 due to an increase in cross promotion of Con Edison programs<sup>17</sup>.

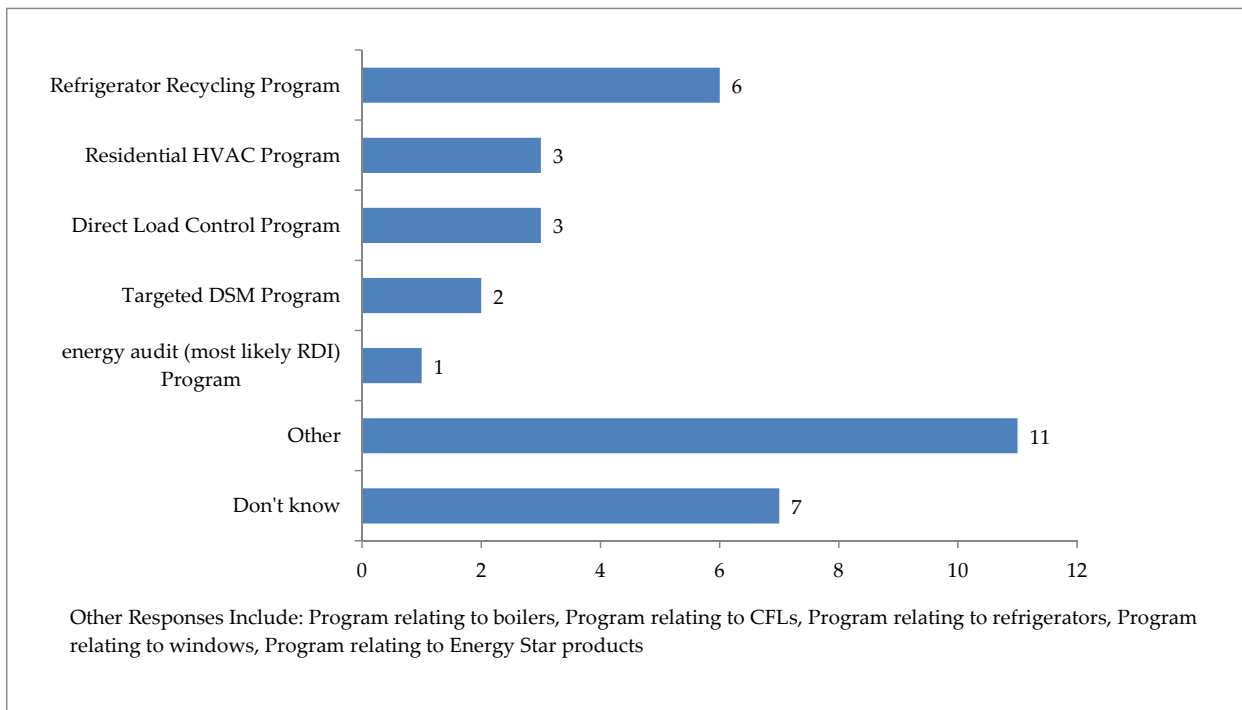
### **12.1 Participant Program Awareness**

Only 17% of the surveyed participants recall hearing about other energy efficiency programs offered by Con Edison. This very low awareness during 2010 indicated that Con Edison would benefit from increased promotional efforts, including cross promoting their programs to customers participating in

<sup>17</sup> Con Edison reports that its marketing group conducted customer awareness surveys a while after the participant surveys that were conducted for this process evaluation. These later surveys reportedly found that program awareness did indeed improve.

their other energy efficiency programs. Those who recalled hearing about other programs were asked to identify which programs they had heard of. As Figure 12-1 indicates, the most commonly recalled program was the refrigerator recycling program. It should be noted that a significant proportion of respondents, 22%, did not recall which program(s) they had heard of<sup>18</sup>.

**Figure 12-1: Other Con Edison Programs that Participants Have Heard Of (n=32)**



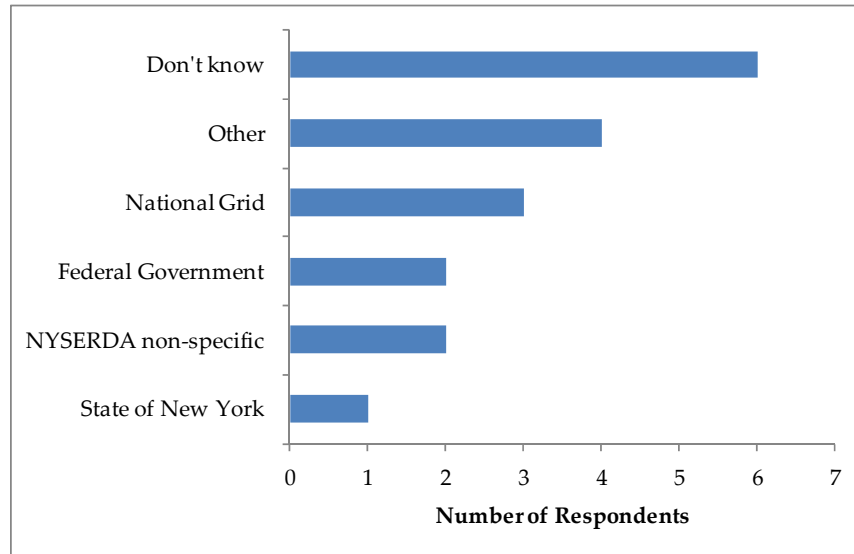
Of the 32 participants who had heard of other Con Edison energy efficiency programs, only 7 individuals reported participating in one. Three participants indicated having participated in the Refrigerator Recycling program, 2 participants reported participating in the Targeted DSM program and 1 participant reported participating in an energy audit (most likely Residential Direct Install) program.

Participants were also asked to identify if they had heard of any energy efficiency programs not offered by Con Edison. At the time of the survey, awareness of these programs was also very low with only 10% (n=19) of participants reporting awareness. Figure 12-2 shows that many of these people are not aware of which non-utility energy efficiency programs they have heard of. Four individuals indicated that they had participated in one of these non Con Edison energy efficiency programs. Two individuals indicated

<sup>18</sup> As of now, the check which participants receive for participating in the program cross-promotes the other Con Edison residential programs. Also, participants who have provided an e-mail address also receive a satisfaction survey which promotes the other programs.

participating in the NYSEERDA home appliance rebate program and 2 individuals participated in some other program.

**Figure 12-2: Non Con Edison Programs that Participants Have Heard Of (n=19)**



The NYSEERDA home appliance rebate program and the Con Edison RAC program overlap. While no participants in the Con Edison program identified that they had also received a rebate for their Energy Star® room air conditioner through the NYSEERDA program, 11 individuals did indicate some confusion due to multiple energy efficiency programs being offered.

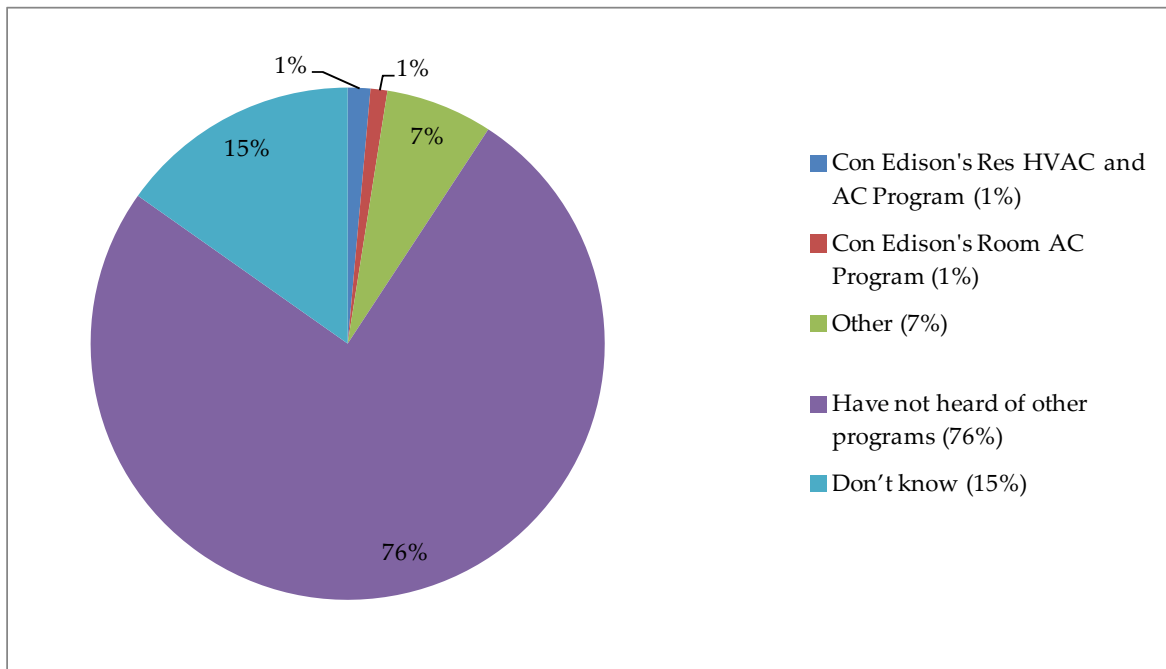
Experience participating in one energy efficiency program can lead individuals to participate in other programs. However, when asked to identify if their experience in the Con Edison RAC program led them to participate in any other energy efficiency programs, only 4 individuals responded that it had.

## 12.2 Non-Participant Program Awareness

Non-Participants were also asked if they had heard of other Con Edison energy efficiency programs. Figure 12-3 demonstrates that the large majority of non-participants (91%) indicated that they had not heard of any other programs or do not know if they had heard of any other programs. This indicates that non-participants were unaware of any other programs the utility is offering.

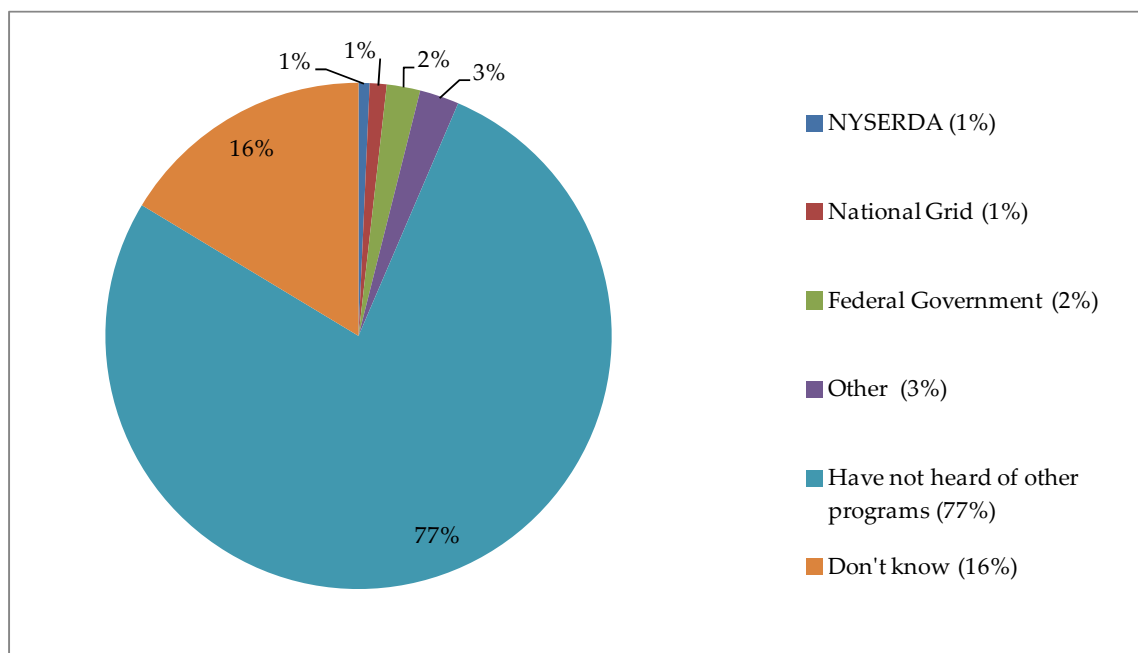


**Figure 12-3: Other Con Edison Programs Non-Participants Have Heard Of (n=209)**



Awareness of the programs offered by entities other than Con Edison was very low. Figure 12-4 illustrates that 93% of non-participants have not heard of other programs or do not know if they have. Thirty-four percent of the non-participants who are aware of non-utility energy efficiency programs also indicated that they have participated in one.

**Figure 12-4: Non Con Edison Programs That Non-Participants Have Heard Of (n=209)**



## Conclusions and Recommendations

Overall, the Residential Room Air Conditioning program is well run and meeting its goals. There are some areas for improvements and opportunities to facilitate more efficient program oversight and impact evaluation. Also, changes in per-unit savings estimates may result in increased difficulty in meeting saving goals and cost-effectiveness requirements.

A concern identified in the evaluation was that many program participants indicated that they would have purchased the same appliance without the incentive from Con Edison (i.e., free ridership). If further research confirms this finding, program design changes may be necessary for the program to cost effectively achieve its objectives.

More detailed findings are presented below.

### Program Planning and Design

Con Edison was successful in meeting its 2010 savings targets.

Incentives do not appear to be an important factor in motivating customers to upgrade to Energy Star® room air conditioners. The majority of participants, 85%, indicated they would have purchased the same unit without a rebate (i.e., free riders). Similarly, only 18% of participants indicated the rebate was a major factor in their decision to purchase the Energy Star® air conditioner. This is consistent with anecdotal information provided to Navigant by retailers, who estimated that more than 80% of units in stores are Energy Star®. Free ridership represents a cost to the program without an apparent benefit. While free ridership should be studied more rigorously as part of the program's impact evaluation, these findings suggest that free ridership may be quite high and program design changes may be warranted for the program to cost effectively achieve its objectives.

### Recommendations for Program Planning and Design

Con Edison should revisit the 2011 savings goals based on the updates to the Technical Reference Manual (TRM) provided by NYSDPS and on the survey results indicating possible high free ridership. The lower energy savings attributed to Room Air Conditioners in the updated TRM will require much higher participation than initially anticipated and will therefore alter the program's costs and, ultimately, its cost effectiveness. If early free ridership indications prove true, changes to the program in the future should be considered (e.g., raising minimum efficiency thresholds for qualifying equipment).

### Infrastructure Development

The information collected on the rebate applications and recorded in the program databases is generally adequate for program management, reporting, and evaluation. The program's quality control procedures in respect to customer eligibility and equipment eligibility are robust.

