

research/into/action inc

Final Report **2011 Oregon Residential Awareness** and Perceptions Study

Funded By:



Prepared By:







research/into/action inc

Jane S. Peters, Ph.D. Jun Suzuki, M.P.A.

Research Into Action, Inc.

October 7, 2011





We would like to thank Energy Trust of Oregon, Inc. for conceiving of this project and giving us the support needed to conduct it. We also wish to acknowledge the many residents of Oregon who agreed to participate in the survey and provided their responses to our questions; we appreciate their willingness to participate.

ACKNOWLEDGEMENTS





= TABLE OF CONTENTS

EXE	ECUTIVE SUMMARY	I
1. I	INTRODUCTION	1
	STUDY PURPOSE	1
	ORGANIZATION OF THIS REPORT	1
2. 1	METHODOLOGY	3
	SURVEY INSTRUMENTS	3
	SAMPLING	4
	DATA COLLECTION	7
	Web Survey	7
	Telephone Survey	7
	ANALYSIS	8
3. [DETAILED FINDINGS	9
	AWARENESS OF ENERGY TRUST	9
	Program Knowledge	11
	Sources of Initial Information about Energy Trust	
	Perceptions of Energy Trust	14
	PROGRAM PARTICIPATION	
	Self-Reports vs. Verified Participation	
	Characteristics of Participants	17
	PERCEPTION AND ATTITUDE	19
	HOME FEATURES AND ENERGY USE	20
	Past and Future Activities	20
	Home Comfort	22
	Compact Fluorescent Lamps	
	LED Lights	
	Thermostat	
	Laundry Method	
	ENERGY STAR® Label	
	SOLARIZE PROGRAM	25

MARKET ASSESSMENT	26
Obstacles	26
Likelihood of Service Use	27
Sources of News and Other Information	
Testing Marketing Messages	30
4. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS	33
FINDINGS	33
Awareness of Energy Trust	
Energy Trust Program Participation	
Perceptions and Attitude	
Home Feature and Energy Use	
Market Assessment	
CONCLUSIONS AND RECOMMENDATIONS	34
APPENDICES	
APPENDIX A: WEB SURVEY INSTRUMENT	A-1
APPENDIX B: PHONE SURVEY INSTRUMENT	B-1
APPENDIX C: POST-STRATIFICATION WEIGHTING PROCEDURE	
APPENDIX D: FINAL DISPOSITION OF PHONE SURVEY	D-1
FIGURES	
Figure 1: Sampling Map	6
Figure 2: Unaided Awareness of Energy Trust by Region	
Figure 3: Unaided Awareness of Energy Trust by Utility	11
Figure 4: Knowledge of Energy Trust's Program	
Figure 5: Awareness of Rebates and Tax Credits	12
Figure 6: Sources of Initial Information about Energy Trust by Region	13
Figure 8: Perceived Entity of Energy Trust	14
Figure 10: Self-Reported Participation in Energy Trust Programs by Region and Utility	16
Figure 11: Effective Action to Reduce Home Energy Use (Web Respondents Only)	19
Figure 12: Concern about Utility Bills	
Figure 13: Comfort of Home in Winter	
Figure 14: Awareness of Solarize Program by Region	26

Figure 15: Obstacles to Save Energy (Web Respondents Only)	27
Figure 16: Likelihood of Using Services	28
Figure 17: General Information Sources	29
Figure 18: Information Sources for Energy Efficiency and Contractors (Multiple Responses Allowed)	30
Figure 19: Testing Marketing Messages	31
Figure 20: Credible Energy Trust Statement	31
TABLES	
Table 1: Sampling Quota	4
Table 2: Disposition of the Web Survey	7
Table 3: Disposition of the Web Survey	8
Table 4: Satisfaction with Energy Trust	17
Table 5: Housing and Demographic Characteristics	17
Table 6: Past and Future Activities (Web Respondents Only)	21
Table 8: Thermostat Type (Web Respondents Only)	23
Table 9: Thermostat Temperature Setting for Heating	24
Table 10: Clothes Washing	24
Table 11: ENERGY STAR® Awareness	25
Table 12: Post-Stratification Weight to Correct Bias Due to Phone Status	
Table 13: Post-Stratification Weight to Correct Demographic Differentials	



EXECUTIVE SUMMARY

This report provides the results of the 2011 Oregon Residential Awareness and Perceptions Study. This is the fourth consecutive year Research Into Action, Inc. and our subcontractor, Abt SRBI, Inc., have conducted an Oregon Residential Awareness and Perceptions Study for Energy Trust of Oregon (Energy Trust). The goal of this report is to provide findings and recommendations Energy Trust may use in its marketing and residential energy-saving programs.

We performed a mixed-mode sampling approach in this year's survey for the first time to counteract a sampling challenge due to the increasing number of cell-phone-only households and the rising cost of telephone data collection. First, using an Address Based Sample (ABS), we mailed two postcards to a random sample of 4,000 Oregon households that are customers of the four utilities Energy Trust of Oregon serves (Portland General Electric, Pacific Power, NW Natural, and Cascade Natural Gas) to solicit the customers' participation in a web survey. One hundred and two households (2.6% of the sample) completed the web survey. Second, we conducted phone surveys with non-respondents to this web survey whose phone numbers were available in the ABS sample. We used Random Digit Dialing (RDD) to the customers' landlines and cell phone numbers, as well as a targeted sample of multifamily residents to fill our sample quotas. We completed 637 surveys with Oregon households in Energy Trust's service area.

The data suggest that more than half (56%) of the Oregon households within the Energy Trust service territory recognize the name of *Energy Trust of Oregon*. This awareness has grown steadily since our first study in 2008. The participation rate in Energy Trust programs also has increased significantly according to self-reports (31%) and verified participation status (47%). These are large increases since the participation rates we reported in 2010 (17% self-reports and 26% verified). We continue to note significant discrepancies between the levels of urban and rural Oregonians' awareness of Energy Trust and participation in its programs.

As in the past studies, we observe demographic and attitudinal differences between those who reported being participants in Energy Trust programs and those who reported not participating in the programs. Compared to nonparticipating households, participating households are overwhelmingly owner-occupied, larger (in square feet), and heated by natural gas, and the primary household member has a college degree. Participants reported greater concern about their utility bills, and a greater use of newspapers and radio for news information.

We also studied specific home features and energy-using behaviors. Eighty-six percent of the Oregon households we contacted reported having installed at least one CFL in their home and 26% of them reported having installed 11 or more CFLs. These figures have changed little since 2009. Web respondents who saw CFL photos as a part of the question reported a much higher installation rate (94%). Ninety percent of the respondents had a thermostat that controlled the temperature in their home, but half of them had a non-programmable type that allows only on/off

or temperature-only settings. Seventy-five percent of the respondents recognized the ENERGY STAR® label; 91% of the web respondents who saw the ENERGY STAR® label reported being aware of it, as compared to 83% nationwide.

We offer the following conclusions and recommendations:

- → Conclusion 1: Energy Trust continues to increase its market presence in Oregon: it is recognized by a majority of the 637 Oregonians surveyed for this study. Most of the Oregonians who participated in this study have a positive image of Energy Trust as a credible organization that provides energy efficiency services. Both self-reported and verified data indicate a significant increase in program participation since 2010.
- → Conclusion 2: Demographic characteristics and phone status of the web respondents from the ABS sample most closely represented the census among all the sampling sources that we employed for this study. Among these web respondents, there was little evidence of fraudulent or inattentive respondents, and the data quality was superior. Telephone data collection, on the other hand, is increasingly more difficult and costly especially when attempting to reach cell phone RDD numbers.
 - Recommendation: Develop a sampling design based on an ABS sample. While low response rates to the web survey requests through postcard solicitation was an issue, we have confidence that we can increase web survey participation by adopting additional methods for contacting and encouraging participation, such letters instead of postcards and enclosed incentives, instead of a lottery, etc. An ABS sample approach can also allow us to better estimate the Energy Trust participation rate by enabling us to match addresses with Energy Trust's program databases without asking questions related to respondents' program participation.
 - **Recommendation:** Develop an additional set of key evaluative measures that can be investigated as a part of this annual study, such as "importance of energy efficiency," awareness of specific Energy Trust program elements, and inclusion of targeted behavior changes Energy Trust is trying to influence.



MEMO

Date: October 14, 2011 **To:** Board of Directors

From: Sarah Castor, Evaluation Sr. Project Manager

Sue Fletcher, Communications and Customer Service Sr. Manager

Subject: 2011 Residential Awareness and Perceptions Study

The 2011 Oregon Residential Awareness and Perceptions Study is our fourth annual awareness survey. The goals of the study, as in previous years, were: 1) to gather information about the level of awareness Oregonians have of Energy Trust; 2) to compare awareness and participation with similar figures from last year's study, 3) to better understand behaviors and perceptions surrounding the topics of energy and climate change and 4) to test messages that will prompt customers to take action.

For 2011, we attempted a mixed mode survey, beginning with a mailed invitation for 4,000 randomly selected residential households that contained a link to a web survey. A web-based survey has significant advantages over a phone survey: the ability to include visuals and different question types, convenience for the respondent, and potentially lower cost. Unfortunately, response to the mailed invitations was much lower than we expected, requiring most of the responses to be completed by phone in order to meet the project timeline. The 102 responses that we received to the web survey, however, confirmed that the method is superior to phone in its ability to reach a representative group of the population and explore complex issues of awareness, behavior and preference. Next year we plan to attempt another web survey, but with a greater number of invitations and a more compelling request for response.

The results of this year's survey were quite pleasing in terms of demonstrating the continued increase in awareness of, and participation with, Energy Trust. Overall awareness is now 56% and reported participation is 31% (up from 48% and 17% in 2010, respectively). Customers of all utilities were more aware of Energy Trust in 2011 than in 2010, and in all regions. Only customers of Pacific Power were less aware of Energy Trust (47%) than the overall 56% average for all four utilities. While raising awareness and program participation in all territories remains a goal of marketing and outreach activities, Energy Trust is collaborating specifically with Pacific Power on marketing communications funded through Pacific Power 838 dollars to raise awareness and participation in Southern and Eastern Oregon Pacific Power territory. Energy Trust will continue to engage with Pacific Power on these marketing efforts and will suggest altering approaches to branding and customer referral in 2012 to reduce potential confusion and streamline the customer's path to Energy Trust information. It is notable that despite lower awareness numbers, residential programs are currently exceeding their savings goals for Pacific Power. As goals increase, lower awareness may be more

of a limiting factor, but it does not appear to be hindering Energy Trust's ability to reach savings goals at this time.

Most of the respondents felt positively about Energy Trust, agreeing with statements that "Energy Trust is a leader in regards to energy efficiency and renewable energy," and "Energy Trust is a credible information source in regards to energy efficiency and renewable energy." The number of respondents agreeing with these statements had increased since the last time these statements were included in the survey.

For the second year in a row, the top source from which respondents initially heard about Energy Trust and its offers was mass media. This was followed closely by utility bill inserts and websites. Both channels remain prominent components of Energy Trust's outreach strategy for 2012 and the survey results confirm the effectiveness of this approach.

In addition to communication channels, the survey also tested the effectiveness of certain messages. As in previous studies the top supported general energy-efficiency message reinforced financial savings. "You can save energy and money" was considered an effective message by 59 percent of respondents. However, unlike previous studies, the second statement that respondents supported referenced the environmental benefits of saving energy. 58 percent of respondents found, "you can save energy and the planet" to be an effective message. Next year's survey will include previously asked questions about the environmental aspects of energy-efficiency to better understand how this message can be used. We will also look for opportunities to test the use of environmental-benefits messaging in 2012.

Survey respondents scored messages about Energy Trust that referenced our nonprofit status and its ten-year track record of delivering services and cash incentives most favorably. These organizational messages were explored as a means of further reinforcing action-oriented messages. Past studies and focus groups have indicated that consumers respond well to advice about energy-efficiency from an independent nonprofit. To that end, we have included messaging about our nonprofit status in consumer-facing materials. This year nearly half of respondents correctly identified Energy Trust as a nonprofit, an increase from previous studies, and an indication that we are successfully getting that message out to consumers. This year the survey tested language about the length of time that Energy Trust has been providing services. Support for the message, "Energy Trust has 10 years of experience helping Oregonians save energy," reinforces the approach we will take in 2012 to develop messaging in association with our 10 year anniversary.

For the first time this year, respondents were asked a question about their awareness of *Solarize*. *Solarize* was described as a community-based bulk buying program for residential solar. Overall, 19% of the respondents reported they had heard about

Solarize programs and the rate didn't differ significantly across the state. This effort has received a great deal of media attention and local promotion. These survey results are a strong indicator of the traction this effort has gained statewide.

1 INTRODUCTION

In March 2011, Energy Trust of Oregon, Inc. (Energy Trust) contracted with Research Into Action, Inc. to conduct a fourth consecutive annual study about general awareness and perceptions of energy efficiency, energy use, and related topics among residential customers within Energy Trust's service territory.

STUDY PURPOSE

The purpose of the 2011 Residential Energy Awareness and Perceptions Study is to understand Energy Trust customers' general interest in, awareness of, and perceptions regarding energy use, energy efficiency, and willingness to participate in Energy Trust programs. The goal is to obtain information that Energy Trust can use to design and support marketing and implementation of its current and future programs and campaigns. Based on insights from the previous studies and discussions with Energy Trust staff, the Research Into Action team examined the following research areas in 2010:

- → Awareness of Energy Trust;
- → Participation in Energy Trust programs;
- → Home features and energy use;
- → Market assessment; and
- → Housing and demographic information.

The Research Into Action team also compared the results from the 2011 study with those from the studies conducted in 2008, 2009, and 2010.

ORGANIZATION OF THIS REPORT

This report has four chapters. Chapter 1 introduces the study and our report. In Chapter 2, we discuss the methodology of the study, including the sampling plan. In Chapter 3, we present the findings from a question-by-question analysis. In Chapter 4, we present our conclusions and recommendations. The appendices include the survey questionnaire, final survey disposition, and a detailed post-stratification weighting procedure.

Page 2

1. INTRODUCTION

2 METHODOLOGY

This chapter describes the detailed data collection and analysis procedures we used to ensure the research produced a representative sample, reliable data, and sound analyses.