On average, the time between application submission and rebate payment is eight weeks. While this is not an uncommon timeframe for rebate processing for programs of this type, Navigant is aware that, for 2011, Con Edison asked Honeywell to explore a relationship with Helgeson, a supplier of utility rebate program services. Navigant understands that Helgeson has been engaged by Honeywell to provide rebate processing services for this program and a review of the 2011 processing time indicates that average rebate processing times have been cut during the 2011 program to 30 days for those applications without missing information and 46 days for those applications with some missing information, which is a strong improvement over the 2010 program.

The program has also benefited from the addition of an online rebate submission channel in 2011. During the 2011 program 8.3% of participants completed their rebate submission online.

#### Recommendations for Infrastructure Development

The robustness of Con Edison's data can be improved for the purposes of impact evaluation by capturing the housing type and square footage of the room being cooled on the rebate application, and tracking this data in the database. It would be helpful for evaluation purposes to have all parameters needed to calculate a unit's savings included in the participation database, so that confirmation of savings could be performed more accurately and easily, but there are no plans in the immediate future to capture this data.

#### Marketing and Customer Acquisition

Retail sales staff are an important driver of program participation to date. They were the most commonly cited means of awareness with 43% of program participants reporting that they heard about the program through sales staff.

The majority of participants (57%) are not aware of the program when entering the store and retailers have suggested that running a larger mass marketing campaign (television and print ads) would help drive customers into stores to participate. Con Edison ran television ads during the 2011 program which may have improve this awareness<sup>19</sup>.

#### Marketing Recommendations

Increased targeted cross-promotion of other Con Edison programs could help increase participation in Con Edison's energy efficiency programs.

Continued mass marketing could help promote participation in both the residential RAC program as well as other Con Edison programs. During 2011, some additional cross-program promotions have been conducted and are benefiting Con Edison programs.

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<sup>19</sup> Con Edison reports that their marketing group conducted customer awareness surveys a while after the participant surveys, which found that program awareness did indeed improve

### Program Delivery

Most participants indicated that they had no difficulty completing the application form for the rebate. However, the original rebate form led to a high number of rejected applications due to missing serial numbers. An updated version of the rebate form for 2011 made the required fields more visible to participants and led to lower rejection of applications.

Very few participants contacted the utility about the program and those who did indicated a high level of satisfaction with the interaction.

### Recommendations for Program Delivery

Con Edison should continue to monitor application rejection numbers to ensure that the updated rebate form is clear and being filled out accurately by customers.

Con Edison reports that the program's rebate form has been revised further in an effort to reduce rebate deactivations. The changes focus on removal of the 'Serial Number' field as associated validation, the more prominent placement of the 'Account Holder Signature' box and more prominent positioning of the 'Program Date' information. It is expected that these changes will significantly reduce application deactivation in 2011.

The aforementioned online rebate process is also an excellent addition to the current program's delivery model.

### Satisfaction with the Program

Participants indicated a high level of satisfaction with the measures they installed through the program and with the amount and timing of the rebate.

A high percentage of participants (88%) also indicated they would be likely to recommend the program to others in the future.

Retailers report satisfaction with the program, reporting that it helps increase sales of Energy Star® air conditioner units. It should be noted that none of the retailers interviewed were able and willing to provide sales data to corroborate this statement.

### Recommendations to Enhance Satisfaction with the Program

To ensure continued high satisfaction with the program, Con Edison and Honeywell continue to work to reduce the average time between application submission and rebate payment – something that is being addressed through the engagement of Helgeson (as noted previously).

It is likely that the added convenience associated with the online rebate channel will also enhance program satisfaction. As noted earlier 99% of the 2011 applications were submitted online indicating that participants find this means of submitting an application much more convenient than by mail.

### Interactions with Other Programs

Participant awareness of other programs which are offered by Con Edison was very low during the 2010 program<sup>20</sup>.

Participants are more likely to have heard of other non-utility programs, including those offered by the federal government, State of New York, National Grid, NYSEERDA, and manufacturer rebate programs.

### Recommendations for Interactions with Other Programs

Increase cross promotion of other Con Edison programs to enhance participation in those programs and help build a Con Edison brand as the trusted advisor on energy efficiency. This recommendation has been implemented in the 2011 program and is expected to improve participant awareness of other Con Edison programs going forward.

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<sup>20</sup> As noted earlier, Con Edison reports that its marketing group conducted customer awareness surveys a while after the participant surveys, which found that program awareness has improved.

## Appendix A: Research Questions

Research Area	Specific Research Questions	Section in the Report
Program Planning & Design	Identify possible improvements for cost-effectiveness, energy savings, and increased customer participation.	Section 7.4
	Identify program process and design limitations that impede the program's ability to meet goals.	Section 7.3
	Determine whether incentive levels are appropriate relative to the customer's incremental cost.	Section 7.4
	Assess customer perceptions regarding the program's value proposition	Section 7.4
	Assess the effectiveness and value of stakeholder outreach	Section 7.2
	Assess the effectiveness of Con Edison's 3 <sup>rd</sup> -party implementation approach	Section 7.2
Infrastructure Development	Determine whether program staffing levels and capabilities are appropriate.	Section 8.3
	Determine whether the program is gathering all info needed for program management and reporting.	Section 8.1
	Determine whether the tracking systems contain appropriate data fields for effective program management, reporting and evaluation.	Section 8.1
	Assess each tracking system's ability to access necessary data and prepare reports.	Section 8.1
	Determine whether the tracking systems contain accurate data.	Section 8.1
	Evaluate each tracking system's interface with other tools.	Section 8.1
	Assess the quality control procedures of the data entered into each tracking system.	Section 8.2
	Review program's quality control procedures to determine whether they are sufficient to ensure that reported savings are real and verifiable.	Section 8.2
Marketing & Customer Acquisition	Assess clarity of requirements and eligibility for new appliance purchase rebates.	Section 9.1
	Assess whether marketing partners and channels are appropriate and effective.	Section 9.1
	Determine whether marketing approaches are appropriate and effective, and whether marketing materials are being leveraged by retailers.	Section 9.1
	Assess effectiveness of and customer satisfaction with the customer service call center.	Section 9.1
	Assess the effectiveness of program website to customers.	Section 9.3

Research Area	Specific Research Questions	Section in the Report
	Identify customer participation drivers and barriers, including customer response to program value proposition.	Section 9.1
	Identify the factors that motivate customers to upgrade to high efficiency equipment.	Section 9.1
Program Delivery	Identify retailer perceptions of the benefits of program participation.	Section 10.1
	Identify possible bottlenecks in the customer participation process.	Section 10.2
	Identify opportunities for streamlining the program delivery processes.	Section 10.2
	Identify retailer participation.	Section 10.1
	Assess changes in stacking patterns and sales person messaging.	Section 10.1
Satisfaction with Program	Assess participating customer's satisfaction with program and identify possible improvements.	Section 11
	Determine whether customers are satisfied with the timing of rebate payments.	Section 11
	Determine whether participating customers recommend the program to other customers.	Section 11
	Assess participant willingness to implement further energy efficiency measures	Section 11
Interactions with Other Programs	Identify areas of potential overlap with other programs.	Section 12
	Determine whether there are any areas of retailer or customer confusion about the program due to having multiple programs in market.	Section 12
	Identify double-counting of program savings or synergistic effects, if applicable.	Section 12
	Determine whether customers are aware of other EE programs.	Section 12
	Determine whether the programs encourage participation in other EE programs.	Section 12



## Appendix B: Evaluation Methodology

This appendix describes the evaluation methodologies used to gather information for this report. The evaluation approach included both primary and secondary data collection.

### *Review of Program and Marketing Materials*

The Navigant team conducted the following background review activities before interviewing program implementation staff:

- » Utility filings and NYSDPS Orders
- » Program Websites
- » Program Applications

Based on the background review, the team refined the specific evaluation instruments planned to capture research issues unique to the RAC program.

During and following the interviews, the process team received additional materials from the program managers. The following materials and resources were reviewed for this report:

- » Program implementation request for proposals
- » Program implementer contracts
- » Program database extracts
- » Program Operations Manuals
- » Marketing Plans
- » Program process diagrams and logic models
- » Marketing materials
- » Utility Scorecards

### *Program Administrator and Implementation Staff Interviews*

The evaluation team conducted interviews with individuals responsible for residential HVAC program design, management, and implementation. Table B-1 summarizes the number of interviews the team conducted with representatives from each of the utilities and implementation contractor.

**Table B-1. Interviews of Utility and Implementation Staff for the RAC Program**

Utility Program	Utility Staff	Implementer Staff	TOTAL	Date of Interviews
Con Edison	2	4	6	May-November 2010 March 2011
<b>Total</b>	<b>2</b>	<b>4</b>	<b>6</b>	

#### *Participant Survey*

Braun Research conducted telephone surveys with Con Edison program participants. The sample frame was developed using the entire participant population through January of 2011. Surveys were conducted in March 2011. Braun Research attempted to reach each participating customer through at least 8 call attempts scheduled at different times of day and days of the week. Interviewers left a scripted message when they encountered an answering machine, including a toll-free number that respondents could use to call in and complete an interview at their convenience. Messages are left initially and every three days thereafter. These steps were taken to minimize non-response.

The survey instrument for the participant survey is provided in Appendix C.

**Table B-2. Participant Sample Frame and Survey Targets**

Segment	Number of Participants	Maximum Sample Size
Single Family (1-4 units) EER < 12	5,545	75
Multi-Family EER < 12	3,976	75
EER 12 and higher	92	40

The sample was designed to exceed an absolute precision level of +/- 10% at the 90% confidence level (as binary options) for the total surveys given a participant population of over 10,000. Table B-3 shows that this level of precision was achieved.

**Table B-3. Summary of Completed Participant Surveys**

Strata	Target Completes	Total Completes	Confidence Interval/ Precision
Single Family EER < 12	75	75	90% +/-9.5%
Multi Family EER < 12	75	75	90% +/-9.5%
EER 12	40	42	90% +/-13%
<b>Total</b>	<b>190</b>	<b>192</b>	90% +/-5.9%

Data were weighted to reflect the population of program participants. Table B-5 shows the total participant population compared to the sample population, and the resulting sample weights. Sample weights are calculated for each stratum by dividing the proportion of the total population by the proportion of the sample.

**Table B-4. Participant Survey Disposition**

Strata	Population		Sample		Weight
	n	%	n	%	
Single Family EER < 12	5,545	53%	75	39%	134%
Multi Family EER < 12	3,976	38%	75	39%	96%
EER 12	1,037	10%	42	22%	45%

Navigant used the survey data to compare responses across strata, and also between participants who purchased EER 12 and EER less than 12 room air conditioners. For the latter comparison, Navigant used alternative sample weights for the participants who purchased EER less than 12. Purchasers of EER 12 were randomly sampled for single family and multi-family customers, and therefore no sample weight is necessary. Table B-6 outlines the sample weights for purchases of EER less than 12.

**Table B-5. Participant Survey Disposition**

EER less than 12	Population		Sample		Weight
Strata	n	%	n	%	
Single Family	5,545	58%	75	50%	116%
Multi Family	3,976	42%	75	50%	84%

### Survey Disposition

Table B-7 shows the final disposition of the participant surveys for Room AC participants.

**Table B-6. Participant Survey Disposition**

Disposition	Single Family	Multi Family	EER 12
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Completed Interview	75	75	<b>42</b>
Break-Off	3	2	0
Disconnected Number	19	8	8
Fax Number	3	11	1
Wrong Number	2	2	0
No Answer	16	13	9
Busy	3	1	2
Refused – soft	12	11	6
Refused – strong	18	8	8
Language Barrier	5	10	1
Answering Machine	23	40	9
Callback	5	4	1
Terminated - Ineligible	4	3	3
<b>TOTAL</b>	<b>188</b>	<b>188</b>	<b>90</b>

### *Non-Participant Survey*

Braun Research conducted telephone surveys with Con Edison customers who were eligible for their room AC programs but who had not yet participated. The non-participant sample was designed to support both the Res HVAC and the Room AC evaluations. Some non-participant customers from the Res HVAC non-participant samples (central AC and gas heat) also had room air conditioners, and therefore qualified for the Room AC non-participant survey questions. Their responses were added to those from the broader sample of single-family (1 to 4 family) electric customers who, upon screening, were found to have room air conditioners. Samples of single family and multi-family electric customers were selected from Con Edison's customer list and screened in the survey for presence of room air conditioning. Quotas for each market segment are summarized in Table B-8. These quotas were established to provide at least +/- 10% absolute precision at the 90% confidence interval for binary questions.

**Table B-7. Non-Participant Sample Quotas**

Program Segment	Minimum Sample Size
Central AC/Gas Heating	Any
Room AC – Single (1-4) Family	75
Room AC – Multi (>4) family	75

Each list was cross checked to ensure that none had participated in the Room AC program.

### Completed Non-Participant Surveys

The non-participant surveys were conducted during January and February of 2011. Braun Research attempted to reach each non-participant through at least 8 call attempts scheduled at different times of day and days of the week. Interviewers left a scripted message when they encountered an answering machine, including a toll-free number that respondents could use to call in and complete an interview at their convenience. Messages were left initially and every three days thereafter. These steps were taken to minimize non-response bias.

The survey instrument for the non-participant survey is provided in Appendix C. The number of completed surveys is shown below in Table B-8.

**Table B-8. Summary of Completed Non-Participant Surveys**

Strata	Target Completes	Total Completes	Confidence Interval/ Precision
Total Single Family	75+	136	90% +/-7.1%
Central AC/Gas Heating	Any	60	
Room AC – Single-family	75	76	
Room AC – Multi-family	75	73	90% +/-9.6%
Total	150+	209	90% +/-5.7%

As with the participant data, non-participant data were weighted to reflect the population of non-participants. Table B-9 shows the total non-participant population compared to the sample population, and the resulting sample weights. Sample weights are calculated for each stratum by dividing the proportion of the total population by the proportion of the sample.

**Table B-9. Participant Survey Disposition**

Strata	Population		Sample		Weight
	n	%	n	%	
Single Family	1,307,007	49%	136	65%	75%
Multi Family	1,377,928	51%	73	35%	147%

### Survey Disposition

Table B-10 shows the final disposition for the total non-participant surveys for both Residential HVAC and Room AC.