In this year's study, to counteract a difficulty in reaching increasingly prevalent cell-phone-only households, coupled with rising phone data collection costs, we used a sequential mixed-mode sampling approach employing web and telephone survey techniques to contact the targeted number of respondents.¹

SURVEY INSTRUMENTS

In order to develop the 2011 survey instruments, the Research Into Action team, in collaboration with Energy Trust staff, prioritized the research issues and questions from the prior *Residential Awareness and Perceptions Studies*. We included many questions from the 2010 survey instrument in the 2011 questionnaire to facilitate cross-study analysis. We changed questions relating to *home features and energy use* and largely omitted the *Attitude and Perception* section of the 2010 study, and replaced them with new questions to address previously unexplored research areas.²

For the web survey, we employed a broad array of web-based technical options, such as inclusion of visual aids/graphics and questions that involved ranking exercises. We also ensured that question wording and response options were appropriate for each survey mode and that the data collected were consistent across the modes.

The web and phone survey questionnaires were primarily closed-ended, with a few opportunities to capture verbatim responses. We included several screening questions to be certain that: we contacted only those individuals who regularly make decisions about their household's energy use; contacts met Energy Trust's geographic and utility criteria; and we minimized response bias by not interviewing households with utility employees. The final instruments are included in Appendix A and Appendix B.

In the previous 2008 through 2010 studies, we collected all samples by phone using a Random Digit Dialing (RDD) technique with an inclusion of an additional cell-phone sample.

Past studies that served as references in the design of the survey instrument include: Residential Segmentation Questionnaire, Puget Sound Energy (2008); Energy Conservation, Efficiency, and Demand Response, Schulman, Ronca and Bucuvalas, Inc. (2008); Residential Website Survey, Energy Trust of Oregon (2007); Energy Conservation, Efficiency, and Demand Response, Schulman, Ronca and Bucuvalas, Inc. (2006); California Statewide Residential Appliance Saturation Study (2004); Residential Energy Consumption Survey, U.S. Department of Energy, Energy Information Administration, (2001).

Page 4 2. METHODOLOGY

SAMPLING

Energy Trust provides services to customers of Oregon's investor-owned electric and gas utilities – Portland General Electric (PGE), Pacific Power, NW Natural, and Cascade Natural Gas. These utilities serve rural and urban customers throughout Oregon, including those in most of the metropolitan areas in the state. Energy Trust also provides services to a limited number of customers in Washington. The population for this study consisted only of electric and/or natural gas customers served by Energy Trust in Oregon.³

We used a sequential mixed-mode sampling approach with web and telephone surveys. In the first phase, we mailed an initial invitation postcard and a reminder postcard to 4,000 randomly selected address-based sample (ABS) households to invite them to participate in a web survey. The ABS list had a very low coverage error (2%), which allowed the postcards potentially to reach almost all of the targeted households regardless of phone status. This ABS list consisted of a proportionate number of households for each region, as noted in Table 1. We offered each person one of two incentives – entry to a cash lottery or a \$2 donation to the *Oregon HEAT* program⁴ – to maximize the number of completed web surveys.

Table 1: Sampling Quota

CHARACTERISTIC		ADDRESS-BASED SAMPLE (ABS) Web Telephone		LANDLINE / CELL RDD/		TOTAL				PERCENT OF	
	We			Telephone		MULTIFAMILY		Unweighted		hted	POPULATION
	Count	%	Count	%	Count	%	Count	%	Count	%	_
					Region	N					
Portland Metropolitan	62	61%	90	46%	135	40%	287	45%	306	49%	50%
Willamette Valley / North Coast	24	24%	56	29%	60	18%	140	22%	157	25%	25%
Southern Oregon / South Coast	7	7%	33	17%	56	16%	96	15%	96	15%	14%
East of the Cascades	9	9%	17	9%	88	26%	114	18%	66	11%	11%
HOUSING OWNERSHIP											
Owner	74	72%	171	87%	164	48%	409	64%	411	66%	64%
Renter	28	28%	25	13%	175	52%	228	36%	215	34%	36%

Continued

Oregon HEAT is a home energy bill assistance program for Oregon low-income households.



The population of the 2008 and 2009 studies included households in the entire state of Oregon.

2. METHODOLOGY Page 5

CHARACTERISTIC			ESS-BASED PLE (ABS)		LANDLINE / CELL RDD/		TOTAL				PERCENT OF
	We	eb	Telep	hone	MULTIF	AWILY	Unweighted Wei		Weig	hted	POPULATION
	Count	%	Count	%	Count	%	Count	%	Count	%	_
	AGE OF PRIMARY HOUSEHOLD MEMBER										
Younger than 65 yrs of age	78	81%	123	63%	294	87%	495	78%	474	77%	79%
65 yrs or older	18	19%	73	37%	45	13%	136	22%	143	23%	21%
				F	PHONE STA	ATUS					
Cell-only households	32	32%	2	1%	40	12%	74	12%	177	28%	31%
Cell and landline households	57	57%	164	85%	217	64%	438	69%	371	60%	56%
Landline-only households	11	11%	28	14%	80	24%	119	19%	72	12%	12%

In the second phase, we contacted by phone those in the ABS sample who did not respond to the web survey. Although we received phone numbers for 47% of the ABS sample, this was not enough phone numbers to fill the quotas. For this reason, we conducted additional Random Digit Dialing (RDD) to both landline (80%) and cell phone (20%) numbers. In addition, since the cell-phone RDD efforts yielded fewer contacts than anticipated, we called a targeted multifamily list in order to reach households whose characteristics were similar to cell-only households (which tend to consist of younger multifamily-dwelling renters).

Our research determined that the combined web survey with ABS, follow-up with non-respondents to the web survey, landline and cell-phone RDD calling, and the multifamily list could reach both listed and unlisted households. This combined method indicated that we would nearly eliminate under-coverage of any population elements that otherwise could not be included in the sample.

We also stratified our sample to ensure that it reflected key demographic proportions of the study population. The overall sample needed to be representative of four geographic regions,⁵ homeowners and renters, and age of the primary household member (limiting only the 65-years or older category). We used the lists of provided ZIP codes to manage the geographic quota, and tracked the rental unit and age quota by monitoring responses to the screening questions.

Energy Trust programs serve gas and electric ratepayers in most of the key metropolitan areas in Oregon, as well as those living and working in less populated areas of the state. To reach a representative sample, we divided the household population into four geographic regions: Portland Metropolitan, Willamette Valley / North Coast, Southern Oregon / South Coast, and East of the Cascades. We used the same scheme in the three prior studies, which allowed consistent analysis and reporting of results.

Page 6 2. METHODOLOGY

The final sample consisted of 637 surveys, which is adequate to provide an overall confidence/precision of 95%, ±4%. Sample sizes within each of the four regions provide 95%, ±10%. We applied post-stratification weights to the final sample to ensure that it appropriately represented the population per key demographic characteristics. (For more details about post-stratification weights, see Appendix C.) Table 1 shows counts and percents of sample-by-sample source, total and weighted sample, and population of the key demographic characteristics. In the body of the report, we will describe all sample sizes using a weighted sample.

Figure 1 shows a map of Energy Trust service regions and locations of survey respondents.

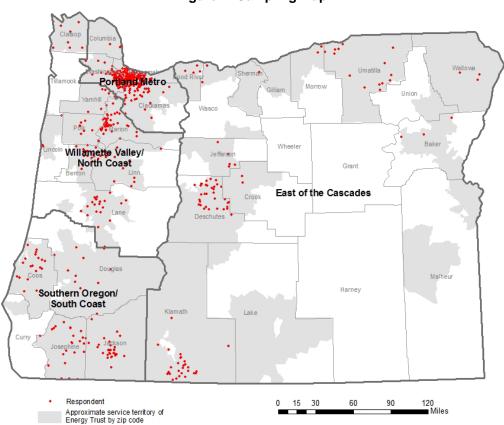


Figure 1: Sampling Map

Note: Utility service territory is defined by the boundaries of ZIP codes, where the utility provides service to at least some residential customers.

We oversampled customers living in the East of the Cascades region to achieve a confidence/precision of 90%, ±10%, among Cascade Natural Gas customers. However, we learned that the incidence rate of Cascade Natural Gas customers within the East of the Cascades region was low (n=41 of 114, wt. n=24); therefore, confidence/precision within the Cascade Natural Gas territory fall short of 90%, ±10%. Sample sizes within other utilities are sufficient to provide 95%, ±10%.



2. METHODOLOGY Page 7

DATA COLLECTION

Web Survey

We designed a postcard with a brief statement that emphasized the importance of the contacts' participation in the survey. It included a web survey link, a personalized ID, and a brief description of the incentive opportunity. The incentive for a random half of the contacts was an entry to a lottery to win a \$50 check, with a 1-in-25 chance of winning; for the other random half, we said we would make a \$2 donation to *Oregon HEAT* (a low-income, bill-pay assistance program) upon their completion of the survey.

We sent this postcard to all 4,000 of the randomly selected households twice: an initial invitation and a reminder within two weeks of the first, regardless of the contacts' participation status. We were able to match 84% of the ABS sample with the name of the current residents. For the unmatched addresses, we sent the postcards to "Current Resident."

Table 2 summarizes the disposition of the web survey. One hundred-thirteen contacts logged into the web survey and 102 of them completed the survey, a 2.6% response rate.⁷

DISPOSITION COUNT

Completed 102

Not Eligible 17

Non-interview: Eligible and unknown eligibility 3,881

Total 4,000

Table 2: Disposition of the Web Survey

Telephone Survey

The telephone interviews were conducted from Abt SRBI's call center using trained, professional survey managers and interviewers who employ a computer-assisted telephone interview system (CATI). In order to maximize meaningful participation in the survey, Abt SRBI project managers trained all staff about the nature of the study, the importance of the information being collected, and management of the sample.

Prior to the full-scale fielding, Abt SRBI conducted 20 pre-test surveys to identify any problems with respondents' (and interviewers') understanding of the questions or any issues with the

We used the *Standard Definitions* published by American Association of Public Opinion Research (AAPOR). To determine disposition codes, we used the disposition guide for mail surveys because the distribution was through a mailed postcard. We used the minimum response rate calculation method (RR1).

Page 8 2. METHODOLOGY

length of the survey. Based on the results of the pre-test, we made minor modifications to some questions. The pre-test data are included in the final dataset.

Abt SRBI conducted the fielding from July 11, 2011, to August 24, 2011. They called during day, evening, and weekend hours to reach as many contacts as possible. To counteract non-response bias, Abt SRBI made at least five attempts per contact to complete the surveys with the least amount of samples necessary. Interviews lasted an average of 14.5 minutes, including the screening questions.

The overall cooperation and response rates were 53% and 11% respectively (Table 3). (See Appendix D for detailed final dispositions.) Cell phone RDD yielded a much lower production rate (40% and 6% respectively) compared with other approaches.

RATE CATEGORY ABS PHONE LANDLINE **CELL-PHONE** MULTI-**TOTAL RDD RDD FAMILY LIST** Cooperation rate * 57% 55% 40% 61% 53% Response rate ** 18% 9% 6% 18% 11%

Table 3: Disposition of the Web Survey

ANALYSIS

The project team analyzed the completed survey data using *SPSS Version 19*. We merged the web and telephone survey datasets. The syntax file documents all procedures employed for data cleaning, data transformation, and statistical analysis. We explain the analytic approaches in more detail in Chapter 3.

^{*} Cooperation rate is the proportion of eligible respondents who agree to participate in a research.

^{**} Response rate is the number of completed interviews divided by the number of eligible units in a sample.

3

DETAILED FINDINGS

In this chapter, we present the results of our question-by-question analysis. We analyzed each question independently. We also combined some questions or transformed data by recoding or computing variables to gain more meaningful information. In particular, we examined key responses by appropriate demographic (geographic region, home ownership, householder's age, housing type, electric and natural gas utility, and household income), participant/nonparticipant, and other available statistics. We then conducted a statistical analysis of the differences among these key responses to assess respondents' awareness of Energy Trust, participation in Energy Trust programs, and various energy-use behaviors. In the body of this report, we indicated statistically significant differences only when we observed them, otherwise readers should assume no statistical difference.

We applied post-stratification weights to ensure that the 2011 sample was representative of the target population. Our reported findings include only the weighted estimates. Appendix C outlines our procedures for applying the post-stratification weights to the 2011 sample.

When possible, we compared notable findings from this 2011 survey to the results of the *Oregon Residential Energy Awareness and Perception Studies* for 2008, 2009, and 2010.

In this chapter, we report on the following analyses:

- → Awareness of Energy Trust
- → Participation in Energy Trust Programs
- → Perceptions and Attitudes
- → Home Features and Energy-use Behaviors
- → Awareness of the Solarize Program
- → Market Assessment

AWARENESS OF ENERGY TRUST

At the beginning of the survey, without explanatory prompting, we asked the respondents if they had heard of Energy Trust of Oregon. Figure 2 shows the 2011 results by region and compares them to the 2008, 2009, and 2010 findings.

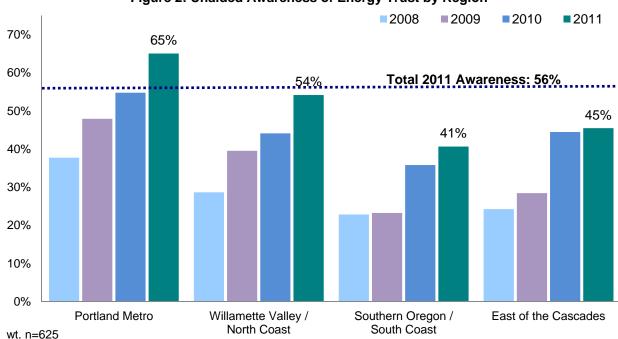


Figure 2: Unaided Awareness of Energy Trust by Region

Overall, 56% of the people we surveyed in 2011 reported they had heard of Energy Trust, a steady increase since we started measuring this in 2008 (32% in 2008, 41% in 2009, and 48% in 2010). Now, a majority of households in the Portland Metro (65%, +10% points from 2010) and Willamette Valley / North Coast (54%, +10% points from 2010) regions recognize the name of Energy Trust. Slightly less than half of the respondents in the East of the Cascades region reported being aware of Energy Trust (45%, +1% point from 2010). Respondents in Southern Oregon / South Coast were least familiar with Energy Trust (41%, +5% points from 2010), although awareness among this group did grow significantly between 2010 and 2011. This regional difference in Energy Trust awareness is statistically significant (chi-square test significant at p<0.01).

The web survey included an Energy Trust logo to aid respondents' recognition of Energy Trust. The overall awareness with the logo was 77%.

We conducted the same analysis based on respondents' electric and natural gas utilities (Figure 3). Customers of all utilities were more aware of Energy Trust in 2011 than in 2010. Only customers of Pacific Power were less aware of Energy Trust (47%) than the overall 56% average for all four utilities. The difference in awareness by utility also was statistically significant (chi-square test significant at p<0.01).

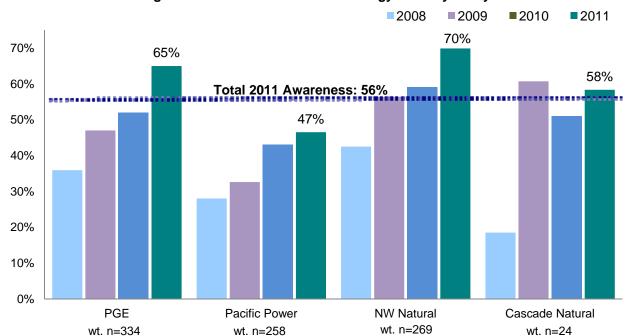


Figure 3: Unaided Awareness of Energy Trust by Utility

Program Knowledge

We asked the respondents who reported awareness of Energy Trust an open-ended question about their knowledge of Energy Trust programs and services (Figure 4). Thirty-nine percent of them expressed awareness of one or more specific elements of Energy Trust's program offering, 23% made a vague statement (such as "energy efficiency" or "sustainable energy"), and 38% indicated they had no knowledge of Energy Trust programs, other than recognizing the Energy Trust name.

The rebate program for efficient appliance purchases was the most familiar program element among those who demonstrated program-specific knowledge of Energy Trust programs (66%). Thirty-four percent of them said that Energy Trust provides information about how to save energy and is a source of contractors, and 25% mentioned Energy Trust's energy audit service. A small percent of respondents also mentioned refrigerator recycling (8%) and renewable programs (4%).

Page 12 3. DETAILED FINDINGS

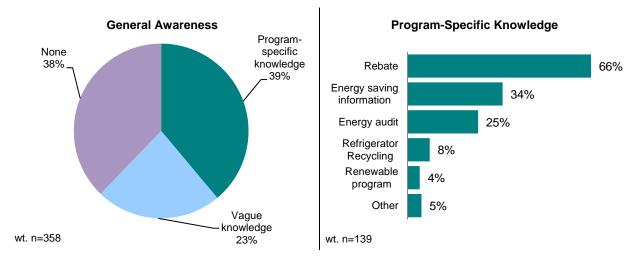


Figure 4: Knowledge of Energy Trust's Program

When we asked all respondents about their awareness of rebates and tax credits available for installing certain energy-saving equipment or renewable energy systems, 83% reported they were aware of these options. Residents in the Portland Metro (86%) and Willamette Valley / North Coast regions (85%) were most aware of them; most of the respondents in the Southern Oregon / South Coast (78%) and East of the Cascades (69%) regions also were aware of them (chi-square test significant at p<0.01).

Awareness of the availability of rebates and tax credits was significantly different between utilities as well (chi-square test significant at p<0.01). Customers of PGE (86%) and NW Natural (92%) were more aware than those of Pacific Power (76%) and Cascade Natural Gas (79%).

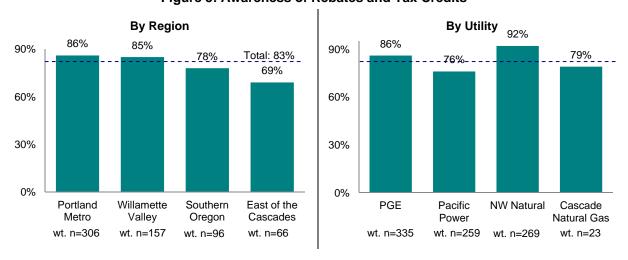


Figure 5: Awareness of Rebates and Tax Credits

Sources of Initial Information about Energy Trust

Sources from which respondents initially heard about Energy Trust and its offers were most commonly mass media (signs, billboard, ads on radio, TV, and other print media: 26%), utilities' bill inserts and websites (26%), retail stores and contractors (19%), and word-of-mouth (from friends, family, neighbors, and coworkers: 12%). A small percent of the respondents also reported they learned about Energy Trust during home shows and other events (4%). Other sources included mortgage company, landlord, college class, and other miscellaneous mentions (12%).

There was little difference between the regions on this issue (see Figure 6), although a significantly greater percentage of respondents in the East of the Cascades region reported mass media as a predominant source from which they first heard about Energy Trust.

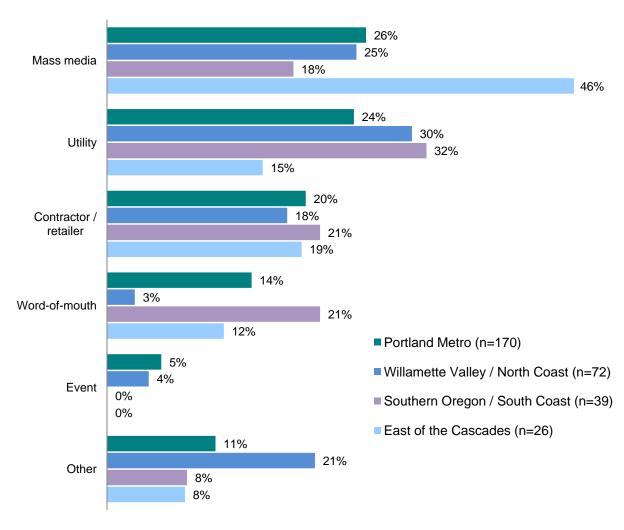


Figure 6: Sources of Initial Information about Energy Trust by Region

Page 14 3. DETAILED FINDINGS

Perceptions of Energy Trust

2010 7%

wt. n=363

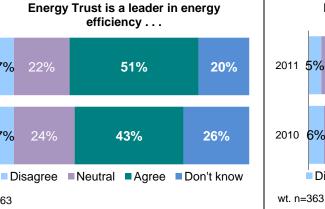
24%

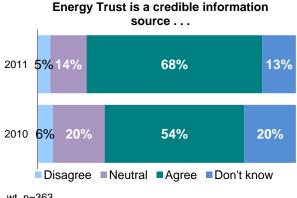
We asked several questions to assess how respondents perceive Energy Trust (Figure 7). Most respondents expressed positive images of Energy Trust by agreeing with the statements that: "Energy Trust is a leader in regards to energy efficiency and renewable energy," and "Energy Trust is a credible information source in regards to energy efficiency and renewable energy" (51% and 68% respectively). These results show improvement in perceived Energy Trust roles since the first time we asked the questions in 2010 (43% and 54% respectively).

Energy Trust is a leader in energy efficiency . . . 51% 2011 7% 22% 20%

43%

Figure 7: Image of Energy Trust





When we asked the respondents if they perceived Energy Trust as a nonprofit organization, a government agency, utility, or private business, almost half (49%) correctly reported it is a nonprofit organization (Figure 8). However, many thought Energy Trust was another type of entity, such as a government agency (20%), a private business (10%), or a utility (6%).

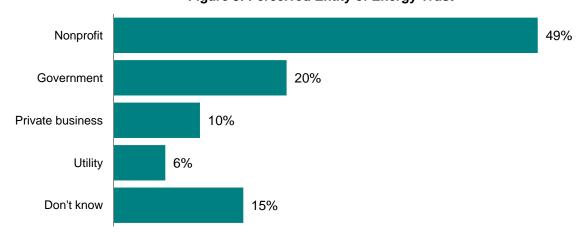


Figure 8: Perceived Entity of Energy Trust

wt. n=363

PROGRAM PARTICIPATION

We consider the respondents who reported participating in Energy Trust programs at their current address or who had received a rebate check from Energy Trust to be participants in Energy Trust programs.

Self-Reports vs. Verified Participation

To check this self-report participation status, we matched each respondent's participation records from Energy Trust's program tracking databases with the respondent's address; we successfully matched 57% of the respondents' addresses. As shown in Figure 9, we estimate this year's overall self-reported participation rate at 31%. However, our analysis using the matched participation record suggests that the self-reported participation rate is significantly underestimated compared to the verified participation rate (47%). Among the verified participants, 67% accurately reported their participation status.

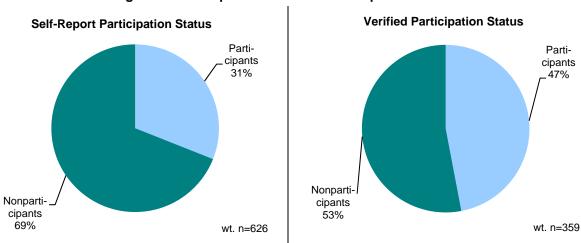


Figure 9: Self-Report and Verified Participation Status

Although we know the self-reported participation status includes significant misreporting, the following analysis of Energy Trust participants will be based on self-reports. We could use address-matched records only to conduct a program participation analysis, however this method would significantly reduce sample size and it could introduce other unknown sampling bias due to the availability or unavailability of addresses.

Figure 10 and Figure 11 show the program participation results by region and by electric and natural gas utility. The overall self-reported participation rate in 2011 was 31%. The regional difference in respondents' participation in Energy Trust programs was statistically significant (chi-square test significant at p<0.01). The Portland Metro area had the highest participation rate (37%), followed by Willamette Valley / North Coast (31%), Southern Oregon / South Coast (22%), and East of the Cascades (18%).

Page 16 3. DETAILED FINDINGS

Among electricity providers, PGE customers reported the highest participation rate (36%). Participation among customers of NW Natural was the highest among all utilities (40%). These self-reported participation rates were significantly different between the utilities (chi-square test significant at p<0.01).

By Region 40% 37% 31% Total: 31% 30% 22% 18% 20% 10% 0% Portland Willamette Southern East of the Metro Valley Oregon Cascades wt. n=306 wt. n=157 wt. n=96 wt. n=66

Figure 10: Self-Reported Participation in Energy Trust Programs by Region and Utility

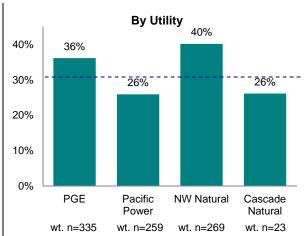
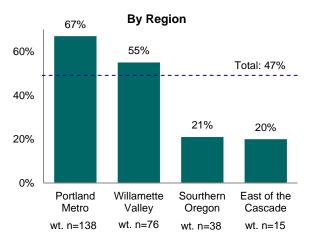
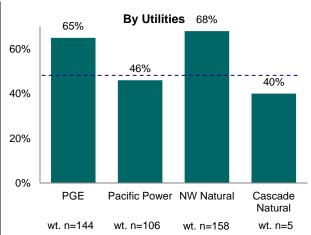


Figure 11: Verified Participation in Energy Trust Program by Region and Utility





When asked about their experiences with the Energy Trust programs in which they participated, 79% of participants reported being satisfied ("4" or "5" on a 5-point scale) with Energy Trust programs in 2011. As shown in Table 4, participants consistently have reported a high level of satisfaction with Energy Trust programs since 2009.



Table 4: Satisfaction with Energy Trust

YEAR		LEVEL OF SATISFACTION								
	Very Dissatisfied 1	2	3	4	Very Satisfied 5					
2011 (n=186)	2%	3%	15%	21%	58%					
2010 (n=181)	3%	3%	15%	26%	54%					
2009 (n=62)	7%	2%	8%	27%	57%					

Note: Those stating "don't know" were excluded from this analysis.

Characteristics of Participants

We examined several key demographic variables in depth between self-reported participants and nonparticipants (Table 5). We found participants and nonparticipants were significantly different statistically in all of these characteristics.

Table 5: Housing and Demographic Characteristics

CHARACTERISTICS	SELF-REPORTED PA	ARTICIPATION STATUS
	Participants (n=194)	Nonparticipants (n=432)
Ho	ME OWNERSHIP (P<0.01)	
Owner	89%	55%
Renter	11%	45%
Total	100%	100%
ŀ	Housing Type (P<0.01)	
Single-family	84%	60%
Multifamily	10%	32%
Other	6%	8%
Total	100%	100%
	House Size (P<0.01) *	
Smaller than 1,000 SF	19%	28%
1,000 to less than 2,000 SF	46%	55%
2,000 SF or larger	35%	17%
Total	100%	100%

Continued



CHARACTERISTICS	SELF-REPORTED P	SELF-REPORTED PARTICIPATION STATUS							
	Participants (n=194)	Nonparticipants (n=432)							
FUEL FOR SPACE HEATING (P<0.01) *									
Electricity	27%	46%							
Natural gas	54%	41%							
Other	19%	13%							
Total	100%	100%							
Hous	SEHOLD INCOME (P<0.01)								
Less than \$30,000	24%	31%							
\$30,000 to less than \$50,000	17%	27%							
\$50,000 to less than \$70,000	16%	14%							
\$70,000 to less than \$110,000	25%	16%							
\$110,000 or more	18%	12%							
Total	100%	100%							
EDUCATION LEVEL	OF PRIMARY HOUSEHOLDER (P<0.01) *								
Without college degree	35%	49%							
With college degree	65%	51%							
Total	100%	100%							
Age of PR	IMARY HOUSEHOLDER (P<0.01)								
24 yrs or younger	0%	6%							
25 – 34 yrs	9%	18%							
35 – 44 yrs	17%	17%							
45 – 59 yrs	32%	27%							
60 yrs or older	42%	32%							
Total	100%	100%							

^{*} A significant result was found among owner-occupied residents only.

Compared with nonparticipants, participants were overwhelmingly homeowners (89%). They were more likely to reside in single-family dwellings (84%) that are relatively larger than nonparticipants' homes (35% in homes with more than 2,000 square feet of living space as compared to 17% of the nonparticipants). Participants were more likely to use natural gas than electricity to heat their home (54%). Participants also were significantly more likely to have greater household incomes (43% over \$70,000 annual household income), their head of household was more likely to have a college degree (65%), and they were slightly older than nonparticipants (74% over 45 years or older).

When we analyzed participation status by singling out only owner-occupied residents, the size of their home, heating fuel, and education level remained significant variables.

These trends are consistent with findings from the three previous studies.