**Table B-10. Final Non-Participant Survey Disposition**

<b>Disposition</b>	<b>Con Ed</b>
Completed Interview	355
Break-Off	40
Disconnected Number	288
Fax Number	25
Ineligible (Business) Number	78
No Answer	328
Busy	93
Refused	415
Language Barrier	124
Answering Machine	524
Callback	141
Terminated - Ineligible	65
Quota Met	19
<b>TOTAL</b>	<b>2,495</b>

### ***Survey Pretests***

The participant and non-participant surveys were pretested prior to the main data collection effort. The surveyors were briefed on the program nomenclature and survey goals prior to making any calls. After approximately five surveys, each instrument was reviewed to identify issues and implement improvements. A memorandum was prepared outlining the results of the pretests and the recommended survey instrument changes. The memorandums were submitted to Con Edison for their review and approval.

## Appendix C: Interview Guide & Survey Instruments

This Appendix contains the following in-depth interview guides and survey instruments:

- Participating Retailer Interview Guide
- Participant Customer Survey Instrument
- Non-Participant Customer Survey Instrument



CON EDISON EEPS EVALUATION  
RESIDENTIAL ROOM AC PROGRAM  
**Participant Retailer Interview Guide**

Name \_\_\_\_\_  
Company \_\_\_\_\_  
Tel: \_\_\_\_\_  
Email: \_\_\_\_\_  
Date: \_\_\_\_\_  
Follow-up actions: \_\_\_\_\_

**1. General**

- a. Please outline your involvement with Honeywell and/or Con Edison to date?  
(Interactions, commitments, promotional activities, staff training, etc.).
- b. Please describe your participation in other energy efficiency related programs – both internal and in partnership with utilities, manufacturers, etc.
- c. What drives your decision to participate in programs such as these?
- d. What are the hallmarks of successful partnerships for programs such as these?
- e. Please share your perspectives on the room AC market and the influence of Energy Star® labeling on a customer's purchase decision?
- f. What proportion of room AC's sold by your business are labeled as "Energy Star®"?  
How has this changed over time?
- g. Is there a price difference between higher and lower efficiency room AC units of the same capacity? If so, please elaborate.



## ***2. Program Planning and Design***

- a. Thinking about Con Edison's Room AC program, are there any aspects of the program which you'd change? If so, what and why? How do you believe these changes would enhance the program?
- b. Are there any program process or design limitations that you believe impede participation – either at the retailer level or customer level? If so, please describe.
- c. Do you believe participant incentive levels (rebates) are sufficient with regard to the customer's incremental cost?
- d. Have you received feedback from staff and customers regarding the program? If so, how is this information being gathered and what has it revealed?
- e. Do you believe customers are aware of the program before entering your stores?

## ***3. Infrastructure Development***

- a. Would you like to receive additional program support from Honeywell and/or Con Edison? If so, what and why?
- b. Are you providing information/intelligence back to Honeywell and/or Con Edison regarding the program? If so, what, how often and how?
- c. Are you being provided with sufficient information, training and other tools to effectively implement the program? If not, what enhancements could be made?

## ***4. Marketing & Customer Acquisition***

- a. Is the program easy for your staff to understand and relay to customers? Would any changes be beneficial?
- b. Are the current marketing partners and channels appropriate and effective?
- c. How have you trained your staff to promote the program?
- d. Are you actively directing your staff and customers to the program's website? If so, do you believe the program website is a helpful resource for your staff and customers?
- e. What feedback can you provide on customer participation drivers and barriers?
- f. What you consider to be the key factors that motivate customers to upgrade to high efficiency equipment?

**5. *Program Delivery***

- a. Have you altered your store layouts, shelf space or other infrastructure as a result of this program?
- b. Have you altered your stock levels as a result of this program?
- c. Can you offer any feedback on the marketing and/or rebate process and suggest any areas for enhancement?
- d. Can you offer any suggestions for streamlining the program delivery processes?
- e. Are you willing to display any program related promotional materials in your store? On your website?

**6. *Satisfaction with Program***

- a. Has participation in the program been of value to your company? If so, how?
- b. Has this been a positive experience?
- c. Can you share any customer feedback on the program that you may have gathered?
- d. Would you suggest any program changes/enhancements based on this feedback?
- e. Have customers shared any information with you regarding the rebate process and its timing? If so, what?

**7. *Interactions with Other Programs***

- a. Is your company promoting any other similar programs and if so, does this create any retailer or customer confusion? If so, how could this be addressed?
- b. (If appropriate, given type of equipment store handles) Has your sales staff been trained on the other programs that Con Edison has in the market at present? If so, how? Are they encouraged to speak to customers about these programs as well?

**8. *Other comments***

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## Room AC Participant Survey

Version 5, 3/9/11

*Hello, may I please speak to [INSERT NAME FROM SAMPLE]?*

*Hi, my name is \_\_\_\_\_, (from Braun Research) calling on behalf of Con Edison. We're evaluating Con Edison's Room Air Conditioner Rebate program, where you received a \$30 rebate for purchasing a new Energy Star® Room Air Conditioner. We would greatly appreciate your time answering a few questions designed to help us improve this program.*

### SCREENER

1. According to Con Edison's records, you purchased [REFER TO DATABASE FOR # OF ACs REBATED] Energy Star® room air conditioner(s) on [PURCHASE DATE 1, (and, if different date: Purchase Date 2)]. Do you recall participating in this program? [PROGRAMMER NOTE: THERE CAN BE UP TO TWO PURCHASES, INSERT TEXT APPROPRIATELY]

1	YES	ASK Q1b
2	NO	ASK Q1a
96	REFUSED	ASK Q1a
97	DON'T KNOW	ASK Q1a

- 1a. Might someone else in your household have participated in Con Ed's Room Air Conditioning Rebate Program?

1	YES
2	NO – THANK AND TERMINATE
96	REFUSED – THANK AND TERMINATE
97	DON'T KNOW – THANK AND TERMINATE

ASK TO SPEAK TO APPROPRIATE PERSON OR SCHEDULE CALLBACK, AS NEEDED. IF NEW PERSON COMES TO PHONE, REPEAT INTRO AND Q1, AND THEN CONTINUE SURVEY. IF ANSWER IS A DEFINITIVE **NO**, **THEY DID NOT PURCHASE THE ROOM AC(S)**", NOTE THIS, THANK RESPONDENT AND TERMINATE CALL.

- 1b. Do you recall receiving the [two] rebate(s) paid on [REBATE PAID DATE 1] (and, if different date, [REBATE PAID DATE 2])?

1	YES ASK Q2
2	NO ASK Q1c
96	REFUSED ASK Q1c
97	DON'T KNOW ASK Q1c

- 1c. Might someone else in your household remember receiving the rebate?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

IF Q1c = 2, 96, 97, SAY "That's Okay" AND CONTINUE TO INTRO BEFORE Q2. IF Q1c = 1, ASK TO SPEAK TO THE PERSON THAT REMEMBERS RECEIVING THE REBATE AND CONTINUE TO INTRO BEFORE Q2. IF THAT PERSON IS UNAVAILABLE, SAY "That's Okay" AND CONTINUE TO INTRO BEFORE Q2.

### PROGRAM RECALL

I'd like to ask you some questions about your experience with the program. [READ IF NECESSARY: This survey should take about 10 minutes, and all of your answers will be kept strictly confidential. Let's begin [IF RESPONDENT REFUSES, TRY TO SCHEDULE CALL-BACK.]

2. How many Energy Star® Room Air Conditioners did you purchase last year through the Con Edison Room Air Conditioner Program?

- |    |                      |
|----|----------------------|
| 1  | 1                    |
| 2  | 2                    |
| 3  | 3                    |
| 4  | 4                    |
| 5  | 5                    |
| 6  | MORE THAN 5          |
| 96 | REFUSED ASK Q2a-1    |
| 97 | DON'T KNOW ASK Q2a-1 |

- 2a-1. Our records indicate that you purchased [NUM OF MEASURES] Energy Star® Room Air Conditioners on [PURCHASE\_DATE1/PURCHASE\_DATE2]? Is this correct?

- |    |                                |
|----|--------------------------------|
| 1  | YES CONTINUE                   |
| 2  | NO THANK AND TERMINATE         |
| 96 | REFUSED THANK AND TERMINATE    |
| 97 | DON'T KNOW THANK AND TERMINATE |

[PROGRAMMER NOTE: CREATE A VARIABLE CALLED "Confirmed Num of Measures" = RESPONSE IN Q2/Q2a-1]

IF "Confirmed Num of Measures" = "Num\_of\_Measures," PROCEED TO Q3.

IF "Confirmed Num of Measures" >1 AND "Num\_of\_Measures" =1, READ THE FOLLOWING STATEMENT AND PROCEED TO Q3: "For the remainder of the survey we will be asking you about the [manuf1] ENERGY STAR® Room Air Conditioner with an Energy Efficiency Ratio (EER) of [EER1] that we have on record as purchased on [purchase\_date1].

IF "Confirmed Num of Measures" >2 AND "Num\_of\_Measures"=2, READ THE FOLLOWING STATEMENT AND PROCEED TO Q3: "For the remainder of the survey we will be asking you about the 2 ENERGY STAR® Room Air Conditioners that we have on record. These are: the [manuf1] ENERGY STAR® Room Air Conditioner with an Energy Efficiency Ratio (EER) of [EER1] that we have on record as purchased on [purchase\_date1], and the [manuf2] ENERGY STAR® Room Air Conditioner with an Energy Efficiency Ratio (EER) of [EER2] that we have on record as purchased on [purchase\_date2].

IF "Confirmed Num of Measures" = 1 AND "Num of Measures"=2, ASK Q2a

2a. We have the following ENERGY STAR® Room Air Conditioners on record: A [manuf1] ENERGY STAR® Room Air Conditioner with an Energy Efficiency Ratio (EER) of [EER1] that we have on record as purchased on [purchase\_date1], and a [manuf2] ENERGY STAR® Room Air Conditioner with an Energy

Efficiency Ratio (EER) of [EER2] that we have on record as purchased on [purchase\_date2]. Which one of these ENERGY STAR® air conditioners do you recall purchasing?

- 1 MEASURE 1
- 2 MEASURE 2
- 3 RECALL BOTH MEASURE 1 AND MEASURE 2
- 96 REFUSED – THANK AND TERMINATE
- 97 DON'T KNOW – THANK AND TERMINATE

IF Q2a =3, CHANGE “Confirmed Num of Measures” TO EQUAL 2.

PROGRAMMER NOTE: USE PLURAL LANGUAGE WHEN “Num\_Of\_ Measures”>1.

3. Did you purchase your Energy Star® Room Air Conditioner (s)... [READ LIST, SELECT ALL THAT APPLY]  
[PROGRAMMER: DO NOT ALLOW NUMBER OF RESPONSES TO EXCEED “Num\_Of\_ Measures”]

- 1 IN A STORE (GO TO Q4)
- 2 ONLINE (GO TO Q5)
- 96 REFUSED (GO TO Q5)
- 97 DON'T KNOW (GO TO Q5)

3a. [IF Q3=1 AND 2] Was the [manuf1] air conditioner purchased on [purchasedate1] purchased online or in a store?

- 1 IN A STORE
- 2 ONLINE
- 96 REFUSED
- 97 DON'T KNOW

3b. [IF Q3=1 AND 2] Was the [manuf2] air conditioner purchased on [purchasedate2] purchased online or in a store?

- 1 IN A STORE
- 2 ONLINE
- 96 REFUSED
- 97 DON'T KNOW

[PROGRAMMER: IF Q3a=2 and Q3b=2, CHANGE Q3 TO EQUAL 2. IF Q3a=1 and Q3b=1, CHANGE Q3 TO EQUAL 1]

4. [IF Q3 = IN A STORE] In which store did you purchase your Energy Star® Room Air Conditioner(s)? [DO NOT READ LIST, SELECT ALL THAT APPLY] [PROGRAMMER: DO NOT ALLOW NUMBER OF RESPONSES TO EXCEED “Num\_Of Measures”]

- 1 P.C. RICHARDS
- 2 BEST BUY
- 3 SEARS
- 4 HOME DEPOT
- 5 EBA APPLIANCE
- 6 COSTCO
- 7 DUDDY'S ELECTRONICS

- 8 LOWES
- 9 OTHER RETAILER
- 96 REFUSED
- 97 DON'T KNOW

5. For how many Energy Star® Room Air Conditioners did you receive a rebate from Con Edison?

- 1 1
- 2 2
- 95 Other (Specify): \_\_\_\_\_
- 96 REFUSED
- 97 DON'T KNOW

6. On a scale of 1-10, where "10" means extremely easy, and "1" means extremely difficult, please rate how easy it was to complete the Room AC rebate application.

- |                        |   |   |   |   |   |   |   |   |                   |     |    |
|------------------------|---|---|---|---|---|---|---|---|-------------------|-----|----|
| 1                      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                | 96  | 97 |
| Extremely<br>Difficult |   |   |   |   |   |   |   |   | Extremely<br>Easy | REF | DK |
- 95 DO NOT RECALL COMPLETING REBATE APPLICATION  
(IF Q6 =10, or Q6 = 95, 96 or 97, Go to Q8)

7. [IF Q6 <10] What was unclear or complicated about the rebate application? [DO NOT READ LIST. RECORD ALL RESPONSES.]

- 1 I DIDN'T KNOW MY ACCOUNT NUMBER
- 2 I DIDN'T KNOW WHERE TO FIND THE ENERGY STAR® MODEL NUMBER
- 3 I DIDN'T KNOW WHERE TO FIND THE UNIT'S SERIAL NUMBER
- 4 I DIDN'T KNOW HOW LONG IT WOULD TAKE TO GET MY REBATE
- 5 I DIDN'T KNOW HOW MANY REBATES I COULD GET
- 6 I DIDN'T KNOW WHEN THE REBATE APPLICATION WAS DUE
- 7 WOULD HAVE BEEN EASIER ONLINE
- 89 TOO MANY QUESTIONS/TOO MUCH PAPERWORK PROOF OF PURCHASE/RECEIPT REQUIREMENT
- 10 NOTHING/NO PROBLEMS WITH APPLICATION
- 95 Other (specify)
- 96 Refused
- 97 Don't Know

8. Did you install your Energy Star® room air conditioner(s)? [PROGRAMMER: USE PLURAL LANGUAGE IF "Confirmed Num of Measures" >1 WHENEVER THE SURVEY SPECIFIES "air conditioner(s)"]

- 1 YES (GO TO Q9)
- 2 SOME (SPECIFY) (GO TO Q9)
- 3 NO (GO TO Q12 )
- 96 REFUSED (GO TO Q12)
- 97 DON'T KNOW (GO TO Q12)

9. [IF CNM = 1] Is the Energy Star<sup>®</sup> Room air conditioner/[IF Num\_Of Measures >1]Are the Energy Star<sup>®</sup> Room air conditioners still installed?

- 1 YES (GO TO Q12)
- 2 SOME (SPECIFY) (GO TO Q10)
- 3 NO (GO TO Q10)
- 96 REFUSED (GO TO Q12)
- 97 DON'T KNOW (GO TO Q12)

10. [IF Q9=2 or 3] When was/were the Energy Star<sup>®</sup> room air conditioner(s) removed?

- 1 AFTER THE SUMMER WAS OVER
- 2 SOON AFTER IT WAS INSTALLED
- 95 OTHER
- 96 REFUSED
- 97 DON'T KNOW

11. Why did you remove your Energy Star<sup>®</sup> room air conditioner[s]? [DO NOT READ LIST, MARK ALL THAT APPLY]

- 1 WAS NOT WORKING PROPERLY
- 2 DID NOT LIKE HOW IT PERFORMED
- 3 AESTHETICS
- 4 COULDN'T OPERATE IT
- 5 REMOVED FOR THE SEASON/WINTER
- 95 OTHER (SPECIFY)
- 96 REFUSED
- 97 DON'T KNOW

### **PROGRAM AWARENESS**

12. How did you hear about the *Room Air Conditioner Rebate* program? [DO NOT READ LIST] [RECORD ALL RESPONSES]

- 1 MAILING
- 2 NEWSLETTER
- 3 BILL INSERT
- 4 WEBSITE
- 5 FAMILY/FRIEND
- 6 CONTRACTOR
- 7 TELEVISION AD
- 8 RADIO AD
- 9 MAGAZINE AD
- 10 NEWSPAPER AD
- 11 IN-STORE ADVERTISING
- 12 SALESPERSON
- 95 OTHER (SPECIFY) [APPRISE CODE]



- 96 REFUSED
- 97 DON'T KNOW

13. [IF MORE THAN ONE RESPONSE IN Q12] Which of these sources of information was most influential in your decision to participate in the program?  
[READ ANSWERS GIVEN IN Q12]  
[IF Q12 IS ONLY ONE RESPONSE, AUTOMARK]

14. [IF Q3 = "IN A STORE" AND Q12 NOT = "SALESPERSON"] Did the store salesperson who helped you tell you about the Energy Star® Room Air Conditioner Rebate program?

- 1 YES
- 2 NO
- 3 I DID NOT INTERACT WITH A SALESPERSON AT THE STORE
- 4 THERE WAS NO SALESPERSON
- 96 REFUSED
- 97 DON'T KNOW

15. What were the most important reasons why you decided to purchase an Energy Star® air conditioner and participate in the *Room Air Conditioner Rebate* program? [DO NOT READ LIST, record all answers]

- 1 SAVING ENERGY
- 2 REDUCING YOUR ENERGY BILL
- 3 CASH REBATES/DISCOUNT ON THE AC UNIT
- 4 BUYING AN ENERGY EFFICIENT APPLIANCE
- 5 FRIEND/RELATIVE/WORK ASSOCIATE'S RECOMMENDATION
- 6 A BILL INSERT FROM CON EDISON
- 7 IMPROVING THE ENVIRONMENT, REDUCING GREENHOUSE GASES
- 8 I NEEDED A NEW AIR CONDITIONER/MINE WAS BROKEN/NEEDED REPLACEMENT
- 95 OTHER, SPECIFY [APPRISE CODE]
- 96 REFUSED
- 97 DON'T KNOW

15a. [IF MORE THAN 1 REASON PROVIDED IN Q15]. Which one of these reasons was the most important reason why you decided to participate in the *Room Air Conditioner Rebate* program?  
[PROGRAMMER: DISPLAY ONLY REASONS PROVIDED IN Q15. ALLOW ONLY ONE RESPONSE].

#### INTERACTION WITH UTILITY

16. At any point during your participation in the *Room Air Conditioner Rebate* program, did you contact a representative at Con Edison?

- 1 YES

2 NO  
96 REFUSED  
97 DON'T KNOW

17. [IF Q16 = YES] On a scale of 1 to 10, where 1 is Extremely Dissatisfied, and 10 is Extremely Satisfied, please rate your satisfaction with your experience contacting Con Edison regarding the Room Air Conditioner Rebate program.

1	2	3	4	5	6	7	8	9	10	96	97
Extremely								Extremely		REF	DK
Dissatisfied								Satisfied			

Q17a. [IF Q17<5] Why are you dissatisfied with your experience contacting Con Edison regarding the Room AC program? [DO NOT READ- RECORD ALL RESPONSES]

1 TOOK TOO LONG TO GET TO TALK TO SOMEONE  
2 BAD ATTITUDE FROM REPRESENTATIVE  
3 COULDN'T UNDERSTAND THE REPRESENTATIVE  
4 FELT LIKE THE REPRESENTATIVE WAS RUSHING ME OFF THE PHONE  
5 REPRESENTATIVE COULDN'T ANSWER MY QUESTION  
6 I WASN'T DISSATISFIED/MY RESPONSE WAS NEUTRAL  
95 OTHER (SPECIFY) [APPRISE CODE]  
96 REFUSED  
97 DON'T KNOW

18. Did you visit the Con Edison *Room Air Conditioner Rebate* program website?

1 YES  
2 NO  
96 REFUSED  
97 DON'T KNOW

19. [IF Q18 = YES] On a scale of 1 to 10, where 1 is Extremely Dissatisfied, and 10 is Extremely Satisfied, please rate your satisfaction with the Room AC program website.

1	2	3	4	5	6	7	8	9	10	96	97
Extremely				Somewhat				Extremely		REF	DK
Dissatisfied				Satisfied				Satisfied			

Q19a. [IF Q19< 5] Why are you dissatisfied with the Room Air Conditioner Rebate program website? [DO NOT READ] [RECORD ALL RESPONSES]

1 COULDN'T FIND THE INFORMATION THAT I WANTED  
2 TOO SLOW  
3 THE INFORMATION IS TOO GENERAL  
4 COULDN'T FIND ANY CONTACT INFORMATION  
5 I'M NOT DISSATISFIED/RESPONSE WAS NEUTRAL

95	OTHER (SPECIFY) [APPRISE CODE]
96	REFUSED
97	DON'T KNOW

## MEASURE SPECIFIC

### **Directions for this section:**

IF "Num\_Of\_Measures" =1, ASK **Q20-Q32** WITH THE FOLLOWING PREAMBLE: *"For the next set of questions, I'll be asking you about the ENERGY STAR® Room Air Conditioner that you purchased on [PURCHASEDATE 1]."*

IF "Confirmed Num of Measures" =1, AND "Num\_Of\_Measures">1, ASK **Q20-Q32** WITH THE FOLLOWING PREAMBLE: *"For the next set of questions, I'll be asking you about the ENERGY STAR® Room Air Conditioner that you purchased on [INSERT PURCHASE DATE BASED ON RESPONSE TO Q2a]."*

IF "Confirmed Num of Measures" >1, AND "Num\_Of\_Measures" >1, AND IF 'DIFFERENT DAYS' VARIABLE IN SAMPLE = 0, ASK **Q20-Q27** ONLY ONCE, WITH THE FOLLOWING PREAMBLE: *"For the next set of questions, I'll be asking you about the ENERGY STAR® Room Air Conditioners that you purchased on [PURCHASEDATE 1]."* **THEN READ PREAMBLE BEFORE Q28, before asking Q28-Q32.**

IF "Confirmed Num of Measures" >1, AND "Num\_Of\_Measures" >1, AND IF 'DIFFERENT DAYS' = 1, ASK **Q20-Q32** TWICE, WITH THE FOLLOWING PREAMBLE FIRST: *"For the next set of questions, I'll be asking you about the ENERGY STAR® Room Air Conditioner(s) that you purchased on [PURCHASEDATE1] and on [PURCHASEDATE 2]. First I'll ask you about the room air conditioner with an efficiency rating of [EER1] purchased on [PURCHASEDATE1]."*

[PROGRAMMER NOTE: If the following is true: "Confirmed Number of Measures" >1, AND "Num\_Of\_Measures">1 AND DIFFERENT DAYS =1 AND Q3 = both online and in a store, use answers in Q3a and Q3b to determine which air conditioner the store-specific questions (Q20, 21, 25, 26) should be asked for, and which air conditioner the online-specific questions (Q22, 23, 27) should be asked for.]

20. [IF Q3 = "IN A STORE"] When you entered the store on the day that you purchased your room air conditioner(s), did you already know about the Con Edison rebate program?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

21. [IF Q3 = "IN A STORE"] Again, when you entered the store the day that you purchased your room air conditioner(s), were you already planning to purchase an Energy Star® room air conditioner?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

22. [IF Q3 = "ONLINE"] On the day you went online to purchase your room air conditioner(s), did you already know about the Con Edison rebate program?

1	YES
2	NO

- 96 REFUSED
- 97 DON'T KNOW

23. [IF Q3 = "ONLINE"] Again, on the day you went online to purchase your room air conditioner(s), were you already planning to purchase an Energy Star® room air conditioner?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

24. Why did you decide to purchase a new **Energy Star®** Room Air Conditioner, rather than a standard room air conditioner? [DO NOT READ] [SELECT ALL RESPONSES]

- 1 TO SAVE ENERGY
- 2 TO SAVE MONEY
- 3 AVAILABILITY OF REBATE
- 4 TAKE ADVANTAGE OF A GOOD DEAL
- 5 TO HELP THE ENVIRONMENT
- 6 OBTAIN QUICK PAYBACK
- 7 TO IMPROVE SAFETY/HEALTH/COMFORT OF HOME
- 8 TO REDUCE CARBON FOOTPRINT OR HAVE OTHER ENVIRONMENTAL BENEFIT
- 9 SEEMED TO BE HIGHER QUALITY THAN STANDARD AIR CONDITIONERS
- 10 HAD THE ENERGY STAR® NAME SO I KNEW IT WAS EFFICIENT/I WOULD SAVE ENERGY
- 11 THAT'S WHAT THE SALESPERSON WAS PUSHING/SHOWING ME
- 12 FRIEND/RELATIVE/WORK ASSOCIATE'S RECOMMENDATION
- 95 OTHER (SPECIFY) [APPRISE CODE]
- 96 REFUSED
- 97 DON'T KNOW

25. [IF Q3 = "IN A STORE"] Did a salesperson help you identify which room air conditioners were Energy Star® qualified?

- 1 YES
- 2 NO – SKIP TO INSTRUCTIONS BEFORE Q27
- 96 REFUSED – SKIP TO INSTRUCTIONS BEFORE Q27
- 97 DON'T KNOW – SKIP TO INSTRUCTIONS BEFORE Q27

26. [IF Q3 = "IN A STORE"] Did a salesperson only show you air conditioners that qualified for the rebate?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

27. [IF Q3 = "ONLINE"] Was it easy to identify online which room air conditioners were Energy Star® qualified?

- 1 YES
- 2 NO

96 REFUSED  
97 DON'T KNOW

**[FOR Q29-Q32:**

["Num\_Of\_Measures" =1] NO PREAMBLE, CONTINUE TO Q28.

[IF "Confirmed Num of Measures" =1, AND "Num\_Of\_Measures">1] NO PREAMBLE, CONTINUE TO Q28.

[IF "Confirmed Num of Measures" >1, AND "Num\_Of\_Measures" >1, AND 'DIFFERENT DAYS' = 0] ASK FOR EACH ROOM AIR CONDITIONER PURCHASED, WITH THE FOLLOWING PREAMBLE: *"Now I'll ask you about each of the room air conditioners that you purchased, starting with the first."*

[IF "Confirmed Num of Measures" >1, AND "Num\_Of\_Measures" >1, AND 'DIFFERENT DAYS' = 1] NO PREAMBLE, CONTINUE TO Q28.

28. **[PROGRAMMER, CHECK SAMPLE. IF EER1 (OR EER2) IS LESS THAN 12]** According to the program records, you purchased a room air conditioner with an efficiency rating of [EER1 (OR EER2)]. Why did you choose that efficiency rather than a higher efficiency model? [DO NOT READ. SELECT ALL RESPONSES PROVIDED]

1 DIDN'T NOTICE ANY HIGHER EFFICIENCY MODELS  
2 BOUGHT WHAT THE SALESPERSON RECOMMENDED  
3 REBATE WAS STILL ONLY \$30 FOR HIGHER EFFICIENCY MODEL  
4 HIGHER EFFICIENCY MODELS WERE TOO EXPENSIVE  
5 THIS WAS THE ONLY QUALIFYING EFFICIENCY AVAILABLE IN THE BRAND I WANTED  
6 THE SIZE OF THE ROOM DICTATED THE AC I PURCHASED  
95 OTHER (SPECIFY) [APPRISE CODE]  
96 REFUSED  
97 DON'T KNOW

29. **[IF EER1 (OR EER2) = 12]** According to the program records, you purchased a room air conditioner with an efficiency rating of 12, when you could have received a rebate from Con Edison even if the unit had had a lower efficiency rating. Why did you buy this higher efficiency model? [DO NOT READ. SELECT ALL RESPONSES PROVIDED]

1 NO LOWER EFFICIENCY MODELS WERE AVAILABLE WHERE I BOUGHT MY UNIT  
2 I WANTED TO SAVE AS MUCH ENERGY AS POSSIBLE  
3 I WANTED TO SAVE AS MUCH MONEY ON MY ELECTRIC BILL AS POSSIBLE  
4 THIS EFFICIENCY LEVEL WAS RECOMMENDED BY THE SALESPERSON  
5 THIS WAS THE ONLY QUALIFYING EFFICIENCY AVAILABLE IN THE BRAND I WANTED  
6 THE SIZE OF THE ROOM DICTATED THE AC I PURCHASED  
95 OTHER (SPECIFY) [APPRISE CODE]  
96 REFUSED  
97 DON'T KNOW

30. Which of the following three statements best describes the action you would have taken had the \$30 rebate for this Energy Star® Room Air Conditioner not been available? **(READ LIST)**

- |    |   |
|----|---|
| 1  | I would not have bought a new room air conditioner,           |
| 2  | I would have bought a less efficient room air conditioner, or |
| 3  | I would have bought the same room air conditioner?            |
| 96 | REFUSED   |
| 97 | DON'T KNOW  |

31. [IF Q30 = 1 OR 2] If the rebate had been only \$20 instead of \$30, would you still have purchased the same Energy Star® Room Air Conditioner?