PERCEPTION AND ATTITUDE

As in the previous studies, we investigated respondents' perceptions and attitudes that may relate to their energy-using behaviors, but asked them a new set of questions.

First, we gave participants a list of different actions they can take to reduce home energy use and asked them to rank the actions by order of their perceived effectiveness. Figure 11 shows the percent of respondents who ranked each item as one of three most effective approaches and compares these rankings to the actual effectiveness reported by Gardner and Stern⁸.

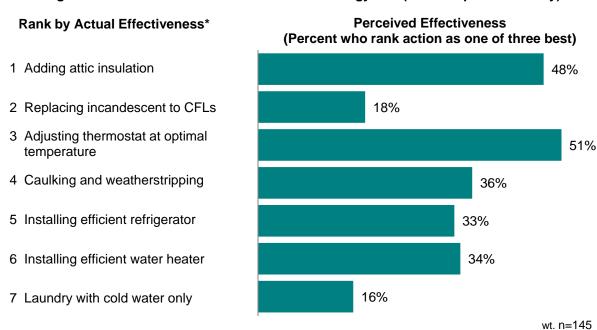


Figure 11: Effective Action to Reduce Home Energy Use (Web Respondents Only)

^{*} Gardner and Stern, "The Short List: The Most Effective Actions US Households Can Take to Curb Climate Change," *Environment Magazine*, 2009.

An article by Gardner and Stern provides a small number of practical actions individuals and households can take to achieve the greatest energy saving and reports percentages of potential energy saved for each item. Gardner, Stern, The Short List: The Most Effective Actions US Households Can Take to Curb Climate Change, Environment Magazine, 2009.

Page 20 3. DETAILED FINDINGS

The respondents most commonly reported that adjusting thermostats to an optimal temperature (51%) and installing attic insulation (48%) were the most effective approaches to reduce home energy use. Both of these actions were highly recommended by Gardner and Stern. Respondents also ranked the following actions as one of the three best approaches: caulking and weatherstripping (36%), and installing a more efficient water heater (34%) or refrigerator (33%). Replacing incandescent with CFLs (18%) and doing laundry using cold water only (16%) were perceived as less effective actions to reduce home energy use, though Gardner and Stern ranked the former as one of the most effective actions individuals can take.

Overall, the respondents demonstrated that they hold reasonably accurate perceptions of effective home energy reduction strategies.

Second, we asked the respondents how concerned they were about their utility bills in order to gauge their sense of urgency to take actions that can reduce home energy use. A little over half of the respondents reported they were concerned about their utility bills (55%) and 24% said they were unconcerned (Figure 12). The level of concern has dropped slightly since 2008.

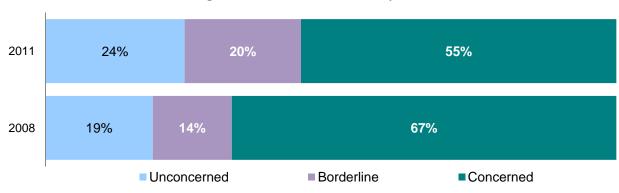


Figure 12: Concern about Utility Bills

n=1,192 (2008), wt. n=625 (2011),

HOME FEATURES AND ENERGY USE

We asked all respondents a series of questions about home features and their use of energy in their homes.

Past and Future Activities

We investigated which energy efficiency activities respondents had taken in the prior 12 months and any that they planned to take in the subsequent 12 months. In addition, we asked web respondents if they would replace certain energy-using equipment when they fail with a high efficiency model (Table 6).



Table 6: Past and Future Activities (Web Respondents Only)

ACTIVITY	DONE IN	PLANNING	WHEN REPL	WHEN REPLACING, WOULD INSTALL			
MT N 445	THE PAST 12 MONTHS	IN THE NEXT 12 MONTHS	Highly Efficient Model	Not Efficient Model	Already Have High Efficient Model		
WT. N=145							
	EFFI	CIENCY UPGRADE	S				
Installing CFLs	50%	27%	_	_	_		
Sealing air leaks around doors and windows	20%	18%	_	_	_		
Replacing windows	14%	11%	56%	3%	41%		
Replacing old refrigerator/freezer with a new one	9%	6%	60%	8%	32%		
Recycling extra refrigerator	9%	6%	_	_	_		
Replacing clothes washer	8%	2%	81%	3%	17%		
Adding insulation	6%	8%	_	_	_		
Sealing duct leaks	6%	7%	_	_	_		
Installing programmable thermostat	5%	3%	_	_	_		
Replacing furnace	5%	4%	70%	0%	30%		
Replacing water heater	4%	7%	51%	7%	41%		
Conducting an energy audit	2%	10%	_	_	_		
Adding duct insulation	1%	7%	_	_	_		
Adding solar PV	1%	3%	_	_	_		
Replacing heat pump	0%	2%	87%	4%	10%		
Adding solar water heater	0%	1%	_	_	_		
	Effic	CIENCY BEHAVIOR	s				
Turning off lights more often when rooms are unoccupied	76%	35%	_	_	_		
Running full loads in clothes washer / dish washer	69%	33%	_	_	_		
Washing clothes in cold water	61%	30%	_	_	_		
Turning down thermostat	55%	23%	_	_	_		

The most common efficiency upgrade the respondents had conducted was installation of CFLs. Half of the respondents reported they had installed CFLs in the previous 12 months and more than a quarter said they were planning to install more CFLs in the next 12 months. Weatherstripping was the second most common upgrade reported in the last 12 months (20%), followed by window replacement (14%). Eight to 9% of the respondents reported they replaced or recycled refrigerators and replaced clothes washers.

Page 22 3. DETAILED FINDINGS

When asked whether they would replace certain equipment with a highly efficient model, most respondents chose high efficiency models over non-efficient ones. Relatively high percentages of the respondents reported they already had high efficiency windows (41%), water heaters (41%), refrigerators/freezers (32%), and furnaces (30%).

Many of the respondents reported they had done activities related to efficiency behaviors in the last 12 months, such as turning off lights (76%), running full laundry loads (69%), using cold water for laundry (61%), and turning down the thermostat (55%). However, when asked if they planned to take such actions in the next 12 months, far fewer (23% to 35%) respondents said they did.

Home Comfort

We asked the respondents to rate the level of comfort inside their home in the winter in terms of temperature and draftiness (Figure 13). Sixty-two percent reported their home had a good level of comfort ("4" or "5" on a five-point scale), while 27% said "so-so," and 11% said "poor." Respondents in renter-occupied households and those with other characteristics common among renters (i.e., multifamily housing residents and those who are younger, have a lower income, or lack a college degree) were more likely to rate the comfort of their home as "poor" (chi-square test significant at p<0.01).

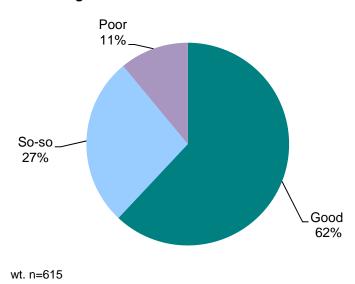


Figure 13: Comfort of Home in Winter

Compact Fluorescent Lamps

We asked respondents if any compact fluorescent lamps (CFLs) or "twisty-swirly" bulbs had been installed in their home. Eighty-six percent of the respondents reported their homes had at least one CFL installed (Table 7). When we asked contacts who had CFLs installed in their home about the number installed, 26% of them reported 11 or more. This CFL penetration rate and the number of CFLs installed have changed little since 2008. However, the web respondents who were presented with CFL photos reported a significantly higher penetration rate (94%) than the overall result. It is likely that contacts who responded by phone have underreported their use of CFLs.

Table 7: Use of Compact Fluorescent Lamps (CFLs)

	2008	2009	2010	2011
CFL Penetration	81%	86%	86%	86% (94% w/photo)
Have more than 11 CFLs installed	25%	29%	33%	26% (33% w/photo)

LED Lights

For the first time, we included a question about LED light bulbs. Twenty-one percent of respondents reported they had replaced incandescent light bulbs or CFLs with LED light bulbs. However, only 12% of the web respondents who were presented with several LED photos reported they had done so.

Thermostat

Most of the respondents reported that they had one or more thermostats that control their home's heating and/or cooling system (90%). We presented the web respondents with photos of various types of thermostats, and asked them which type looked most like the one in their home (Table 8). About half (49%) of respondents reported they had a non-programmable thermostat that mainly controls only on/off and the temperature.

Table 8: Thermostat Type (Web Respondents Only)



wt. n=140

Page 24 3. DETAILED FINDINGS

Half (50%) of the phone respondents who were not given the thermostat photos reported that their thermostat had a programmable feature that allows them to set different temperatures for different times.

In addition, we asked the respondents at what heating temperature they normally keep their thermostat when they are home in the winter (Table 9). Eighty-four percent reported they set their thermostat at 70° F or lower, while just 16% said they set it at 71° F or higher.

Table 9: Thermostat Temperature Setting for Heating

TEMPERATURE	WEIGHTED PERCENT (wt. n=534)
67° F or lower	30%
68° F	28%
69° F	7%
70° F	19%
71° F	2%
72° F	7%
73° F or higher	7%

Laundry Method

As we did in the 2010 survey, we asked respondents to estimate the percentage of laundry loads they do in cold water only (Table 10). Almost two-thirds of the respondents (65%) reported washing at least half (average 55%) of their laundry loads in cold water only. Senior residents (60 years or older) and male respondents were less likely to use cold water (chi-square test significant at p<0.01) than younger or female respondents.

Table 10: Clothes Washing

SURVEY	PER	CENT OF LAUN	NDRY LOA	ADS USING COL	D WATER	ONLY
	0%	1% to 49%	50%	51% to 99%	100%	Mean
2011 (n=605)	15%	20%	17%	29%	19%	55%
2010 (n=918)	17%	19%	14%	26%	24%	56%

Note: "Do not Know" or "Refused" responses are treated as missing.

3. DETAILED FINDINGS Page 25

ENERGY STAR® Label

Since 2008, we have investigated awareness of the ENERGY STAR[®] label, which identifies appliances that meet U.S. Environmental Protection Agency energy efficiency standards. Overall awareness of the label this year was 75% (Table 11). This has grown steadily since 2008 (+17% points since 2008, +3% point since 2010). The label recognition rate among web respondents was 91% (compared with 83% nationwide). Participants (89%) were significantly more likely to be familiar with the label than the nonparticipants (69%) (chi-square test significant at p<0.01).

When asked about how frequently they factored the ENERGY STAR[®] label into their decisions about buying appliances or other products, a high proportion (81%) of those who said they were aware of the label reported they "always" or "often" considered ENERGY STAR[®]-labeled models. Participants (92%) reported that they considered ENERGY STAR[®] models significantly more frequently than did nonparticipants (74%; chi-square test significant at p<0.01).

	2008	2009	2010	2011
Aware of ENERGY STAR®	58%	61%	72%	75% (91% web respondents)
Consider ENERGY STAR® Models Always or Often	25%	29%	79%	81% (83% web respondents)

Table 11: ENERGY STAR® Awareness

SOLARIZE PROGRAM

In this year's survey, we included a question about respondents' awareness of the *Solarize* programs offered in several communities in Oregon, such as *Solarize Portland*, *Solarize Salem*, and *Solarize Pendleton*. Energy Trust is one of the program sponsors. *Solarize* programs offer bulk-purchase discounts for solar PV panels.

Overall, 19% of the respondents reported they had heard about *Solarize* programs (Figure 14). The awareness in the Portland Metro region (22%) was higher than in the rest of the state (15% to 17%), but the regional difference overall was not significant.

Onsortium of Energy Efficiency (CEE) estimated the national ENERGY STAR® label recognition rate at 83% in the 2010 internet panel study. Source: http://www.energystar.gov/ia/partners/publications/pubdocs/National%20Awareness%20of%20ENERGY%20STAR%202010.pdf.

Page 26 3. DETAILED FINDINGS

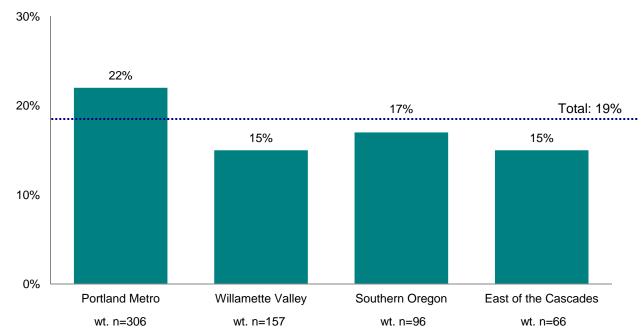


Figure 14: Awareness of Solarize Program by Region

MARKET ASSESSMENT

We included several questions that intended to assess market conditions that may relate to people's energy efficiency activities.

Obstacles

First, we asked web respondents to choose from the list we provided up to three of the most difficult obstacles they faced in trying to save energy in their homes. By far, the most common of obstacles, cited by 66% of the respondents, was the up-front cost of equipment or repair (Figure 15). The next common obstacles were the payback period for equipment and repairs (27%), uncertainty about the energy and money an improvement can save (26%), renters' limited power to make decisions about their home (25%), the construction or design of the home (20%), and the age of the home (19%). Some (11%) respondents also reported uncertainty about contractor cost estimates.

3. DETAILED FINDINGS Page 27

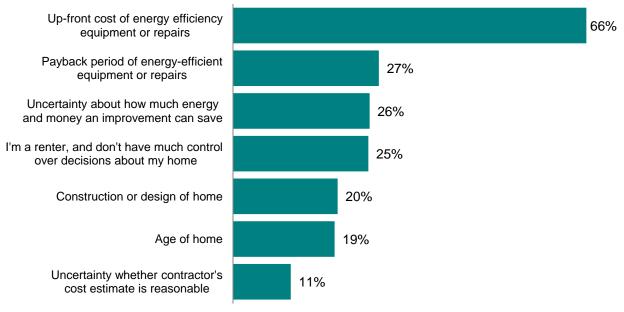


Figure 15: Obstacles to Save Energy (Web Respondents Only)

wt. n=145

Likelihood of Service Use

Energy Trust asked us to investigate the likelihood that respondents would use any of three specific services. Each of these services would be offered at no cost to the participant. The three services were:

- 1. Online energy survey in which they would input home information and receive recommendations to save energy
- 2. An energy adviser who would visit their house to assess their needs and make recommendations to save energy
- 3. Advice service that they could call and ask questions about how to save energy or use the equipment in their home

Responses for all of these service areas were almost evenly split between "unlikely" and "likely" (Figure 16), although respondents gave the online energy survey the highest number of "likely" responses (46%), followed by the energy adviser visit (42%) and phone advice service (41%). We consistently found statistical significance in these responses according to the age of the respondents (chi-square test significant at p<0.01).