- |    |            |
|----|------------|
| 1  | YES        |
| 2  | NO         |
| 96 | REFUSED    |
| 97 | DON'T KNOW |

32. [IF Q30 = 3] When would you have bought this Energy Star® Room Air Conditioner? [READ LIST. ACCEPT SINGLE RESPONSE]

- |    |                         |
|----|-------------------------|
| 1  | At the same time,       |
| 2  | Within 1 year, or       |
| 3  | More than a year later? |
| 96 | REFUSED                 |
| 97 | DON'T KNOW              |

[“Confirmed Num of Measures” >1, AND “Num\_Of\_Measures” >1, AND ‘DIFFERENT DAYS’ = 0] **REPEAT Q28-Q32** FOR THE SECOND ROOM AIR CONDITIONER PURCHASED, WITH THE FOLLOWING PREAMBLE: “Now I’ll ask you about the second room air conditioner that you purchased.”

[IF “Confirmed Num of Measures” >1, AND “Num\_Of\_Measures” >1, AND IF ‘DIFFERENT DAYS’ VARIABLE = 1, **REPEAT Q20-Q32** FOR THE ROOM AIR CONDITIONER PURCHASED ON [PURCHASEDATE 2] WITH THE FOLLOWING PREAMBLE: “Now I’ll ask you about the room air conditioner purchased on [PURCHASEDATE 2].”

## SATISFACTION

**READ FOR ALL:** We’d like to get a sense of your satisfaction with the Room Air Conditioner Rebate program. For the next few questions, please use a 1 to 10 scale, where 1 means **EXTREMELY DISSATISFIED** and 10 means **EXTREMELY SATISFIED**.

33. Overall, how satisfied are you with the performance of your Energy Star® Room Air Conditioner (s)?[USE PLURAL LANGUAGE BASED on Num\_Of Measures]

- |              |   |   |   |   |   |   |   |           |    |     |    |
|--------------|---|---|---|---|---|---|---|-----------|----|-----|----|
| 1            | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9         | 10 | 96  | 97 |
| Extremely    |   |   |   |   |   |   |   | Extremely |    | REF | DK |
| Dissatisfied |   |   |   |   |   |   |   | Satisfied |    |     |    |

34. How satisfied are you with the rebate amount?

1	2	3	4	5	6	7	8	9	10	96	97
Extremely Dissatisfied								Extremely Satisfied		REF	DK

95 – I NEVER RECEIVED A REBATE CHECK

35. How satisfied are you with the amount of time between submitting your rebate application and receiving your rebate check?

1	2	3	4	5	6	7	8	9	10	96	97
Extremely Dissatisfied								Extremely Satisfied		REF	DK

95 – I NEVER RECEIVED A REBATE CHECK

36. How satisfied are you overall with your experience participating in Con Edison's Room Air Conditioner rebate program?

1	2	3	4	5	6	7	8	9	10	96	97
Extremely Dissatisfied								Extremely Satisfied		REF	DK

37. [IF Q8 = "Yes" or "Some"] Did you notice any difference in your monthly utility bill directly after installing your Energy Star® Room Air Conditioner?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

38. [IF Q37 = YES] Was your bill higher, lower or about the same as you expected?

1	HIGHER
2	LOWER
3	ABOUT THE SAME
96	REFUSED
97	DON'T KNOW

39. What other appliances or equipment would you like to see rebated by Con Edison? [DO NOT READ, MARK ALL THAT APPLY]

1	CFLs
2	REFRIGERATORS
3	LED LIGHTS
4	WASHING MACHINES
5	DRYERS
6	OVENS
7	ROOM AIR CONDITIONERS

- 8 LOW FLOW TOILETS
- 9 DOUBLE PANE/ENERGY EFFICIENT WINDOWS
- 10 FREEZERS
- 11 APPLIANCE TIMERS
- 12 SPACE/ROOM HEATERS
- 13 HOT WATER HEATERS
- 14 SOLAR (ANY TYPE OR MENTION OF SOLAR)
- 15 CENTRAL AIR CONDITIONING
- 16 INSULATION
- 17 DISHWASHERS
- 18 HUMIDIFIER/DEHUMIDIFIER
- 19 MICROWAVE
- 20 HEATING EQUIPMENT
- 21 TELEVISION
- 22 ENERGY AUDIT
- 23 NONE
- 95 OTHER, SPECIFY
- 96 REFUSED
- 97 DON'T KNOW

40. Have you recommended the *Room Air Conditioner Rebate* program to friends, neighbors or colleagues?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

41. [IF Q40 = NO] On a scale of 1 to 10, where 1 is Not at All Likely, and 10 is Extremely Likely, how likely are you to recommend this program to others in the future, for example, next summer?

- |            |   |   |   |   |   |   |   |           |    |     |    |
|------------|---|---|---|---|---|---|---|-----------|----|-----|----|
| 1          | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9         | 10 | 96  | 97 |
| Not at all |   |   |   |   |   |   |   | Extremely |    | REF | DK |
| Likely     |   |   |   |   |   |   |   | Likely    |    |     |    |

42. [IF Q41 < 7] Why might you not recommend the program to others? [DO NOT READ, MARK ALL THAT APPLY]

- 1 ENERGY USAGE SAVINGS WEREN'T HIGH ENOUGH
- 2 ENERGY BILL SAVINGS WEREN'T HIGH ENOUGH
- 3 TOO MUCH OF A HASSLE/TOO MUCH RED TAPE
- 4 TOOK TOO LONG TO GET THE REBATE
- 5 THE REBATE AMOUNT WASN'T WORTH IT/WAS TOO LOW
- 6 ENERGY STAR® PRODUCTS ARE POOR QUALITY
- 7 RESPONSE WAS NEUTRAL / NOT NEGATIVE
- 95 OTHER (SPECIFY) [APPRISE CODE]
- 96 REFUSED
- 97 DON'T KNOW



## OTHER PROGRAMS

43. Do you recall hearing about any other energy efficiency programs offered by Con Edison?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

43a. (If Q43=Yes) Which Con Edison programs do you recall hearing about? (DO NOT READ. SELECT ALL RESPONSES)

1	CON EDISON TARGETED DSM PROGRAM (FREE CFLS/EFFICIENT LIGHT BULBS)
2	CON EDISON LOAD CONTROL PROGRAM (CONTROL AIR CONDITIONER THROUGH THERMOSTAT)
3	CON EDISON RESIDENTIAL HVAC PROGRAM
4	CON EDISON REFRIGERATOR RECYCLING PROGRAM
5	CON EDISON SMALL BUSINESS DIRECT INSTALL PROGRAM
6	ENERGY AUDIT
95	OTHER (SPECIFY) [APPRISE CODE]
96	REFUSED
97	DON'T KNOW

44. [IF Q43=2, 96, 97 OR NOT MARKED IN Q43a] Please tell me whether you have heard of each of the following programs, when I mention the program ... [Read each program and then Mark yes/no]

	Program	Yes	No
a	CON EDISON TARGETED DSM PROGRAM (FREE CFLS/EFFICIENT LIGHT BULBS)		
b	CON EDISON LOAD CONTROL PROGRAM (CONTROL AIR CONDITIONER THROUGH THERMOSTAT)		
c	CON EDISON RESIDENTIAL HVAC PROGRAM		
d	CON EDISON REFRIGERATOR RECYCLING PROGRAM		
e	CON EDISON SMALL BUSINESS DIRECT INSTALL PROGRAM		
f	ENERGY AUDIT		

45. [IF Q43, Q44a, Q44b, Q44c, Q44d, Q44e, or Q44f = YES] Have you participated in any other energy efficiency programs offered by Con Edison?

- 1 YES [GO TO Q45a]
- 2 NO
- 96 REFUSED

97 DON'T KNOW

Q45a. [IF Q45 = Yes] In which program or programs have you participated? [DO NOT READ] [SELECT ALL RESPONSES]

- 1 RESIDENTIAL HVAC PROGRAM
- 2 CENTRAL AIR-CONDITIONING PROGRAM
- 3 HOME ENERGY SURVEY
- 4 APPLIANCE RECYCLING (REFRIGERATOR, ROOM AC)
- 5 TARGETED DSM PROGRAM
- 95 OTHER (SPECIFY) [APPRISE CODE]
- 96 REFUSED
- 97 DON'T KNOW

46. Have you heard of any other residential energy efficiency programs apart from those offered by Con Edison?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

46a. [If Q46 = YES] Whose programs have you heard of? [DO NOT READ, MARK ALL THAT APPLY]

- 1 NYSDERDA NON-SPECIFIC
- 2 NYSDERDA APPLIANCE REBATE PROGRAM
- 3 NATIONAL GRID
- 4 CENTRAL HUDSON GAS AND ELECTRIC
- 5 CON EDISON
- 6 ORANGE AND ROCKLAND
- 7 STATE OF NEW YORK
- 8 FEDERAL GOVERNMENT
- 95 OTHER (SPECIFY) [APPRISE CODE]
- 96 REFUSED
- 97 DON'T KNOW

47. [IF NYSDERDA APPLIANCE REBATE PROGRAM NOT MENTIONED IN Q46a] Have you heard of NYSDERDA's Appliance Rebate Program?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

48. [IF Q46 = YES] Have you participated in any of these other energy efficiency programs?

- 1 YES
- 2 NO
- 96 REFUSED

97 DON'T KNOW

Q48a. [IF Q48 = YES] In which program or programs have you participated? [DO NOT READ] [SELECT ALL RESPONSES]

- 1 NYSERDA NON SPECIFIC
- 2 NYSERDA HOME APPLIANCE REBATE PROGRAM
- 3 NATIONAL GRID
- 4 CENTRAL HUDSON GAS AND ELECTRIC
- 5 ORANGE AND ROCKLAND GAS HEATING EQUIPMENT REBATE PROGRAM
- 6 ORANGE AND ROCKLAND OTHER
- 7 STATE OF NEW YORK
- 8 FEDERAL GOVERNMENT
- 95 OTHER (SPECIFY) [APPRISE CODE]
- 96 REFUSED
- 97 DON'T KNOW

49. [IF Q48A = NYSERDA HOME APPLIANCE REBATE PROGRAM] Did you receive a rebate for your Energy Star® Room Air Conditioner from NYSERDA, as well as from Con Edison?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

50. [IF Q43, Q44a, Q44b, Q44c, Q44d, Q44e, or Q44f = YES] Was it confusing to have more than one energy efficiency program available to you at the same time?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

51. [IF Q43, Q44a, Q44b, Q44c, Q44d, Q44e, or Q44f = YES, OR Q48= YES] Did you participate in any other energy efficiency programs because of your experience with the Room Air Conditioner Rebate program?

- 1 YES
- 2 NO
- 96 REFUSED
- 97 DON'T KNOW

#### **OTHER ENERGY SAVING ACTIONS**

52. In the months since you participated in the Room Air Conditioner rebate program, have you taken any additional energy savings actions to reduce your electricity consumption, either by installing other types of energy efficient products (other than the room air conditioner that you purchased) or by changing your energy consumption behavior?

- 1 YES  
 2 NO – SKIP TO Q56  
 96 REFUSED – SKIP TO Q56  
 97 DON'T KNOW– SKIP TO Q56

53. What additional energy savings actions have you done since May 14th, 2010? [DO NOT READ, MARK ALL THAT APPLY]

	CATEGORY		MEASURE
1	PURCHASED A NEW HIGH-EFFICIENCY APPLIANCE	1A	PURCHASED A NEW HIGH-EFFICIENCY REFRIGERATOR
		1B	PURCHASED A NEW HIGH-EFFICIENCY FREEZER
		1C	PURCHASED A NEW HIGH-EFFICIENCY WASHING MACHINE
		1D	PURCHASED A NEW HIGH-EFFICIENCY DRYER
		1E	PURCHASED A NEW HIGH-EFFICIENCY DISHWASHER
2	REDUCE HEAT LOSS THROUGH EXTERIOR OF HOME	2A	INSTALLED CEILING/WALL/BASEMENT INSULATION
		2B	REPLACED WINDOWS
		2C	WEATHERPROOFED HOME
		2D	SEALED AROUND WINDOWS/DOORS
3	REDUCED HEATING AND/OR COOLING USE	3A	INSTALLED HIGH EFFICIENCY FURNACE
		3B	INSTALLED HIGH EFFICIENCY CENTRAL AIR CONDITIONING
		3C	INSTALLED PROGRAMMABLE THERMOSTAT
		3D	TURNED DOWN THE THERMOSTAT SETTING
4	CHANGED CLOTHES WASHING /DRYING BEHAVIOR	4A	WASHED LAUNDRY IN COLD WATER
		4B	DRIED CLOTHES INSIDE ON A RACK
5	REDUCED HOUSEHOLD LIGHTING ENERGY USE	5A	TURNED OFF/REDUCED USE OF LIGHTS
		5B	INSTALLED CFLS
		5C	INSTALLED MOTION SENSORS OR TIMERS
		5D	INSTALLED ENERGY STAR® LIGHT FIXTURES
		5E	INSTALLED LED LIGHTS
6	TURNED OFF / REDUCE POWER TO HOUSEHOLD ITEMS	6A	TURNED OFF HOUSEHOLD ITEMS
		6B	UNPLUGGED SECONDARY REFRIGERATORS OR FREEZERS
		6C	UNPLUGGED DEVICES USUALLY PLUGGED

			INTO AN OUTLET
		6D	INSTALLED SMART POWER BAR
95	OTHER	95_oth	OTHER ACTION (SPECIFY)
96	REFUSED		
97	DON'T KNOW		

**[Ask Q54 and Q55 for each MEASURE mentioned in Q53]**

54. Using a scale between 1 and 10, where “1” means “Not at all likely” and “10” means “Extremely likely”, how likely you would have been to [INSERT MEASURE FROM Q53] on your own, had there been NO Room Air Conditioner Rebate program or promotions?

1 – Not at all likely

2

3

4

5

6

7

8

9

10 – Extremely likely

96 REFUSED

97 DON'T KNOW

55. Using a scale between 1 and 10, where 1 means not at all influential and 10 means very influential, how influential was the Room Air Conditioner Rebate promotion in your decision to [INSERT CATEGORY FROM Q53]?