Respondents who were between 25 and 59 years old were more eager to use an online energy survey than those in other age categories. Respondents who were less than 25 years old were

Page 28 3. DETAILED FINDINGS

more likely to be interested in using the energy adviser visit and phone advice service. Respondents who were 60 years or older were less interested in any of services than the other age groups.

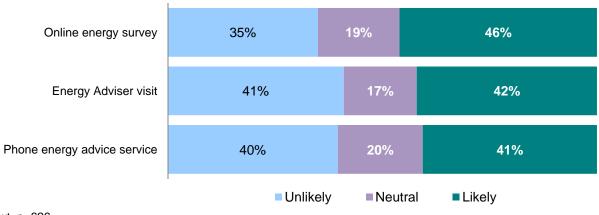


Figure 16: Likelihood of Using Services

wt. n=626

Sources of News and Other Information

As part of assessing marketing outlets that reach Oregonians, we asked respondents to identify their primary source for general news (Figure 17), energy efficiency information, and contractors (Figure 18).

Figure 17 shows the summary of general news sources by region. The most commonly reported information sources were online and TV (40% and 29% respectively). Newspapers (14%) and radio (7%) followed. Respondents throughout the four regions widely reported using online as a primary news source; respondents in the Portland Metro region most heavily rely on this information medium (46%). TV is an important news source, particularly for respondents in the Southern Oregon / South Coast region (45%). Participants reported significantly higher usage of newspapers (17%) and radio (12%) than did nonparticipants. These differences in the primary news sources between regions and participation status are statistically significant (chi-square test significant at p<0.01).

3. DETAILED FINDINGS Page 29

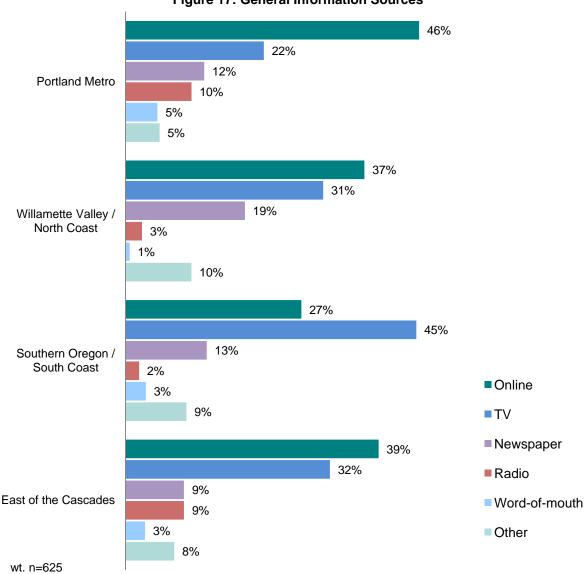


Figure 17: General Information Sources

Figure 18 shows various sources of information the respondents reported using when looking for information about energy efficiency and contractors. A majority of the respondents reported they used online resources (53%) to look for information about how to reduce home energy use or find energy-efficient products. Much smaller percentages of the respondents reported stores (15%), word-of-mouth (13%), and consumer reports (12%) as an information source for searches of energy-efficiency-specific information and products.

Overall, 22% of the respondents reported they tried to find contractors for home improvements or repairs in the past 12 months. When looking for contractors, the respondents most commonly

Page 30 3. DETAILED FINDINGS

reported word-of-mouth sources (37%) and the contractors with whom they had established relationships (17%) as their sources. Eight percent said they use the online *Angie's List*, while 7% reported home improvement stores as their sources for information about contractors. Six percent of the respondents reported they used the Energy Trust website to find information about contractors. Verbatim responses for other web resources (11%) included Google and other search engines and online review sites.

For Energy Efficiency Information **For Contractors** Online 53% Word-of-mouth 37% Stores 15% 17% My contractors Word-of-mouth 13% Angie's List 8% Consumer reports 12% Stores 7% TV 8% **Energy Trust website** 6% Newspaper 8% Craigslist Utility Newspapers Magazine Other websites Other wt. n=625wt. n=625

Figure 18: Information Sources for Energy Efficiency and Contractors (Multiple Responses Allowed)

Testing Marketing Messages

We included questions to assess the potential effectiveness of several campaign messages Energy Trust is considering. After we read each message, we asked respondents to rate the effectiveness of each message in convincing them to move forward with energy-saving projects in their homes. Figure 19 shows the results.

Messages that received the highest ratings seem to emphasize monetary benefit. Messages that received lower ratings seem to be rather general with less direct benefit to consumers.

3. DETAILED FINDINGS Page 31

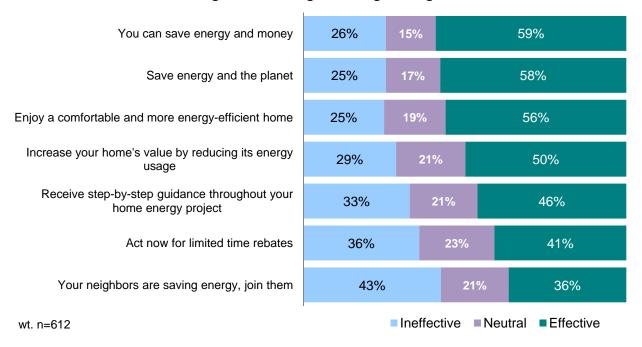


Figure 19: Testing Marketing Messages

In addition, we read several statements about Energy Trust to measure which one more effectively persuaded the respondents that Energy Trust is a credible organization. A majority of the respondents rated statements that describe Energy Trust as a nonprofit (58%) and its years of providing energy-saving services (58%) as the most credible.

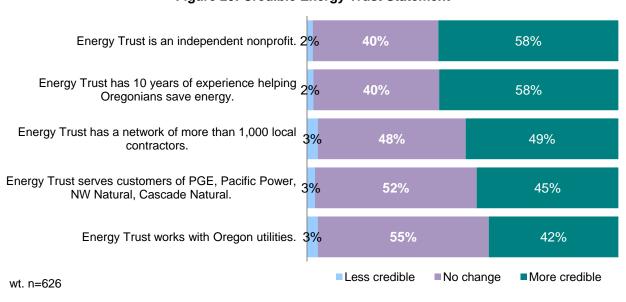


Figure 20: Credible Energy Trust Statement

Page 32	3. DETAILED FINDINGS

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

FINDINGS

Awareness of Energy Trust

- → More than half (56%) of the respondents in the Energy Trust service area in Oregon recognized the name *Energy Trust of Oregon*, equivalent to an 8% increase since 2010. Seventy-seven percent of the web survey respondents recognized the Energy Trust logo.
- → Respondents in the Portland Metropolitan area had the highest familiarity with Energy Trust (65%), followed by Willamette Valley / North Coast (54%), East of the Cascades (45%), and Southern Oregon / South Coast (41%). Although there still are large differences in awareness of Energy Trust between the four regions, we observed some increases in all regions.
- → PGE and NW Natural customers were significantly more aware of Energy Trust (65% and 70% respectively) than customers of Pacific Power and Cascade Natural (47% and 58%, respectively).
- → Thirty-nine percent of the respondents demonstrated knowledge of specific Energy Trust programs. Rebates (66%), energy saving information (34%), and energy audit (25%) were mentioned most frequently.
- → The initial source of information about Energy Trust ranged widely. The most common were: mass media (26%), utilities (26%), retailers and contractors (19%), and word-of-mouth (12%).
- → A majority of the respondents expressed positive perceptions of Energy Trust.

Energy Trust Program Participation

- → The overall self-reported participation rate is 31%, but the verified participation rate was much higher (47% among those whose address was available to match Energy Trust's program databases).
- → The differences in self-reported participation in Energy Trust programs per region and utility are large. The Portland Metropolitan area has the highest (37%) regional participation rate, followed by Willamette Valley / North Coast (31%), Southern Oregon / South Coast (22%), and East of the Cascades (18%). PGE and NW Natural customers' participation rates (36% and 40% respectively) are significantly higher than those of customers of Pacific Power and Cascade Natural Gas (both 26%).

→ Self-reported participants are more likely to be owner-occupied households, live in larger homes and homes heated by natural gas, and with a college degree.

Perceptions and Attitude

- → Respondents demonstrated accurate knowledge of which home energy reduction strategies are effective.
- → Fifty-five percent of the respondents reported they were concerned about utility bills. This level of concern has diminished since 2008.

Home Feature and Energy Use

- → The CFL penetration rate (86%) and the number of households that reported installation of 11 or more CFLs (26%) have stayed almost constant since 2009. The web respondents who were presented with photos of CFLs reported a much higher rate of CFL installation (94%).
- → Ninety percent of all the respondents reported they have a thermostat, but half of them are non-programmable that allows on/off- or temperature-only settings.
- → The ENERGY STAR[®] label was recognized by 75% of the respondents. Web respondents who were graphically presented with an ENERGY STAR[®] label reported a much higher recognition rate (91%, as compared to 83% nationwide).

Market Assessment

- → The three top obstacles respondents reported in their efforts to save energy were: up-front cost (66%), payback (27%), and uncertainty about potential money and energy savings (26%).
- → Online sites are the dominant sources of information for general news (53%) and energy efficiency-specific information (53%).
- → Respondents most commonly used word-of-mouth (37%) and existing relationships with contractors (17%) as sources of information about contractors. Other sources were *Angie's List* (8%), stores (7%), and the Energy Trust website (6%).

CONCLUSIONS AND RECOMMENDATIONS

→ Conclusion 1: Energy Trust continues to increase its market presence in Oregon: it is recognized by a majority of the 637 Oregonians surveyed for this study. Most of the Oregonians who participated in this study have a positive image of Energy Trust as a credible organization that provides energy efficiency services. Both self-reported and verified data indicate a significant increase in program participation since 2010.

- → Conclusion 2: Demographic characteristics and phone status of the web respondents from the ABS sample most closely represented the census among all the sampling sources that we employed for this study. Among these web respondents, there was little evidence of fraudulent or inattentive respondents, and the data quality was superior. Telephone data collection, on the other hand, is increasingly more difficult and costly especially when attempting to reach cell phone RDD numbers.
 - Recommendation: Develop a sampling design based on an ABS sample. While low response rates to the web survey requests through postcard solicitation was an issue, we have confidence that we can increase web survey participation by adopting additional methods for contacting and encouraging participation, such letters instead of postcards and enclosed incentives, instead of a lottery, etc. An ABS sample approach can also allow us to better estimate the Energy Trust participation rate by enabling us to match addresses with Energy Trust's program databases without asking questions related to respondents' program participation.
 - **Recommendation:** Develop an additional set of key evaluative measures that can be investigated as a part of this annual study, such as "importance of energy efficiency," awareness of specific Energy Trust program elements, and inclusion of targeted behavior changes Energy Trust is trying to influence.

Page 36	4. FINDINGS, CONCLUSIONS	S, AND RECOMMENDATIONS
	2 1 0	



APPENDIX A: WEB SURVEY INSTRUMENT

APPENDIX B: PHONE SURVEY INSTRUMENT

APPENDIX C: POST-STRATIFICATION WEIGHTING

PROCEDURE

APPENDIX D: FINAL DISPOSITION OF PHONE SURVEY

APPENDICES





Energy Trust of Oregon

2011 Oregon Residential Awareness and Perceptions Study (Web)

Note:

- () indicates choose one option type question
- [] indicates multiple response allowed

[ASK IF Q1~=YES] indicates skip logic (Ask if Q1 is not "yes")

Introduction: www.researchintoaction.com/energysurvey

We are grateful that you chose to participate in the Oregon Energy Study. Your answers will be invaluable for Oregon's energy suppliers to better serve their customers by designing programs that aim to maintain affordable electricity rates.

We assure you that your responses will be 100% confidential and released only as summaries in which answers are anonymous.

Click on this link to start the survey. You'll be first asked to type in the ID on the postcard, and you'll just need to follow the questions.

This online survey will close at 12:00 AM on May 31, 2011.

[RANDOM 50%]

Upon your completion, we will donate \$2 to Oregon HEAT, a low-income bill pay assistance program as our way of saying "Thank you."

[RANDOM 50%]

Upon your completion, you will be entered in a lottery to win a check for \$50 as our way of saying "Thank you." We will select one out of every 25 people who complete this survey online. If you include your contact information at the end, we will notify you if you are selected.

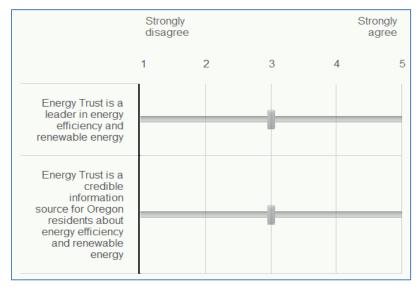
Jane Peters, Ph.D. President

S1.	Are you one of the persons who are responsible for making decisions about energy use in your household such as paying your utility bill or buying new appliances? () Yes () No
[IF S1	=YES, SKIP TO S2]
	Please give the postcard to another household member who is responsible for energy use decisions for your household. This person can use the same information on the card to start the survey. Thank you.
S2.	Are you, or is anyone in your household, an employee of an electric or gas utility company?
	() Yes [END SCREEN OUT PAGE]
	() No () Don't know [END SCREEN OUT PAGE]
S3.	What is the name of your electric utility?
	() PGE, Portland General Electric () Pacific Power (Pacific Power and Light, PP&L, PacifiCorp) () EWEB (Eugene Water & Electric Board) () Other (SPECIFY) () Don't know
S4.	What is the name of your natural gas utility, if you use one? Natural gas comes in a pipe to the house.
	() Northwest Natural () Cascade Natural Gas () Avista () NO NATURAL GAS COMPANY () Don't know
[IF S3	~=1 AND S3~=2 AND S4~=1 AND S4~=2, END SCREEN OUT PAGE]
S5.	Do you own or rent your home? () Own () Rent () Don't know [END SCREEN OUT PAGE]

[IF Q1=NO AND Q2=NO, SKIP TO Q12]

S6.	Please type in the year you were born.
	[ENTER FOUR DIGITS]
QUO	TA CHECK
	 S4: Geographic region S5: Homeownership S6: Age of primary homeowner (only limiting 65 yrs or older)
Abou	t Energy Trust of Oregon
Q1.	Have you heard of Energy Trust of Oregon?
	() Yes () No
Q2.	Have you seen this logo prior to today?
	Energy Trust of Oregon
	() Yes () No
[IF Q1	I=NO AND Q2=NO, SKIP TO Q4]
Q3.	To the best of your knowledge, what does Energy Trust offer?
Q4.	Are you aware that rebates and tax credits are available for installing certain energy saving equipment or renewable energy systems in your home?
	() Yes () No () Don't Know

- Q5. From whom or how did you first hear about Energy Trust and its offers? [RANDOMIZE]
 - () Word of mouth (friend, neighbor, family, co-worker)
 - () Contractor or retailer
 - () Energy Trust (website, representative, advertising)
 - () Utility (website, bill insert, representative, advertising)
 - () Mass media (sign, billboard, newspaper/magazine ad, tv/radio ad)
 - () Event (conference, seminar, workshop)
 - () Online search, web links
 - () Other (SPECIFY)
 - () Don't know
- Q6. Using a slider, how would you rate the following statements about Energy Trust of Oregon? [SLIDER] [RANDOMIZE]



- Q7. To the best of your knowledge, do you think Energy Trust is a...? [RANDOMIZE]
 - () Government agency
 - () Nonprofit
 - () Utility
 - () Other private business
 - () Don't know

- Q8. Have you ever received any services from Energy Trust such as a Home Energy Review or participated in any Energy Trust programs, or received a rebate or incentive check from Energy Trust?
 - () Yes
 - () No
 - () Don't know

[IF Q8~=YES, SKIP TO Q10]

- Q9. Did you participate at this present address or at some other address?
 - () Present address
 - () Other address
 - () Don't know

[IF Q8=NO, DO NOT ASK Q10 1]

Q10. At your present address, have you ever . . . [RANDOMIZE]

	Yes	No	DK
Received a home energy audit from Energy Trust (also called a "home energy review")	()	()	()
Purchased appliances such as a clothes washer or refrigerator and gotten a check from Energy Trust	()	()	()
Installed heating or cooling system or a water heater and gotten a check from Energy Trust	()	()	()
Installed insulation or air sealing and gotten a check from Energy Trust	()	()	()
Installed a solar electric or solar hot water system and gotten a check from Energy Trust	()	()	()
Recycled an old refrigerator or freezer and gotten a check from Energy Trust	()	()	()
Received an energy saver kit from Energy Trust that contains light bulbs, a shower head and other water saving devices	()	()	()

[IF Q8~=YES AND Q10 ALL=NO, SKIP TO Q12]

Q11.	Using a slider, how satisfied were you	u with your	experience	with the l	Energy	Trust?
	[SLIDER]					

Very dissatisfied (1)

2

3

4

Very satisfied (5)

Energy Use

- Q12. Using a slider, how concerned are you about your utility bill? [SLIDER] Extremely unconcerned (0) 1 2 3 4 Borderline (5) 6 7 8 9 Extremely concerned (10)
- Q13. Thinking about your home in the winter, how would you describe the level of comfort inside your home, in terms of temperature and draftiness? [SLIDER] Exceptionally poor (1) 2 So-so (3) Exceptionally good (5)
- Q14. Do you have any types of compact fluorescents light bulbs also called "twisty bulbs" like these in your home?



- () Yes
- () No
- () Don't know

[IF Q14~=YES, SKIP TO Q16]

- Approximately how many of these bulbs do you have installed in your home? Would you Q15. say...?
 - () 1-5
 - ()6-10
 - () 11-20
 - () more than 20
 - () Don't know
- Q16. Have you replaced any incandescent light bulbs or CFLs with LED light bulbs like these?







- () Yes
- () No
- () Don't know

- Q17. Do you have thermostats that control the heating and/or cooling system for all or most of your home?
 - () Yes
 - () No
 - () Don't Know

[IF Q17~=YES, SKIP TO Q20]

Q18. Which type of thermostat looks closest to the one that controls temperature for all or most of your home? [RANDOMIZE]



- Q19. At what heating temperature do you normally keep your thermostat when you are home in the winter?
 - () Heating temperature: ____ Fahrenheit
 - () Don't know
- Q20. In what percent of laundry loads do you use cold water only?

Open't know

Q21. We'd like to know what you have done in the past 12 months and what you are planning to do in next 12 months to reduce your home's energy usage. For each column, please check all that apply.

	What you have done in the past 12 months?	What you are planning to do in next 12 months?
Conducting an energy audit		
Replacing furnace		0
Replacing heat pump	[]	[]
Adding insulation	[]	[]
Replacing windows		
Replacing water heater		
·		Continued

	What you have done in the past 12 months?	What you are planning to do in next 12 months?
Adding duct insulation	[]	[]
Sealing duct leaks	[]	[]
Replacing clothes washer	[]	[]
Sealing air leaks around doors and windows		
Replacing an old refrigerator or freezer with a new one	[]	[]
Recycling an old or extra refrigerator	[]	
Adding solar electric (photovoltaic or PV) system	[]	[]
Adding solar water heating system	[]	[]
Turning down thermostat	[]	
Installing programmable thermostat		
Turning off lights more often when rooms are unoccupied	[]	[]
Installing compact fluorescent light bulbs (twisty or swirly bulbs), LED light bulbs or other lower wattage lighting	0	
Washing clothes in cold water	[]	[]
Running full loads in clothes washer or dishwasher	[]	[]
Other (specify)		[]
Other (specify)		[]
Other (specify)		[]

Q22.	When the following equipment needs to be replaced, which one would you replace with a
	highly efficient model? Please check all that apply. [RANDOMIZE]

[] Furnace

[] Heat pump

[] Windows

Water heater

[] Clothes washer

[] Refrigerator

Q23. The list below shows various different actions you can take to reduce home energy use. We'd like you to drag as many those items that you think are effective actions and drop them into the box on the right, and rank them by the order of effectiveness from the most effective action to the least. [RANDOMIZE]

ITEMS	EFFECTIVE ACTION TO REDUCE HOME ENERGY USE
Replacing incandescent bulbs to compact fluorescent twisty bulbs	
Adjusting thermostat at optimal temperature	
Doing laundry using cold water only	
Adding attic insulation	
Caulking and weatherstripping	
Installing more efficient refrigerator	
Installing more efficient water heater	
Turning off lights in unoccupied rooms	
Recycling more	
Unplugging unused appliances	

- Q24. What are some obstacles that you currently face in trying to save energy in your home? Please drag up to three items on the left that are difficult obstacles for you and drop them into the box on the right. [RANDOMIZE] [DRAG AND DROP]
 - a. Cooperation of other family members
 - b. Construction or design of home
 - c. Up-front cost of energy efficient equipment or repairs
 - d. Payback period of energy efficient equipment or repairs
 - e. Uncertainty about how much energy and money an improvement can save
 - f. Uncertainty whether an energy-saving improvement can improve comfort in my home
 - g. Uncertainty whether contractor's cost estimate is reasonable
 - h. Age of home
 - i. Lack of time
 - j. Don't know what to do
 - k. Don't know where to get information
 - 1. Family medical needs
 - m. Other obstacle (SPECIFY)
 - n. Other obstacle (SPECIFY)
 - o. Other obstacle (SPECIFY) _____



Q25.	Using a slider, how likely would you be to use the following products or services if they
	are provided at no cost to you? [SLIDER] [RANDOMIZE]

Very unlikely (1)

2

3

4

Very likely (5)

- a. Advice service which you can call and ask questions about how to save energy or use the equipment in your home
- b. Energy Adviser who visits your house to assess your needs and make recommendations to save energy
- c. Online energy survey in which you input your home information and receive recommendations to save energy

ENERGY STAR®

Q26. Have you ever heard of ENERGY STAR® or seen this label on products you buy or use?



() Yes

() No

() Don't know

[IF Q26~=YES, SKIP TO Q28]

- Q27. When purchasing appliances and other equipment, how often do you look for products with the ENERGY STAR® label? Would you say...?
 - () Always
 - () Often
 - () Sometimes
 - () Rarely or never
 - () Don't know

Renewable

- Q28. Have you heard about a community solar panel bulk-purchase effort? The name varies depending on the area where you live. For example, it's called *Solarize Portland* in Portland, *Solarize Pendleton* in Pendleton, and *Solarize Salem* in Salem.
 - () Yes
 - () No
 - () Don't know

Market

Q29.	What information source do you use most often to get general news or information? [RANDOMIZE]
	() Newspaper () Radio () TV () Online () Friends, family, coworkers () Other (SPECIFY) () Don't know
Q30.	What are your primary sources of information when looking for information about energy efficiency, or how to reduce your energy consumption, or find products that are energy efficient? [RANDOMIZE]
	() Newspaper () Radio () TV () Online () Friends, family, coworkers () Contractors () Home improvement stores () Magazines () Consumer Reports () Books () Other (SPECIFY) () Don't know
[IF Q	30~=ONLINE, SKIP TO Q32]
Q31.	Which website do you primarily use to look for information about energy efficiency or energy efficiency products? [RANDOMIZE] () Utility's website () Energy Trust of Oregon's website () Other website (SPECIFY) () Don't know

Q32. Please use the slider to indicate how effective each statement is to convince you that you should pursue an energy-saving or renewable energy project such as insulation, energy efficient appliances or solar for your home? [SLIDER] [RANDOMIZE]

Very ineffective (1)

4

Very effective (5)

- a. Enjoy a comfortable and more energy efficient home
- b. Save energy and the planet
- c. Act now for limited time rebates
- d. Your neighbors are saving energy, join them
- e. Receive step by step guidance throughout your home energy project
- f. You can save energy and money
- g. Increase your home's value by reducing its energy usage
- Q33. Please read the following statements about the Energy Trust of Oregon. We'd like to know if each statement persuades you that Energy Trust is more credible, less credible, or if it doesn't affect your opinion of Energy Trust's credibility. [RANDOMIZE]

	Less credible	No change in my opinion	More credible
Energy Trust of Oregon is an independent nonprofit	()	()	()
Energy Trust of Oregon works with Oregon utilities	()	()	()
Energy Trust of Oregon serves customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas	()	()	()
Energy Trust of Oregon has 10 years of experience helping Oregonians save energy	()	()	()
Energy Trust o Oregon has a network of more than 1,000 local contractors	()	()	()

- Q34. Have you tried to find contractors for your home improvements and/or repair in the past 12 months?
 - () Yes
 - () No
 - () Don't know

When needing a contractor for home improvement projects to reduce energy use, where do you look to find one? Please select all that apply.		

Q38.	What is your home's primary source of energy for water heating?
	() Electricity () Natural gas () Liquid propane gas (LPG) () Fuel oil () Solar () Other (SPECIFY) () Don't know
Q39.	Which of the following describes the square footage of the living area (heated area) of your home?
	() Fewer than 500 square feet () 500 to less than 1,000 square feet () 1,000 to less than 1,500 square feet () 1,500 to less than 2,000 square feet () 2,000 to less than 2,500 square feet () 2,500 to less than 3,000 square feet () More than 3,000 square feet () Don't know
Q40.	How many people, including yourself, live in your home full time now? Number of people:
[IF Q ²	40=1, SKIP TO Q42]
Q41.	How many school-aged children 18 years or younger live in your household? () Number of school-aged children () None
Q42.	What type of home do you live in? () Single-family detached house () Single-family attached home (such as a townhouse) () Duplex, triplex or fourplex () Apartment or Condominium with 5 units or more () Manufactured or Mobile home () Other (SPECIFY) () Don't know

Q43.	How many stories in your building, not including a basement?
	stories
Q44.	Which of the following best describes your education?
	 () High school or less () Some college or post-high school training () College graduate () Post-graduate work or degree () Don't know
Q45.	What is your household's total annual income before taxes?
	() Less than \$10,000 () \$10,000 - \$29,999 () \$30,000 - \$49,999 () \$50,000 - \$69,999 () \$70,000 - \$89,999 () \$90,000 - \$109,999 () \$110,000 - \$149,999 () \$150,000 - \$199,999 () \$200,000 or more () Don't know
Q46.	How long have you lived in this home?
	() Less than a year () 1 to 2 years () 3 to 5 years () 6 to 10 years () More than 10 years () Don't know
Q47.	How much longer do you see your household living in this home?
	() Less than a year () 1 to 2 years () 3 to 5 years () 6 to 10 years () More than 10 years () Don't know

Q48.	Do you consider yourself
	 () White or European American () African-American () Hispanic or Latino American () Asian or Asian-American () American Indian
	() Something not mentioned
Q49.	What's your gender?
	() Female () Male () Neither
Q50.	Finally, we'd like to know about your household's phone status. Does your household use
	 () Landline phone only (not including internet phone) () Landline and cell phone () Cell phone only () Don't know
Q51.	We are also making phone calls to some households. Please tell us your phone numbers so that we can insure you won't receive a call from us. We assure you that we will not use or sell your phone number.
	Landline phone number: Cell phone number:
[INCE	ENTIVE=OREGON HEAT]

These are all the questions we have. Please make sure you click on the Submit button to complete your survey. Upon your submission, we will donate \$2 to the Oregon HEAT low-income bill pay assistance program.

REDIRECT TO http://www.oregonheat.org/

[INCENTIVE=CASH LOTTERY]

These are all the questions we have. Please make sure you enter your email address and click on the "submit" button to complete your survey. Upon your submission, you will be



automatically entered in a lottery to win a check for from us if you are selected.	\$50. You will be notified by email
EMAIL:	
Thank you very much for your opinion.	