1 – Not at all influential

2

3

4

5

6

7

8

9

10 – Very influential

96 REFUSED

97 DON'T KNOW

**DEMOGRAPHICS**

**READ FOR ALL:** Now I have just a few categorization questions to ask and we'll be finished.

56. What type of home do you live in? [READ LIST] Is it a . . .

- 1 Stand alone single Family home,
- 2 A multi-family home with 4 separate units or less, including townhomes or rowhouses, or a
- 3 Multi-family home with 5 or more units, including condos or apartments?
- 96 REFUSED
- 97 DON'T KNOW

57. What fuel do you mainly use to heat your home? [READ LIST]

- 1 Natural Gas,
- 2 Electric,
- 3 Propane,
- 4 Wood,
- 5 Oil, or
- 95 Something else? Specify
- 99 NOTHING/NO HEAT IN HOME
- 96 REFUSED
- 97 DON'T KNOW

58. Do you have central air conditioning, or other room air conditioners [besides the Energy Star<sup>®</sup> air conditioner(s) we just discussed] in your home? [READ LIST]

- 1 Central air conditioning,
- 2 Room air conditioners,
- 3 No other air conditioning
- 96 REFUSED
- 97 DON'T KNOW

59. What type of fuel does your hot water heater use? [READ LIST]

- 1 Electricity,
- 2 Natural Gas,
- 3 Propane, or
- 4 Some other fuel?
- 5 None
- 6 DON'T HAVE WATER HEATER
- 96 REFUSED
- 97 DON'T KNOW

60. Do you own or rent your home?

- 1 OWN
- 2 RENT
- 96 REFUSED
- 97 DON'T KNOW

61. How long have you lived in your current residence?

\_\_\_\_\_ YEARS

96 REFUSED

97 DON'T KNOW

62. What is the highest level of education you have completed? [READ LIST]

- |    |                           |
|----|---------------------------|
| 1  | Some High School          |
| 2  | High School               |
| 3  | Trade or Technical School |
| 4  | Some college              |
| 5  | College graduate          |
| 6  | Some graduate school      |
| 7  | Graduate degree, or       |
| 95 | Something else?           |
| 96 | REFUSED                   |
| 97 | DON'T KNOW                |

63. And finally, for statistical purposes only, please tell me which of the following categories applies to your total household income, before taxes, for the year 2010? **(Read list and select one)**

- |    |                                       |
|----|---------------------------------------|
| 1  | Under \$20,000                        |
| 2  | \$20,000 to just under \$40,000       |
| 3  | \$40,000 to just under \$60,000       |
| 4  | \$60,000 to just under \$80,000       |
| 5  | \$80,000 to just under \$100,000      |
| 6  | \$100,000 to just under \$150,000, or |
| 7  | \$150,000 or more                     |
| 96 | PREFER NOT TO SAY/REFUSED             |
| 97 | DON'T KNOW                            |

**READ FOR ALL:** Thank you for taking the time to complete this important survey. Have a good day/evening!

## RESIDENTIAL HVAC & ROOM AC NON-PARTICIPANT SURVEY

Quota Group	Target N
Con Ed CAC	100
Con Ed Gas	100
O&R Gas	100
Room AC Single	75
Room AC Multi	75

**PROGRAMMER: FOR THE PURPOSES OF THE SURVEY, [UTILITY] IS Con Edison OR Orange & Rockland. [PROGRAM NAME] FOR CON EDISON IS: Residential Heating, Ventilation and Air Conditioning Rebate AND FOR ORANGE & ROCKLAND: Gas Heating Equipment Rebate.**

Hi, my name is \_\_\_\_\_, from Braun Research and I'm calling on behalf of [UTILITY]. We're evaluating one of [UTILITY]'s energy efficiency programs. May I speak with [CONTACT], or the person in your household that is most knowledgeable about your household's energy bill?

READ IF NECESSARY: This survey will take approximately 15 minutes and all of your answers will be kept strictly confidential. Let's begin. [IF NOW IS NOT A CONVENIENT TIME, SCHEDULE CALL-BACK, OR IF REFUSAL, THANK AND TERMINATE CALL. RECORD REASONS FOR REFUSAL IN CALL NOTES.]

### NON PARTICIPANT CATEGORIZATION

64. First, we need a little bit of information about your home and the energy equipment in it. What type of home do you live in? Is it a . . . [READ LIST AS THREE CLEARLY SEPARATE CHOICES]

1	Stand alone single family home,
2	A multi-family home with 4 separate units or less, including townhomes or row houses, or a
3	Multi-family home with 5 or more units, including condos or apartments?
96	REFUSED
97	DON'T KNOW

65. Do you own or rent your home?

1	OWN
2	RENT
96	REFUSED
97	DON'T KNOW

66. What fuel do you mainly use to heat your home? [READ LIST]

1	Natural Gas,
2	Electricity,
3	Propane,
4	Wood,
5	Oil, or



95	Something else? SPECIFY
99	NOTHING/NO HEAT IN HOME
96	REFUSED
97	DON'T KNOW

67. [IF Q3 = Natural Gas ASK Q4; OTHERWISE, SKIP TO Q5] What type of equipment do you use to heat your home? Is it a . . . [READ LIST]  
[READ IF NECESSARY: Furnaces use heated air that blows out of air vents to heat your home, and boilers use heated water that runs in radiators or in pipes in baseboard heaters to heat your home. Which of these types of systems do you have?]

1	Furnace,
2	Water boiler, or
3	Steam boiler?
96	REFUSED
97	DON'T KNOW

68. What type of air conditioning, if any, do you have in your home? Do you have . . . [READ LIST, CHOOSE ONE RESPONSE.]

1	Central air conditioning,
2	Room air conditioners,
3	Both central air conditioning and room air conditioners, or
4	No air conditioning at all?
96	REFUSED
97	DON'T KNOW

69. What type of fuel does your hot water heater use? Does it use . . . [READ LIST, CHOOSE ONE RESPONSE.]

1	Electricity,
2	Natural Gas,
3	Propane, or
95	Some other fuel?
99	NONE/DON'T HAVE WATER HEATER
96	REFUSED
97	DON'T KNOW

70. [IF Q2 = 2] Are you permitted to replace the heating and/or air conditioning equipment in your residence? [CHOOSE ONE RESPONSE] [DO NOT READ CHOICES]

1	YES
2	NO [TERMINATE FOR ALL BUT CON ED ROOM AC]
3	ALLOWED TO REPLACE AC, BUT NOT HEAT
4	ALLOWED TO REPLACE HEAT, BUT NOT AC
96	REFUSED
97	DON'T KNOW

#### CATEGORIZATION FOR QUOTAS:

Categorization	Requirements	Categorization	Requirements
Con Ed CAC	[UTILITY] = Con Ed	O&R Gas	[UTILITY] = O&R
	Q1 = 1 or 2		Q1 = 1 or 2
	Q2 = 1 or (Q2 = 2 AND Q7 = 1 OR 3)		Q2 = 1 or (Q2 = 2 AND Q7 = 1 OR 4)
	Q5 = 1 or 3		Q3 = 1
Con Ed Gas	[UTILITY] = Con Ed	Room AC Single	[UTILITY] = Con Ed
	Q1 = 1 or 2		Q1 = 1 or 2
	Q2 = 1 or (Q2 = 2 AND Q7 = 1 OR 4)		Q5 = 2 or 3
	Q3 = 1	Room AC Multi	[UTILITY] = Con Ed, Q1=3, Q5=2 or 3

IF RESPONDENT DOES NOT FALL INTO ANY CATEGORY, THANK AND TERMINATE FROM SURVEY BY SAYING: I'm sorry, but our quota is already filled for people who live in homes like yours. Thank you for your time, and have a nice day/evening

#### PROGRAM AWARENESS – HVAC

ASK Q8-Q12 IF CATEGORY = Con Ed CAC, Con Ed Gas, or O&R Gas, ELSE SKIP TO INSTRUCTIONS BEFORE Q27.

71. Are you familiar with [UTILITY]'s [PROGRAM NAME] program that provides rebates for high efficiency [CON ED ONLY: central air conditioners,] gas heating and water heating equipment, and programmable thermostats?

1	YES – AM FAMILIAR, BUT NOT PARTICIPATING
3	YES – AM FAMILIAR, <b>BUT CURRENTLY ARE PARTICIPATING IN PROGRAM -- TERMINATE</b>
2	NO [SKIP TO Q11]
96	REFUSED [SKIP TO Q11]
97	DON'T KNOW [SKIP TO Q11]

72. [IF Q8 = Yes] How did you hear about the program? [DO NOT READ] [RECORD ALL RESPONSES]

1	MAILING
2	NEWSLETTER
3	BILL INSERT/AS A CUSTOMER
4	WEBSITE
5	FAMILY/FRIEND
6	CONTRACTOR
7	TELEVISION ADVERTISING
8	RADIO ADVERTISING
9	PRINT ADVERTISING
10	COMMUNITY EVENT/STATE/COUNTY FAIR
95	OTHER, SPECIFY

96	REFUSED
97	DON'T KNOW

73. [IF Q9 = MAILING, NEWSLETTER, WEBSITE, ANY ADVERTISING OR COMMUNITY EVENT]  
Do you know who provided the information about the program? [DO NOT READ] [RECORD ALL RESPONSES]

1	CON EDISON
2	ORANGE & ROCKLAND
3	HONEYWELL
4	NYSERDA
5	NATIONAL GRID
6	INDUSTRY ASSOCIATION SPECIFY:
7	TRADE ASSOCIATION
95	OTHER, SPECIFY
96	REFUSED
97	DON'T KNOW

- 10a. [IF 10 = 97] Was it [UTILITY] or another organization?

1	CON EDISON [ONLY ASK IF UTILITY = CONED]
2	ORANGE & ROCKLAND [ONLY ASK IF UTILITY = O&R]
95	ANOTHER ORGANIZATION, SPECIFY:
96	REFUSED
97	DON'T KNOW

74. Where do you typically get information about energy efficient products? [DO NOT READ]  
[CHECK ALL THAT APPLY]

1	FAMILY/FRIENDS
2	WORK ASSOCIATES/COLLEAGUES
3	WEBSITES
4	UTILITY BILL INSERTS
5	TELEVISION
6	BILLBOARDS
7	MAILINGS
8	CONTRACTORS (PLUMBERS, ELECTRICIANS. . .)
9	APPLIANCE TAGS/ENERGY STAR® INFO PRINTED ON APPLIANCES
10	RETAILERS (HARDWARE STORES, HOME DEPOT/LOWES)
11	DO NOT GET INFORMATION ABOUT ENERGY EFFICIENT PRODUCTS
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

- 11a. [IF Q11 = 3] Who sponsors the websites you visit to get information about energy efficient products? [CHECK ALL THAT APPLY]

1	UTILITY WEBSITES
2	ENERGY STAR® WEBSITE

3	CONSUMER REPORTS
95	ANOTHER WEBSITE, SPECIFY:
96	REFUSED
97	DON'T KNOW

**[DO NOT ASK IF Q7 = 02, NO; SKIP TO Q27]**

75. Please indicate if you have purchased any of the following products for your home since June 2009. Have you purchased a(n) . . . : [READ LIST. CHOOSE ALL THAT APPLY.]

	Yes	No	RF	DK	
a.	1	2	96	97	Central air conditioner?
b.	1	2	96	97	Gas Furnace?
c.	1	2	96	97	Gas Water Boiler?
d.	1	2	96	97	Gas Steam Boiler?
e.	1	2	96	97	Gas Water Heater?
f.	1	2	96	97	Boiler reset control? READ IF NECESSARY: Most boilers are set to a constant temperature. The boiler reset control allows the boiler temperature to change (or reset) based on the outdoor temperature.
g.	1	2	96	97	Electronically commuted motor, or ECM, for your air conditioning? READ IF NECESSARY: An ECM fan is sometimes called a variable speed fan. For systems with an ECM, the air handler will turn on and ramp up to 100% speed slowly. When the thermostat satisfies, the motor will slowly ramp down and then stop after so many minutes. This is often referred to as soft start and soft stop and uses less energy than a fan set to a constant speed.
h.	1	2	96	97	Electronically commuted motor, or ECM, for your furnace? READ IF NECESSARY: An ECM fan is sometimes called a variable speed fan. For systems with an ECM, the air handler will turn on and ramp up to 100% speed slowly. When the thermostat satisfies, the motor will slowly ramp down and then stop after so many minutes. This is often referred to as soft start and soft stop and uses less energy than a fan set to a constant speed.

***Equipment Purchasers***

ASK Qs 13-17 ONLY IF AT LEAST ONE OF Q12a – Q12h = 1. OTHERWISE, SKIP TO INSTRUCTIONS BEFORE Q18. REPEAT Qs13-17 FOR EACH ITEM PURCHASED IN Q12. ASK ALL QUESTIONS FOR EACH ITEM BEFORE MOVING ON THE NEXT.

Now I'd like to ask to ask you some questions about the [ANSWER FROM Q12] that you purchased.

FOR Q13, USE THE FOLLOWING VALUES FOR [REBATE AMOUNT] AND [INCREMENTAL COST], BASED ON ANSWER(S) TO Q12:

	Equipment Type	Rebate Amount	Incremental Cost
a	Central air conditioner	\$400	\$1,000
b	Gas Furnace	\$200	\$1,000
c	Gas Water Boiler	\$500	\$1,000
d	Gas Steam Boiler	\$500	\$1,000
e	Gas Water Heater	\$300	\$300
f	Boiler reset controls	\$100	\$500
g	Electronically commuted motor, or ECM for central air	\$200	\$455
h	Electronically commuted motor, or ECM for furnace	\$200	\$455

76. A typical **additional** cost for purchasing [IF Q12a-d = 1, ADD: "a high efficiency"; IF Q12e = 1, ADD: "an indirect"; IF Q12f = 1, DON'T ADD ANYTHING; IF 12g or h=1, ADD: "an"] [ANSWER FROM Q12] [IF Q12a-e=1, ADD: "rather than a standard efficiency model"] is about [INCREMENTAL COST]. Were you aware of the [REBATE AMOUNT] rebate that you could receive from [UTILITY] for purchasing [IF Q12a-d = 1, ADD: "the high efficiency"; IF Q12e = 1, ADD: "the indirect"; IF Q12f = 1, DON'T ADD ANYTHING; IF 12g or h=1, ADD: "the"] [ANSWER FROM Q12]? [REPEAT FOR EACH Q12 ITEM INSTALLED]?

1	YES [CONTINUE]
2	NO [SKIP TO Q15]
96	REFUSED [SKIP TO Q15]
97	DON'T KNOW [SKIP TO Q15]

77. Why didn't you purchase your [ITEM FROM Q12] through the [UTILITY] [PROGRAM NAME] program? [DO NOT READ]? [CHECK ALL THAT APPLY]

1	DID NOT WANT ANYONE COMING INTO MY HOME TO INSPECT
2	QUALIFYING EQUIPMENT WAS TOO EXPENSIVE
3	ENERGY SAVINGS NOT ENOUGH TO JUSTIFY ADD'L EXPENSE
4	DID NOT HAVE TIME/DIDN'T WANT TO DEAL WITH REBATE APPLICATION
5	PLANNED TO DO IT ON MY OWN
6	REBATE WASN'T HIGH ENOUGH
7	I DIDN'T KNOW HOW LONG THE PROGRAM WAS RUNNING
8	DIDN'T KNOW ABOUT PROGRAM/DIDN'T KNOW PROGRAM EXISTED
95	OTHER (SPECIFY):
96	REFUSED
97	DON'T KNOW

**SKIP TO Q17**

78. [IF q13=2,96,97] If you had known about this rebate when you made your purchase, on a scale of 1 to 10, where 1 is not at all likely and 10 is extremely likely, how likely would you have been to purchase your [ITEM FROM Q12] through the [PROGRAM NAME] program? [REPEAT FOR EACH Q12 ITEM INSTALLED] [READ IF NECESSARY: "You would need to pay [READ ONLY FOR ITEMS A-E an additional] [INCREMENTAL COST] to receive a [REBATE AMOUNT] rebate."