Energy Trust of Oregon

2011 Oregon Residential Awareness and Perceptions Study (Phone)

Note t	to a CATI programmer:
	Choose 1 type question
	Multiple responses allow type question
[]	Skip and validation
in	ease use identical names for variable names as the question numbers in this strument. Please also use identical values as used in this instrument, they are shown ith parenthesized numbers. This will facilitate merging datasets.
FOR	LANDLINE]
weeks 1ad a	my name is with SRBI Research calling to conduct a survey for Oregon Energy. Our partner organization, Research Into Action, has sent you two postcards in the last few to invite you to the online version of this survey, but our database suggests you haven't chance to respond. So, I'm following up with you today and conducting this survey on the this is not a sales call, and all responses will be kept confidential.
S1.	Are you one of the persons who are responsible for making decisions about energy use in your household such as paying your utility bill or buying new appliances?
	 Yes (1) No, respondent currently not available (2) [THANK, SCHEDULE A CALLBACK] DK (3) [THANK AND TERMINATE] REF (4) [THANK AND TERMINATE]
S2.	Are you, or is anyone in your household, an employee of an electric or gas utility company?
	☐ Yes (1) [THANK AND TERMINATE]
	□ No (2) □ DK (3) [THANK AND TERMINATE]
	□ REF (4) [THANK AND TERMINATE]

S3.	What is the name of your electric utility?
	 □ PGE, Portland General Electric (1) □ Pacific Power (Pacific Power and Light, PacifiCorp, PP&L) (2) □ EWEB (Eugene Water & Electric Board (3) □ Other (specify) (4) (s3_TEXT) □ DK (5) □ REF (6)
S4.	What is the name of your natural gas utility, if you use one? Natural gas comes in a pipe to the house.
	 □ Northwest Natural (1) □ Cascade Natural Gas (2) □ Avista (3) □ NO NATURAL GAS COMPANY (4) □ DK (5) □ REF (6)
[IF (s	3~=1 AND s3~=2] AND (s4~=1 AND s4~=2), THANK AND TERMINATE]
S5.	Do you own or rent your home?
	 □ Own (1) □ Rent (2) □ DK (3) [THANK AND TERMINATE] □ REF (4) [THANK AND TERMINATE]
S6.	What year were you born?
QUO	TA CHECK
	 S4: Geographic region S5: Homeownership S6: Age of primary homeowner (only limiting 65 yrs or older) =2011-s6

You have met our criteria for this survey; now let's go to the first question.

About Energy Trust of Oregon	
Q1.	Prior to today, have you heard of Energy Trust of Oregon? ☐ Yes (1) ☐ No (2) ☐ DK (3) ☐ REF (4)
[IF q	1~=1, SKIP TO q4]
Q3.	To the best of your knowledge, what does Energy Trust offer?
Q4.	Are you aware that rebates and tax credits are available for installing certain energy saving equipment or renewable energy systems in your home? Yes (1) No (2) DK (3) REF (4)
[IF q	1~=1, SKIP TO q13]
Q5.	From whom or how did you first hear about Energy Trust and its offers? Word of mouth (friend, neighbor, family, co-worker) (1) Contractor or retailer (2) Energy Trust (website, representative) (3) Utility (website, bill insert, representative) (4) Mass media (sign, billboard, ad in newspaper, magazine, TV, or radio) (5) Event (conference, seminar, workshop) (6)

□ DK (9)□ REF (10)

Q6. Using a 5-point scale, where 1 is "strongly disagree" and 5 is "strongly agree," how much do you agree or disagree with the following statements about Energy Trust of Oregon?

[RANDOMIZE]	Strongly Disagree (1)	2 (2)	3 (3)	4 (4)	Strongly Agree (5)	DK (6)	REF (7)
Q6_1. Energy Trust is a leader in energy efficiency and renewable energy	0	0	0	0	O	•	•
Q6_2. Energy Trust is a credible information source for Oregon residents about energy efficiency and renewable energy	0	0	•	0	0	•	0

- Q7. To the best of your knowledge, do you think Energy Trust is a . . . [READ]
 - \Box Government agency (1)
 - □ Nonprofit (2)
 - \Box Utility (3)
 - ☐ Other private business (4)
 - \square DK (5)
 - □ REF (6)
- Q8. Have you ever received any services from Energy Trust such as a Home Energy Review or participated in any Energy Trust programs, or received a rebate or incentive check from Energy Trust?
 - ☐ Yes (1)
 - □ No (2)
 - □ DK (3)
 - □ REF (4)

[IF q8~=1, SKIP TO q10]

- Q9. Did you participate at this present address or at some other address?
 - □ Present address (1)
 - \Box Other address (2)
 - \Box DK (3)
 - \Box REF (4)

Q10. At your present address, have you ever . . .

[RANDOMIZE]	Yes (1)	No (2)	DK (3)
Q10_1. Received an energy audit from Energy Trust (also called "energy review")	0	O	O
Q10_2. Purchased appliances such as a clothes washer or refrigerator and gotten a check from Energy Trust	•	O	•
Q10_3. Installed heating or cooling system or a water heater and gotten a check from Energy Trust	O	O	O
Q10_4. Installed insulation or air sealing and gotten a check from Energy Trust	O	O	O
Q10_5. Installed a solar electric or solar hot water system and gotten a check from Energy Trust	O	O	O
Q10_6. Recycled an old refrigerator or freezer and gotten a check from Energy Trust	O	O	O
Q10_7. Received an energy saver kit from Energy Trust that contains light bulbs, a shower head and other water saving devices	•	O	O

[IF $q8\sim=1$ AND q10_ALL $\sim=1$, SKIP TO q13]

Q11. Using a 5-point scale, where 1 is "very dissatisfied" and 5 is "very satisfied," how satisfied were you with your experience with the Energy Trust?

[RANDOMIZE]	Very Dis- satisfied (1)	2 (2)	(3)	4 (4)	Very Satisfied (5)	DK (6)	REF (7)
Comfort level inside your home (1)	0	0	0	•	O	•	0

Q12. Using a 10-point scale, where 0 is "extremely unconcerned," 5 is "borderline," and 10 is "extremely concerned," how concerned are you about your utility bill?

•	[RANDOMIZE]	<u>0</u> (1)	1 (2)	2 (3)	3 (4)	4 (5)	<u>5</u> (6)	6 (7)	7 (8)	8 (9)	9 (10)	<u>10</u> (11)	DK (12)	REF (13)
	Concern about utility bill (1)	O	O	O	O	O	O	O	O	O	O	0	0	O

Q14.	Do you have any types of compact fluorescents light bulbs in your home? These are often
	twisty or swirly looking bulbs or have a bend.

Vec	<i>(</i> 1	١
res	(1)

$$\square$$
 DK (3)

 $[\]square$ No (2)

[IF qI4	4~=1, SKIP 1O q16]
Q15.	Approximately how many of these bulbs do you have installed in your home? Would you say
	□ 1 - 5 (1) □ 6 - 10 (2) □ 11 - 20 (3)
	 □ More than 20 (4) □ DK (5) □ REF (6)
Q16.	Have you replaced any incandescent light bulbs or CFLs with LED light bulbs?
	 Yes (1) No (2) DK (3) REF (4)
Q17.	Do you have thermostats that control the heating and/or cooling system for all or most of your home?
	 □ Yes (1) □ No (2) □ DK (3) □ REF (4)
[IF Q1	7~=1, SKIP TO q20]
Q18a.	Does the thermostat allow you to
	 □ Turn on/off only (1) □ Set the temperature only (2) □ Set different temperatures for different times (3) □ DK (4) □ REF (5)
Q19.	At what heating temperature do you normally keep your thermostat when you are home in the winter?
	Fahrenheit

Q20.		do you	use cola	water o	my!			
Q25.	Using a 5-point scale, where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the following produced by the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use the scale where 1 is you be to use 1 is you be	-	-		-			-
	[RANDOMIZE]	Very Unlikely (1)	2 (2)	3 (3)	4 (4)	Very Likely (5)	DK (6)	REF (7)
	Q25_1. Advice service which you can call and ask questions about how to save energy or use the equipment in your home	0	•	O	O	O	•	O
	Q25_2. Energy Adviser who visits your house to assess your needs and make recommendations to save energy	O	O	0	O	O	0	O
	Q25_3. Online energy survey in which you input your home information and receive recommendations to save energy	O	•	0	0	O	•	•
ENER	RGY STAR®							
Q26.	Have you ever heard of ENERG ☐ Yes (1) ☐ No (2) ☐ DK (3) ☐ REF (4)	Y STAR	<u>.</u> ®?					
[IF q79	9~=1, SKIP TO q29]							
Q27.	When purchasing appliances and with the ENERGY STAR® label ☐ Always (1) ☐ Often (2) ☐ Sometimes (3) ☐ Rarely or never (4) ☐ DK (5) ☐ REF (6)				often do	you look	for pro	ducts

Renewable Energy

Q28.	Have you heard about a community solar panel bulk-purchase effort? The name varies depending on the area where you live. For example, it's called <i>Solarize Portland</i> in Portland, <i>Solarize Pendleton</i> in Pendleton, and <i>Solarize Salem</i> in Salem.
	 □ Yes (1) □ No (2) □ DK (3) □ REF (4)
Mark	et
Q29.	What information source do you use most often to get general news or information? [DO NOT READ, PROBE TO CODE]
	 Newspaper (1) Radio (2) TV (3) Online (4) Friends, family, co-worker (5) Other (SPECIFY) (6) (q29_TEXT) DK (7) REF (8)
Q30.	What are your primary sources of information when looking for information about energy efficiency, or how to reduce your energy consumption, or find products that are energy efficient? [DO NOT READ, PROBE TO CODE. SELECT ALL THAT APPLY]
	□ Newspaper (1) □ Radio (2) □ TV (3) □ Online (4) □ Friends, family, co-workers (5) □ Contractors (6) □ Home improvement stores (7) □ Magazines (8) □ Consumer Reports (9) □ Books (10) □ Other (SPECIFY) (11)
[IF q3	0~=4, SKIP TO q32]

Q31.	Which website do you primarily use to loo energy efficiency products? [DO NOT RE	EAD, PROBE TO CODE
	 □ Utility's website (1) □ Energy Trust of Oregon's website (2) □ Other website (SPECIFY) (3) □ DK (4) 	(q31_3_TEXT)

Q32. I will read you several statements. Using a 5-point scale where 1 is "very unlikely" and 5 is "very likely", I'd like you to tell me, for each statement, how likely is the message to convince you to pursue an energy-saving or renewable energy project, such as insulation, energy-efficient appliances, or solar for your home. [RANDOMIZE]

[RANDOMIZE]	Very Unlikely (1)	2 (2)	3 (3)	4 (4)	Very Likely (5)	DK (6)	REF (7)
Q32_1. Enjoy a comfortable and more energy efficient home	0	0	•	0	•	•	0
Q32_2. Save energy and the planet	O	O	O	O	O	O	O
Q32_3. Act now for limited time rebates	O	0	O	0	0	0	•
Q32_4. Your neighbors are saving energy, join them	0	0	O	0	O	O	•
Q32_5. Receive step by step guidance throughout your home energy project	0	0	•	0	•	•	•
Q32_6. You can save energy and money	0	0	O	0	•	O	•
Q32_7. Increase your home's value by reducing its energy usage	•	•	•	•	•	•	•

Q33. The followings are statements about the Energy Trust of Oregon. We'd like to know if each statement persuades you that Energy Trust is "more credible", "less credible", or if "it doesn't affect your opinion" of Energy Trust's credibility.

[RANDOMIZE]	Less Credible (1)	No Change In My Opinion (2)	More Credible (3)	DK (6)	REF (7)
Q33_1. Energy Trust of Oregon is an independent nonprofit	•	•	O	O	O
Q33_2. Energy Trust of Oregon works with Oregon utilities	O	O	O	O	O
Q33_3. Energy Trust of Oregon serves customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas	•	•	•	•	•
Q33_4. Energy Trust of Oregon has 10 years of experience helping Oregonians save energy	•	•	•	•	O
Q33_5. Energy Trust of Oregon has a network of more than 1,000 local contractors	•	•	•	•	0

Q34.	Have you tried to find contractors for your home improvements and/or repair in the past 12 months?
	□ Yes (1)
	□ No (2)
	$\Box \ DK (2)$ $\Box \ DK (3)$
	\square REF (4)
Q35.	When needing a contractor for home improvement projects to reduce energy use, where do you look to find one? [DO NOT READ, PROBE TO CODE. SELECT ALL THAT APPLY]
	□ Craigslist.com (1)
	□ Angie's list (2)
	☐ Energy Trust of Oregon's website (3)
	☐ Ask around to your friends, family, co-worker (4)
	☐ A store that sells energy efficient products (5)
	□ Newspaper (6)
	☐ Magazine (7)
	☐ A contractor you know (8)
	□ Other web resources (SPECIFY) (9) (q35_9_TEXT)
	\Box Other (specify) (10) (a35, 10, TEXT)

Housing and Demographic Information

Q36.	What year was your home built? Was it
	☐ Before 1970 (1) ☐ 1970 to 1979 (2) ☐ 1980 to 1986 (3) ☐ 1987 to 1992 (4) ☐ 1993 to 2000 (5) ☐ After 2000 (6) ☐ DK (7) ☐ REF (8)
Q37.	What is your home's primary source of energy for space heating?
	 □ Electricity (1) □ Natural gas (2) □ Liquid propane gas (LPG) (3) □ Fuel oil (kerosene) (4) □ Solar (5) □ Other (SPECIFY) (6) (q37_TEXT) □ DK (7) □ REF (8)
Q38.	What is your home's primary source of energy for water heating?
	 □ Electricity (1) □ Natural gas (2) □ Liquid propane gas (LPG) (3) □ Fuel oil (4) □ Solar (5)
	☐ Other (SPECIFY) (6) (q38_TEXT) ☐ DK (7) ☐ REF (8)

Q39.	What is the square footage of the living area of your home that is heated? (Was it)
	 □ Fewer than 500 square feet (1) □ 500 to less than 1,000 square feet (2) □ 1,000 to less than 1,500 square feet (3) □ 1,500 to less than 2,000 square feet (4) □ 2,000 to less than 2,500 square feet (5) □ 2,500 to less than 3,000 square feet (6) □ More than 3,000 square feet (7) □ DK (8) □ REF (9)
Q40.	How many people, including yourself, live in your home full time now?
[IF q4	0_1_TEXT=1, SKIP TO q42]
Q41.	How many school-aged children 18 years or younger live in your household?
Q42.	What type of home do you live in?
	 □ Single-family detached house (1) □ Single-family attached home (such as a townhouse) (2) □ Duplex, triplex or fourplex (3) □ Apartment or Condominium with 5 units or more (4) □ Manufactured or Mobile home (5) □ Other (SPECIFY) (6) (q42_TEXT) □ DK (7) □ REF (8)
Q43.	How many stories in your building, not including a basement?