1                      2                      3                      4                      5                      6                      7                      8                      9                      10  
 Not at all                      Neutral                      Extremely  
 Likely                      Likely

79. [IF Q15 RESPONSE < 7, ASK]: Why wouldn't you have been likely to purchase your [ITEM FROM Q12] through the program? [DO NOT READ] [CHECK ALL THAT APPLY]

1	ENERGY EFFICIENT EQUIPMENT IS TOO EXPENSIVE
2	ENERGY SAVINGS NOT ENOUGH TO JUSTIFY ADD'L EXPENSE
3	DO NOT HAVE TIME TO DEAL WITH REBATE APPLICATION
4	PLAN TO DO IT ON MY OWN
5	REBATE ISN'T HIGH ENOUGH
6	RECENTLY UPGRADED MY EQUIPMENT
7	NOT CONCERNED WITH ENERGY EFFICIENCY
8	NOT LIKELY TO BE ABLE TO GET THE BRAND I WANT
9	I MIGHT/I NEED MORE INFORMATION/MY RESPONSE IS NEUTRAL
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

**[ASK IF Q13 = 01 OR Q15 < 7]**

80. Under what circumstances would you have participated in the [UTILITY] rebate program to buy your [ITEM FROM Q12 ]? [DO NOT READ] [CHECK ALL THAT APPLY]

1	HIGHER REBATE
2	BETTER ADVERTISEMENT
3	MORE EQUIPMENT REBATED
4	LONGER PROGRAM PERIOD
5	NONE/NO CIRCUMSTANCE UNDER WHICH I WOULD'VE PARTICIPATED
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

### Non-Purchasers

ASK ONLY IF ANY Q12a-h NOT = 1; OTHERWISE, SKIP TO INSTRUCTIONS ABOVE Q23 FOR THE FOLLOWING QUESTIONS (Q18-Q22), ASK FOR EACH EQUIPMENT TYPE (FURNACE, BOILER, WATER HEATER, CENTRAL AIR CONDITIONER) IF THE RESPONDENT IS IN THE FOLLOWING CATEGORY:

- FURNACE IF {CON EDISON GAS, Q4 = FURNACE, AND Q12b ≠ 1} OR {ORANGE & ROCKLAND GAS, Q4 = FURNACE, AND Q12b ≠ 1}
  - BOILER IF {CON EDISON GAS, Q4 = WATER OR STEAM BOILER, AND Q12c/d ≠ 1} OR {ORANGE & ROCKLAND GAS, Q4 = WATER OR STEAM BOILER, AND Q12c/d ≠ 1}
  - INDIRECT WATER HEATER IF {Q6 = 2, and Q12e ≠ 1}
  - CENTRAL AIR CONDITIONER IF {Q5 = 1 OR 3, CON EDISON CUSTOMER, and Q12a ≠ 1}
- NOTE: NO ONE CAN ANSWER QUESTIONS FOR BOTH FURNACE **AND** BOILER. ASK ALL QUESTIONS FOR EACH EQUIPMENT TYPE BEFORE MOVING ON TO NEXT EQUIPMENT TYPE.

Question Key	Incremental Cost	Equipment Type	Rebate Amount
Q4 = 1 (Furnace)	\$1,000	Furnace	\$200
Q4 = 2 (Water Boiler) or 3 (Steam Boiler)	\$1,000	Boiler	\$500
Q5 = 1 or 3	\$1,000	Central Air Conditioner	\$400
Q6 = 2 (Gas)	\$300	Indirect Water Heater	\$300

[FOR Q18, USE TABLE ABOVE FOR INCREMENTAL COSTS, EQUIPMENT TYPES AND REBATE AMOUNT INSERTION TEXT.]

81. When it comes time to replace your current [EQUIPMENT TYPE; IF EQUIPMENT TYPE = INDIRECT WATER HEATER, INSERT 'WATER HEATER'], on a scale of 1 to 10, where 1 means "not at all likely" and 10 means "extremely likely," how likely would you be to spend an additional [IF FURNACE/BOILER/CENTRAL AC – "\$1000"; IF WATER HEATER – "\$300"] to purchase a **high efficiency** [FURNACE/BOILER/"INDIRECT" WATER HEATER/CENTRAL AIR CONDITIONER] if you were given a rebate of [IF FURNACE – "\$200"; IF BOILER – "\$500; IF WATER HEATER – "\$300"; IF CENTRAL AIR CONDITIONER – "\$400]? [DO NOT READ] INTERVIEWER: IF RESPONDENT SAYS SOMETHING LIKE, WHEN IT'S TIME TO BUY A NEW UNIT I'LL BE HAPPY TO PAY EXTRA FOR ENERGY EFFICIENCY EVEN WITHOUT THE REBATE' CODE RESPONSE AS A '10'

1	2	3	4	5	6	7	8	9	10
Not at all				Neutral					Extremely
Likely									Likely

82. [IF Q18 < 7] Why wouldn't you be likely to take advantage of the rebate and purchase a high efficiency [FURNACE/BOILER/INDIRECT WATER HEATER/CENTRAL AIR CONDITIONER]? [DO NOT READ] [CHECK ALL THAT APPLY]

1	ENERGY EFFICIENT EQUIPMENT IS TOO EXPENSIVE
2	ENERGY SAVINGS WOULD NOT BE LARGE ENOUGH
3	DO NOT HAVE TIME TO DEAL WITH REBATE APPLICATION
4	PLAN TO DO IT ON MY OWN

5	REBATE ISN'T HIGH ENOUGH
6	RECENTLY UPGRADED MY EQUIPMENT
7	NOT CONCERNED WITH ENERGY EFFICIENCY
8	NOT LIKELY TO BE ABLE TO GET THE BRAND I WANT
9	I MIGHT/I NEED MORE INFORMATION/MY RESPONSE IS NEUTRAL
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

83. [IF Q18 < 7] Under what circumstances **would** you purchase a high efficiency [FURNACE/BOILER/INDIRECT WATER HEATER/CENTRAL AIR CONDITIONER]? [DO NOT READ] [CHECK ALL THAT APPLY]

1	HIGHER REBATE
2	BETTER ADVERTISEMENT
3	MORE EQUIPMENT REBATED
4	LONGER PROGRAM PERIOD
5	IF HIGH EFFICIENCY EQUIPMENT BECOMES LESS EXPENSIVE
6	WOULD NEVER PURCHASE THE HIGH EFFICIENCY MODEL/VERSION
7	IF MY CURRENT EQUIPMENT BREAKS
8	IF PAYBACK IN ENERGY SAVINGS IS REASONABLE/IF THE ADDITIONAL COST WILL BE PAID BACK IN ENERGY SAVINGS QUICKLY
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

84. Assuming you decided to install a high efficiency [FURNACE/BOILER/INDIRECT WATER HEATER/CENTRAL AIR CONDITIONER], what is the longest you would be willing to wait until the energy savings covered the additional cost of the new [FURNACE/ BOILER/ INDIRECT WATER HEATER/CENTRAL AIR CONDITIONER]? [RECORD RESPONSE IN YEARS – DO NOT ACCEPT A RANGE]

READ IF NECESSARY: This is called 'payback' or the time it takes for the extra cost of high efficiency heating or air conditioning equipment to be paid for by the money you save on lower utility bills.

\_\_\_\_\_ YEARS

96	DON'T KNOW
97	REFUSED

85. Now please assume you need to replace your [FURNACE/BOILER/WATER HEATER/CENTRAL AIR CONDITIONER]. Using a scale from 1 to 10, where 1 is "not at all important" and 10 is "extremely important," how important is the availability of rebates in deciding whether to purchase a high efficiency [FURNACE/BOILER/WATER HEATER/CENTRAL AIR CONDITIONER] rather than one of standard efficiency? [DO NOT READ]

1	2	3	4	5	6	7	8	9	10
Not at all Important				Neutral					Extremely Important



**FOR THE FOLLOWING QUESTIONS (Q23-Q26), ASK FOR EACH PRODUCT (BOILER RESET CONTROLS OR PROGRAMMABLE THERMOSTAT) IF THE RESPONDENT MEETS THE FOLLOWING QUALIFICATIONS:**

- **PROGRAMMABLE THERMOSTAT IF {CON EDISON GAS NON-PARTICIPANT AND Q4 = FURNACE OR BOILER} OR {ORANGE & ROCKLAND GAS NON-PARTICIPANT AND Q4 = FURNACE OR BOILER} OR {CON EDISON CAC NON-PARTICIPANT AND Q5 = CENTRAL AIR CONDITIONING OR BOTH CENTRAL AIR CONDITIONING AND ROOM AIR CONDITIONERS}**
- **ASK ALL QUESTIONS FOR ONE TYPE OF EQUIPMENT BEFORE MOVING ON TO THE NEXT**
- **BOILER RESET CONTROLS IF {CON EDISON GAS NON-PARTICIPANT, Q4 = BOILER, Q12f ≠ YES }**

86. Are you aware that the [UTILITY] [PROGRAM NAME] program also offers rebates on [BOILER RESET CONTROLS/PROGRAMMABLE THERMOSTATS] that [IF BOILER RESET CONTROLS – “control the temperature of your boiler”; IF PROGRAMMABLE THERMOSTAT – “let you automatically change the temperature setting of your thermostat at different times of the day”]?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

PROGRAMMER AUTOFILL Q23a=YES IF Q12f=YES

**[ASK IF Q4 = BOILER AND Q12f ≠ 1]**

23a. Does your boiler have a reset control? READ IF NECESSARY: A boiler reset control allows the boiler temperature to vary (or reset) based on the outdoor temperature.

1	YES – CHECK TO SEE IF RESPONDENT QUALIFIES FOR PROGRAMMABLE THERMOSTAT QUESTIONS. IF NOT, GO TO INSTRUCTIONS BEFORE Q27
2	NO – GO TO Q24
96	REFUSED – CHECK TO SEE IF RESPONDENT QUALIFIES FOR PROGRAMMABLE THERMOSTAT QUESTIONS. IF NOT, GO TO INSTRUCTIONS BEFORE Q27
97	DON'T KNOW – CHECK TO SEE IF RESPONDENT QUALIFIES FOR PROGRAMMABLE THERMOSTAT QUESTIONS. IF NOT, GO TO INSTRUCTIONS BEFORE Q27

**[ASK IF Q4 = FURNACE/BOILER OR Q5 = CENTRAL AIR CONDITIONER/BOTH CENTRAL A/C AND ROOM AC]**

23b. Does your home have a programmable thermostat?

1	YES – GO TO INSTRUCTIONS BEFORE Q27
2	NO – GO TO Q24
96	REFUSED – GO TO GO TO INSTRUCTIONS BEFORE Q27
97	DON'T KNOW – GO GO TO INSTRUCTIONS BEFORE Q27

87. [IF Q23a/b = NO] Why don't you have a [BOILER RESET CONTROL/ PROGRAMMABLE THERMOSTAT]? [DO NOT READ] [CHECK ALL THAT APPLY]

1	DON'T KNOW WHAT IT IS
2	DON'T HAVE A NEED FOR IT/ALREADY HAVE ONE
3	TOO EXPENSIVE
4	REBATE NOT HIGH ENOUGH
5	I RENT MY HOUSE
6	WORRIED ABOUT HOME COMFORT
7	DON'T THINK THEY REALLY WORK/SAVE MUCH ENERGY
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

88. On a scale of 1 to 10, where 1 is not at all likely and 10 is extremely likely, knowing that you can receive a [IF BOILER RESET CONTROLS – "\$100"; IF PROGRAMMABLE THERMOSTAT – "\$25"] rebate for installing [IF BOILER RESET CONTROLS: "boiler reset controls on your current boiler"; IF PROGRAMMABLE THERMOSTAT – "a programmable thermostat"], how likely are you to participate in the [PROGRAM NAME] program in the next 12 months? [DO NOT READ] [READ IF NECESSARY: IF BOILER RESET CONTROLS: "Boiler reset controls typically cost about \$500" IF PROGRAMMABLE THERMOSTAT: "A programmable thermostat typically costs \$50."]

1	2	3	4	5	6	7	8	9	10
Not at all Likely				Neutral					Extremely Likely

89. [IF Q25 < 7] Why wouldn't you be likely to purchase a [BOILER RESET CONTROL/ PROGRAMMABLE THERMOSTAT] through the [PROGRAM NAME] Program? [DO NOT READ] [CHECK ALL THAT APPLY]

1	DON'T KNOW WHAT THEY ARE
2	DON'T HAVE A NEED FOR IT/ALREADY HAVE ONE
3	TOO EXPENSIVE
4	REBATE NOT HIGH ENOUGH
5	I RENT MY HOUSE
6	WORRIED ABOUT HOME COMFORT
7	DON'T THINK THEY REALLY WORK/SAVE MUCH ENERGY
8	I MIGHT/I NEED MORE INFORMATION/MY RESPONSE IS NEUTRAL
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

#### PROGRAM AWARENESS – ROOM AC

**[ASK THE QUESTIONS IN THIS SECTION (Q27-Q40) ONLY IF CATEGORIZATION = CON EDISON ROOM AC SINGLE OR CON EDISON ROOM AC MULTI]**

90. Are you familiar with Con Edison's *Room AC* program, which provided rebates for purchasing Energy Star® room air conditioners?

1	YES
---	-----

2	NO [SKIP TO Q30]
96	REFUSED [SKIP TO Q30]
97	DON'T KNOW [SKIP TO Q30]

91. [IF Q27= YES] How did you hear about the program? [DO NOT READ]

1	MAILING
2	NEWSLETTER
3	BILL INSERT/AS A CUSTOMER
4	WEBSITE
5	FAMILY/FRIEND
6	CONTRACTOR
7	TELEVISION ADVERTISING
8	RADIO ADVERTISING
9	PRINT ADVERTISING
10	COMMUNITY EVENT/STATE/COUNTY FAIR
95	OTHER, SPECIFY
96	REFUSED
97	DON'T KNOW

92. [IF Q28 = MAILING, NEWSLETTER, WEBSITE, ANY ADVERTISING OR COMMUNITY EVENT]  
Do you know who provided the information about the program? [DO NOT READ] [MARK ALL RESPONSES] [PROMPT IF NECESSARY: Was it the utility or another organization?]