Q44.	Which of the following best describes your education?
	 □ High school or less (1) □ Some college or post-high school training (2) □ College graduate (3) □ Post-graduate work or degree (4) □ DK (5) □ REF (6)
Q45a.	Please stop me when I get the range of your household's total annual income before taxes.
	 □ Less than \$50,000 □ \$50,000 - \$109,999, or [SKIP TO q45c] □ \$110,000 or more? [SKIP TO q45d] □ REF [SKIP TO q46]
Q45b.	Is it
	 □ Less than \$10,000 [SKIP TO q46] □ \$10,000 - \$29,999 [SKIP TO q46] □ \$30,000 - \$49,999 [SKIP TO q46] □ REF [SKIP TO q46]
Q45c.	Is it
	□ \$50,000 - \$69,999 [SKIP TO q46] □ \$70,000 - \$89,999 [SKIP TO q46] □ \$90,000 - \$109,999 [SKIP TO q46] □ REF [SKIP TO q46]
Q45d.	Is it
	□ \$110,000 – \$149,999 □ \$150,000 - \$199,999 □ \$200,000 or more □ REF

How long have you lived in this home?
 □ Less than a year (1) □ 1 to 2 years (2) □ 3 to 5 years (3) □ 6 to 10 years (4) □ More than 10 years (5) □ DK (6) □ REF (7)
How much longer do you see your household living in this home?
 □ Less than a year (1) □ 1 to 2 years (2) □ 3 to 5 years (3) □ 6 to 10 years (4) □ More than 10 years (5) □ DK (6) □ REF (7)
Do you consider yourself [READ]
 White or European American (1) African-American (2) Hispanic or Latino American (3) Asian or Asian-American (4) American Indian (5) Something not mentioned (6) DK (7) REF (8)
RECORD GENDER
□ Male (1)□ Female (2)
Finally, we'd like to know about your household's phone status. Does your household use [READ] Landline phone only (not including internet phone) (1) Landline and cell phone (2) Cell phone only (3) DK (4) REF (5)

These are all the questions we have. Thank you for your opinion.



We applied post-stratification weights to the final sample to ensure that it appropriately represented the population per key demographic characteristics. Post-stratification weighting is a technique to mathematically correct for biases that result from under- or over-sampling.

Our sample originated from five different sample sources or data collection modes:

- → Online survey using Address-Based Sample (ABS)
- → Phone survey using ABS (non-respondents to the online survey whose phone number was listed)
- → Landline Random Digit Dialing (RDD)
- → Cell-phone RDD
- → Targeted list of multifamily residents

Our primary concern by introducing multiple sample sources was that each sample source would result in differing coverage of cell-phone-only households. We know that demographic characteristics, as well as some energy-using behaviors, of cell-phone-only households are significantly different from landline households (more likely to be younger, renters, lower income, minority, etc.). For this reason, regardless of the sample source, we first applied a weight to correct for biases due to phone status (Table 12). We call this weight *W_PHONE*.

Table 12: Post-Stratification Weight to Correct Bias Due to Phone Status

HOUSEHOLD TYPE	PERCENT OF CENSUS 2010	PERCENT OF UNWEIGHTED SAMPLE	WEIGHT: <i>W_PHONE</i> (Census % / Sample %)
Landline-only households	12%	19%	0.65
Wireless-only households	31%	12%	2.26
Landline and cell-phone households	56%	69%	0.80

Next, we calculated weighting values to correct differentials of key demographic characteristics to represent according to census. Percentages of unweighted sample are based on adjusted percentages after applying the *W_PHONE*. Table 13 shows weighting value calculation of region, housing tenure, and age variables.

Table 13: Post-Stratification Weight to Correct Demographic Differentials

CHARACTERISTIC	PERCENT OF CENSUS 2010	PERCENT OF UNWEIGHTED SAMPLE (Adjusted by W_PHONE)	WEIGHT (Census % / Sample %)
	REGION (W_RE	GION)	
Portland Metro	50%	48%	1.05
Willamette Valley / North Coast	25%	22%	1.13
Southern Oregon / South Coast	14%	12%	1.18
East of the Cascades	11%	18%	0.60
	Housing Tenure (W	_TENURE)	
Owner	64%	57%	1.12
Renter	36%	43%	0.83
	Householder's Ag	E (<i>W_AGE</i>)	_
Under 25 years	6%	4%	1.57
25 – 44 years	34%	35%	1.00
45 – 64 years	39%	45%	0.87
65 years or older	21%	17%	1.20

To calculate the final weight value, we multiplied the weighting values for each of the four weights. This total weight was applied when conducing analysis:

■ Total Weight = W_PHONE x W_REGION x W_TENURE x W_AGE



FINAL DISPOSITION OF PHONE SURVEY

							purchased targeted	targeted		
	AB	ABS list	landli	landline RDD	cell	cell RDD	SAMPLE	PLE		
SRBI	cati1:1		cati1:2		cati1:3		cati1:4		Total	
	5	Dialed%		Dialed%		Dialed%		Dialed%		Dialed%
TOTAL NUMBERS DIALED	1787	100.0%	21971	100.0%	6407	100.0%	3439	100.0%	33604	100.0%
RAD NIMBERS (out of frame)	366	20 5%	14340	65 3%	1751	77 3%	845	24 6%	17302	51 5%
BUSINESS/GOVERNMENT NUMBER/NON-RESIDENT	84	2.7%								3.8%
Cell Phone	0	0.0%								0.1%
Fax/Modem Number/Computer Tone	20	1.1%	25		2		2		က	1.0%
Incomplete Call/Line Problems (Temporary)	16	0.9%	338	1.5%		0.5%	22	0.6%	410	1.2%
Not In Service / Disconnected	214	12.0%	12465	26.7%	1374	21.4%	589	17.1%	14642	43.6%
Possible Unassigned Number/No Answer All Attempts	89	3.8%	446	2.0%	4	0.1%	91	2.6%	609	1.8%
TOTAL GOOD NUMBERS (total sample frame)	1421	79.5%	7631	34.7%	4656	72.7%	2594	75.4%	16302	48.5%
NO CONTACT	49	2.7%	2140	9.7%	283	4.4%	184	5.4%	2656	7.9%
Live Non-Contacts	49	2.7%				4.4%				7.9%
Busy	0	0.0%	20		4	0.1%	2	0.1%	29	0.2%
Fax/Modem/Computer tone (live)	0	0.0%	547		25	0.4%	11		583	1.7%
No answer	0	0.0%	1407	6.4%	122		62	1.8%	1591	4.7%
Live Non Contacts - OVER MAX (max set to 5)	49	2.7%	136	%9:0	132		106	3.1%	423	1.3%
TOTAL CONTACTS	1372	76.8%	5491	25.0%	4373	68.3%	2410	70.1%	13646	40.6%
CONTACTS - NOT SCREENED	1107	61.9%	4756	21.6%	4024	63.3%	1931	56.2%	11848	35.3%
Dead - Not Screened	31	1.7%	102	0.5%	132	2.1%	128	3.7%	393	1.2%
Away for duration	2	0.3%	19			%9'0	10			0.2%
CHILD/TEEN PHONE	_	0.1%	_	0.0%	99	1.1%	2	0.1%	72	0.2%
Foreign Language - NON-SPANISH	6	0.5%		0.1%	10	0.2%	25	0.7%	29	0.2%
Health Problems - LONG TERM	7	0.4%		0.1%	2	0.1%		0.8%		0.2%
Hearing Problems	o	0.5%	38	0.2%		0.1%	63	1.8%	119	0.4%
Live - Not Screened	305	17.1%	2064	9.4%	2134	33.3%	487	14.2%	4990	14.8%
Answering Machine/Voice Mail	0	0.0%	1628		1398	ľ	134	3.9%	3160	9.4%
CallBack - CALL BLOCKING	0	0.0%	2	0.0%	10	0.2%	0	%0.0	15	%0.0
Live Not Screened - OVER MAX (max set to 5)	305	17.1%	431	2.0%	726	11.3%	353	10.3%	1815	5.4%
	<u> </u>	9	•							

research/into/action ***

				í í		4	purchased targeted	targeted	
	ABS list	list	landline KDD	RDD	cell KDD	400	SAMPLE	<u>۔</u>	
	cati1: 1		cati1: 2		cati1: 3		cati1: 4		Total
	D	Dialed%	Q	Dialed%	7	Dialed%		Dialed%	Q
Callback - Not Screened	579	32.4%	2014	9.5%	1332	20.8%	1015	29.5%	4940
Callback - APPOINTMENTS	0	0.0%	17	0.1%	_	0.0%		0.1%	23
Callback - UNSPECIFIED	က	0.5%	527	2.4%	133	2.1%		2.2%	739
CB1 - S1: RESPONDENT CURRENTLY NOT AVAILABLE	2	0.1%	51	0.2%	28	0.4%		0.2%	88
- dn-bunH	0	0.0%	237	1.1%	100	1.6%	49	1.4%	386
Health Problems - SHORT TERM	0	0.0%	12	0.1%	9	0.1%		0.3%	27
Foreign Language - SPANISH	7	0.6%	28	0.3%	71	1.1%	103	3.0%	243
Callback - CALL BLOCKING (over max)	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Hung-up CB - OVER MAX	234	13.1%	899	3.0%	310	4.8%		11.6%	1611
Callbacks Not Screened - OVER MAX (max set to 5)	329	18.4%	444	2.0%	683	10.7%	367	10.7%	1823
Refusals - Not Screened	192	10.7%	576	2.6%	456	7.1%	301	8.8%	1525
Refusal - CALL BLOCKING	_	0.1%	12	0.1%	20	0.3%		0.1%	32
Refusal - SOFT	92	4.3%	248	1.1%	155	2.4%		3.9%	612
SOFT REFUSAL 1 - S1: REF	14	0.8%	24	0.1%	တ	0.1%	_	0.3%	28
SOFT REFUSAL 2 - S2: REF	0	0.0%	_	0.0%	7	0.0%		0.0%	က
SOFT REFUSAL 3 - S5: REF	_	0.1%	9	0.0%	_	0.0%	2	0.1%	10
SOFT REFUSAL 4 - S6: REF	2	0.3%	31	0.1%	7	0.1%		0.2%	21
Second Soft Refusal	0	0.0%	0	0.0%	0	0.0%		0.0%	0
Refusal - HARD (Do Not Callback)	25	1.4%	114	0.5%	129	2.0%	85	2.5%	353
HARD REFUSAL 1	0	0.0%	7	0.0%	40	%9:0		0.0%	47
Hung-up REF - OVER MAX	37	2.1%	88	0.4%	46	0.7%		1.3%	216
Refusals Not Screened- OVER MAX (max set to 5)	33	1.8%	45	0.2%	47	0.7%		0.4%	140
CONTACTS - SCREENED	265	14.8%	735	3.3%	319	5.0%	479	13.9%	1798
Screen-Outs	62	3.5%	203	%6·0	104	1.6%		2.8%	269
SCREEN-OUT	0	0.0%	0	0.0%	0	0.0%		0.0%	0
SCREEN-OUT 17 - S1: ALREADY COMPLETED ONLINE	9	0.3%	7	0.0%	9	0.1%	80	0.2%	27
	2	0.3%	20	0.1%	10	0.2%		0.2%	43
SCREEN-OUT 5 - S3~=1 AND S3~=2 AND S4~=1 AND S4~=2	51	2.9%	176	0.8%	88	1.4%	184	5.4%	499

5.4% 1.7% 0.0% 0.1% 0.1% 1.5%

Dialed%
14.7%
0.1%
2.2%
0.3%
1.1%
0.7%
0.0%
4.8%
5.4%



APPENDIX D: FINAL DISPOSITION OF PHONE SURVEY

							purchased targeted	targeted		
	AB	ABS list	landli	landline RDD	cell	cell RDD	SAMPLE	J.E		
	cati1:1		cati1:2		cati1:3		cati1: 4		Total	
		Dialed%		Dialed%		Dialed%		Dialed%		Dialed%
Quota-Outs	0	0.0%	288	1.3%	148	2.3%	202	2.9%	638	1.9%
Q/O (OVER QUOTA TERMINATE)	0	%0.0	0	0.0%	0	0.0%	0	%0.0	0	%0.0
Q/O (OVER QUOTA TERMINATE) - OWNER	0	0.0%	206	%6.0	144	2.2%	150	4.4%	200	1.5%
Q/O (OVER QUOTA TERMINATE) - RENTER	0	0.0%	0	0.0%	0	%0.0		0.0%	0	%0.0
Q/O (OVER QUOTA TERMINATE) - 24 YOUNGER TO 64	0	0.0%	0	%0.0	0	0.0%	0	0.0%	0	%0.0
Q/O (OVER QUOTA TERMINATE) - 65+	0	%0.0	82	0.4%	4	0.1%	52	1.5%	138	0.4%
Qualified Refusals		0.1%		0.0%	0	0.0%		0.0%		%0.0
Mid-Interview Term	0	0.0%	0	0.0%		0.0%		0.0%	0	0.0%
Qualified Soft Refusal - 1	_	0.1%	_	0.0%		0.0%		0.0%		%0.0
Qualified Refusals - OVER MAX (max set to 5)	0	0.0%	0	%0.0	0	%0.0		%0.0		%0.0
Qualified Callbacks	9	0.3%	22	0.1%	16	0.2%		0.3%	53	0.2%
Abandoned Interview	_	0.1%				0.2%	7	0.2%		0.1%
Qualified Callback - 1	0	0.0%			_	0.0%		0.0%	4	%0.0
Qualified Callbacks - OVER MAX (max set to 5)	2	0.3%	2	%0.0	2	0.1%	_	%0.0	16	%0.0
Total Completes	196	11.0%	221	1.0%	51	0.8%	29	1.9%	535	1.6%
Proceed with interview/Completed Interview	196	11.0%	221	1.0%	21	0.8%	29	1.9%	535	1.6%
Survey Incidence (Screening Incidence)	76.6%		72.4%		67.4%		58.2%		68.4%	
List Incidence (Dialing Incidence)	11.4%		2.4%		3.4%		8.1%		3.7%	
Cooperation Rate 1	57.2%		55.2%		39.9%		%8.09		53.3%	
Cooperation Rate 2	26.5%		54.3%		39.1%		60.1%		52.4%	
Totals Refusals	13.6%		%9'.		8.6		11.6%		9.4%	
Response Rate 1	18.2%		9.3%		9:2%		18.1%		10.7%	
Response Rate 2	19.2%		13.2%		7.1%		20.6%		13.1%	





research/into/action ***