1	CON EDISON
2	ORANGE & ROCKLAND
3	HONEYWELL
4	NYSERDA
5	NATIONAL GRID
6	INDUSTRY ASSOCIATION
7	TRADE ASSOCIATION
95	OTHER
96	REFUSED
97	DON'T KNOW

93. Did you purchase any new room air conditioners for your home between May 14<sup>TH</sup> and July 14<sup>TH</sup> of 2010? [DO NOT READ]

1	YES [GO TO Q31]
2	NO [GO TO Q37]
3	MAYBE/CAN'T RECALL EXACT DATE [GO TO Q31]
96	REFUSED [GO TO Q37]
97	DON'T KNOW [GO TO Q37]

**Room AC Purchasers [IF Q30=1 or 3]**

94. [IF Q30=1 OR 3] When you bought your air conditioner, were you aware of the \$30 rebate that you could receive from Con Edison for purchasing a new Energy Star<sup>®</sup>, high-efficiency room air conditioner?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

31a. When you bought your air conditioner, did it have an Energy Star® label on it?

1	YES
2	NO [SKIP TO Q33]
96	REFUSED [SKIP TO Q33]
97	DON'T KNOW [SKIP TO Q33]

95. [IF Q31a=1] Why didn't you purchase an Energy Star® room air conditioner through the program? [DO NOT READ] [CHECK ALL THAT APPLY]

1	DID NOT HAVE FUNDS TO BUY AN ENERGY STAR® ROOM AC
2	ENERGY SAVINGS WOULD NOT BE LARGE ENOUGH TO JUSTIFY ADD'L COST OF ENERGY STAR®
3	REBATE TOO COMPLICATED
4	REBATE WASN'T HIGH ENOUGH
5	I DIDN'T KNOW HOW LONG THE PROGRAM WAS RUNNING
6	I DIDN'T KNOW HOW MUCH THE REBATE WAS
7	I DIDN'T KNOW HOW TO GET THE REBATE
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

96. [IF Q31a=2 OR 96 or 97] If you had known about this rebate when you bought your air conditioner, on a scale of 1 to 10, where 1 is "not at all likely" and 10 is "extremely likely," how likely would you have been to purchase an Energy Star® room air conditioner? [DO NOT READ] [READ IF NECESSARY: "The typical cost difference between a regular efficiency room air conditioner and an Energy Star® room air conditioner is between \$30 and \$50."]

1	2	3	4	5	6	7	8	9	10
Not at all				Neutral					Extremely
Likely									Likely

97. [IF Q33<7] Why wouldn't you have been likely to buy your air conditioner through the program? [DO NOT READ] [CHECK ALL THAT APPLY]

1	ENERGY EFFICIENT EQUIPMENT IS TOO EXPENSIVE
2	ENERGY SAVINGS WOULD NOT BE LARGE ENOUGH
3	DO NOT HAVE TIME TO DEAL WITH REBATE APPLICATION
4	PLAN TO DO IT ON MY OWN
5	REBATE ISN'T HIGH ENOUGH
6	RECENTLY UPGRADED MY EQUIPMENT
7	NOT CONCERNED WITH ENERGY EFFICIENCY
8	NOT LIKELY TO BE ABLE TO GET THE BRAND I WANT
9	I MIGHT/I NEED MORE INFORMATION/MY RESPONSE IS NEUTRAL

95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

98. Using the same scale of 1 to 10, where 1 is “not at all likely” and 10 is “extremely likely,” how likely are you to buy an Energy Star® air conditioner through the program the next time you need to buy one? [DO NOT READ] [READ IF NECESSARY: “The typical cost difference between a regular efficiency room air conditioner and an Energy Star® room air conditioner is between \$30 and \$50.”]

1	2	3	4	5	6	7	8	9	10
Not at all Likely				Neutral					Extremely Likely

99. [IF Q35<8] Under what circumstances would you be very likely to buy your next room air conditioner through this program? [DO NOT READ] [CHECK ALL THAT APPLY]

1	HIGHER REBATE
2	BETTER ADVERTISEMENT
3	IF I SEE SOMETHING ABOUT IT/IF RETAILERS TELLS ME ABOUT IT AT THE STORE
4	LONGER PROGRAM PERIOD
5	NONE/DON'T KNOW OF ANY CIRCUMSTANCE UNDER WHICH I WOULD'VE PARTICIPATED
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

**Room AC Non-Purchasers (ENTER THIS SECTION IF Q30=2, 96 or 97, ELSE SKIP TO Q41)**

100. [IF Q30 = 2, 96 OR 97 (NO, RF, DK)] When it is time to buy a new room air conditioner, using a scale from 1 to 10, where 1 means “not at all likely” and 10 means “extremely likely,” how likely would you be to purchase an Energy Star® high efficiency room air conditioner, if you were offered a \$30 rebate? [DO NOT READ]  
[READ IF NECESSARY: “The typical cost difference between a regular efficiency room air conditioner and an Energy Star® room air conditioner is between \$30 and \$50.”]

1	2	3	4	5	6	7	8	9	10
Not at all Likely				Neutral					Extremely Likely

101. [IF Q37 < 7] Why wouldn't you be likely to take advantage of the rebate and purchase an Energy Star® room air conditioner? [DO NOT READ] [SELECT ALL RESPONSES]

1	ENERGY STAR® ROOM AIR CONDITIONERS ARE TOO EXPENSIVE
2	ENERGY SAVINGS WOULD NOT BE LARGE ENOUGH
3	DO NOT HAVE TIME TO DEAL WITH REBATE APPLICATION
4	PLAN TO DO IT ON MY OWN
5	REBATE ISN'T HIGH ENOUGH

6	RECENTLY UPGRADED MY EQUIPMENT
7	I MIGHT/I NEED MORE INFORMATION/MY RESPONSE IS NEUTRAL
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

102. [IF Q37<8] Under what circumstances **would** you be very likely to buy an Energy Star® room air conditioner? [DO NOT READ] [CHECK ALL THAT APPLY]

1	HIGHER REBATE
2	BETTER ADVERTISEMENT
3	LONGER PROGRAM PERIOD
4	I WOULDN'T BUY ONE UNDER ANY CIRCUMSTANCES
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

103. Using a scale from 1 to 10, where 1 is not at all important and 10 is extremely important, how important is the availability of rebates in deciding whether to purchase a new Energy Star® room air conditioner? [DO NOT READ]

1	2	3	4	5	6	7	8	9	10
Not at all				Neutral					Extremely
Important									Important

#### ENERGY EFFICIENCY ATTITUDES - ASK ALL

104. Are there any other energy-using products for which you would like [UTILITY] to offer rebates? [DO NOT READ] [CHECK ALL THAT APPLY]

1	CFLS/COMPACT FLUORESCENT LIGHT BULBS
2	CLOTHES WASHER
3	CLOTHES DRYER
4	COMPUTERS
5	DISHWASHER
6	DEHUMIDIFIER
7	EVAPORATIVE COOLER
8	REFRIGERATOR
9	FREEZER
10	POOL PUMP
11	LOW-FLOW SHOWERHEAD
12	OCCUPANCY SENSOR
13	ROOM AIR CONDITIONER
14	TELEVISIONS
15	VIDEO GAMING SYSTEMS
16	SOLAR PANELS
17	NO/NONE

95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

105. Do you normally purchase energy efficient products?

1	YES (GO TO Q44)
2	SOMETIMES (GO TO Q43)
3	NO (GO TO Q43)
96	REFUSED (GO TO Q45)
97	DON'T KNOW (GO TO Q45)

106. [IF Q42 = NO OR SOMETIMES] What are some reasons you might not purchase energy efficient products? [DO NOT READ] [CHECK ALL THAT APPLY]

1	THEY ARE NOT WORTH THE ADDED COST
2	I AM NOT CONCERNED ABOUT ENERGY EFFICIENCY
3	THE PRODUCTS SEEM EXPERIMENTAL
4	THE APPEARANCE OF THE PRODUCTS IS UNDESIRABLE
5	THE PERFORMANCE OF THE PRODUCT IS QUESTIONABLE
6	NOT ENOUGH INFORMATION ON THE BENEFITS THEY WILL PROVIDE ME
7	I DO NOT HAVE THE DISPOSABLE INCOME TO BUY ANYTHING EXTRA RIGHT NOW/UPFRONT COSTS HURT
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

107. [IF Q42 = YES] What is the main reason you buy energy efficient products? [DO NOT READ. TAKE ONE RESPONSE.]

1	THEY SAVE MONEY/COST ME LESS IN THE LONG RUN
2	THEY SAVE ENERGY
3	IT'S GOOD FOR THE ENVIRONMENT/REDUCES POLLUTION
4	THEY TEND TO BE HIGHER QUALITY PRODUCTS
5	IF I HAVE TO BUY A NEW [PRODUCT] ANYWAY/MY CURRENT ONE IS BROKEN, HAS TO BE REPLACED
95	OTHER, SPECIFY:
96	REFUSED
97	DON'T KNOW

#### OTHER PROGRAMS – ASK TO ALL

108. What other energy efficiency programs offered by [UTILITY] have you heard of, if any? [DO NOT READ] [CHECK ALL THAT APPLY]

1	CON EDISON'S TARGETED DSM PROGRAM (AKA DEMAND SIDE MANAGEMENT)
2	CON EDISON'S DIRECT LOAD CONTROL PROGRAM
3	CON EDISON'S RESIDENTIAL HEATING, VENTILATION AND AIR

	CONDITIONING PROGRAM
4	CON EDISON'S ROOM AC PROGRAM
5	ORANGE AND ROCKLAND'S GAS HEATING EQUIPMENT PROGRAM
6	ORANGE AND ROCKLAND'S TIME OF USE PROGRAM
7	HAVE NOT HEARD OF OTHER PROGRAMS (GO TO Q48)
95	OTHER, SPECIFY INDIVIDUAL PROGRAMS SEPARATELY (OTHER #1, OTHER #2, ETC)
96	REFUSED (GO TO Q48)
97	DON'T KNOW (GO TO Q48)

[IF ONLY ONE RESPONSE RECORDED IN Q45, GO TO Q46. IF MORE THAN ONE RESPONSE, GO TO Q47]

109. [IF Q45 = **ONE** OF 1-6 OR 95] Have you participated in that program?

1	YES
2	NO
96	REFUSED
97	DON'T KNOW

110. [IF Q45 = MORE THAN ONE OF 1-6, 95] Which of these other programs, if any, have you participated in? [DO NOT READ. ACCEPT MULTIPLE RESPONSES]

1	CON EDISON'S TARGETED DSM PROGRAM
2	CON EDISON'S DIRECT LOAD CONTROL PROGRAM
3	CON EDISON'S RESIDENTIAL HEATING, VENTILATION AND AIR CONDITIONING PROGRAM
4	CON EDISON'S ROOM AC PROGRAM
5	ORANGE AND ROCKLAND'S GAS HEATING EQUIPMENT PROGRAM
6	ORANGE AND ROCKLAND'S TIME OF USE PROGRAM
94	NONE/NO OTHER
95	LIST OTHER(S) FROM Q45
96	REFUSED
97	DON'T KNOW

111. Apart from the programs offered by [UTILITY], which other residential energy efficiency programs are you familiar with, if any? [DO NOT READ] [CHECK ALL THAT APPLY]

1	NYSERDA
2	NATIONAL GRID
3	CENTRAL HUDSON GAS AND ELECTRIC
4	CON EDISON
5	ORANGE AND ROCKLAND
6	STATE OF NEW YORK
7	FEDERAL GOVERNMENT
8	NO OTHER PROGRAMS
95	OTHER, SPECIFY:
96	REFUSED



97	DON'T KNOW
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112. [IF Q48 = 1-7 OR 95] Have you participated in [this/any of these] energy efficiency program(s)?

1	YES
2	NO (GO TO Q50)
96	REFUSED (GO TO Q50)
97	DON'T KNOW (GO TO Q50)

49a. [IF Q49 = YES AND IF Q48 HAS MORE THAN ONE PROGRAM] Which program or programs have you participated in? [DO NOT READ, GET ORGANIZATION AND NAME OF PROGRAM IN Q49a AND Q49b, RESPECTIVELY]

1	NYSERDA
2	NATIONAL GRID
3	CENTRAL HUDSON GAS AND ELECTRIC
4	CON EDISON
5	ORANGE AND ROCKLAND
6	STATE OF NEW YORK
7	FEDERAL GOVERNMENT
95	OTHER
96	REFUSED
97	DON'T KNOW

**ASK NAME OF PROGRAM FOR EACH ORGANIZATION MENTIONED Q49A**

49b. [IF Q49 = YES AND IF Q48 LISTS MORE THAN ONE PROGRAM, PROVIDE NAME OF PROGRAM.] [CHECK ALL THAT APPLY]

1	NYSERDA:
2	NATIONAL GRID:
3	CENTRAL HUDSON GAS AND ELECTRIC:
4	CON EDISON:
5	ORANGE AND ROCKLAND:
6	STATE OF NEW YORK:
7	FEDERAL GOVERNMENT:
95	OTHER:
97	REFUSED
98	DON'T KNOW

**DEMOGRAPHICS**

Finally, I have just a few categorization questions to ask.

113. How long have you lived in your current residence?

\_\_\_\_\_YEARS96 – REFUSED

97 – DON'T KNOW

114. What is the highest level of education you have completed? Was it . . .[READ LIST]

1	Some High School,
2	High School,
3	Trade or Technical School,
4	Some college,
5	College graduate,
6	Some graduate school,
7	Graduate degree, or
95	Something else?
96	REFUSED
97	DON'T KNOW

115. And finally, for statistical purposes only, please tell me which of the following categories applies to your total household income, before taxes, for the year 2010? Was it . . . **(READ LIST AND SELECT ONE)**

1	Under \$20,000,
2	\$20,000 to under \$40,000,
3	\$40,000 to under \$60,000,
4	\$60,000 to under \$80,000,
5	\$80,000 to under \$100,000,
6	\$100,000 to under \$150,000, or
7	\$150,000 or more?
97	PREFER NOT TO SAY/REFUSED
98	DON'T KNOW

Thank you for taking the time to complete this important survey. We really appreciate your input. Have a good day/evening