



PWP Inc.

Energy Trust of Oregon Existing Buildings Program Process Evaluation Report

FINAL REPORT

Submitted by Evergreen Economics

August 11, 2016

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Executive Summary

Evergreen Economics, along with PWP Inc., was hired by Energy Trust of Oregon (Energy Trust) to conduct a process evaluation of its Existing Buildings program. This evaluation focused specifically on the Standard and Custom program tracks in Oregon and Southwest Washington for the 2014 and 2015 program years. The Lighting track, Strategic Energy Management (SEM), pilots, and other initiatives are not addressed in this evaluation. This report presents the objectives, methods, and findings of this evaluation.

Program Background

The Existing Buildings program has been offered by Energy Trust since 2003 and provides energy study services and incentives for energy efficient upgrades to commercial buildings. Customers of Portland General Electric (PGE), Pacific Power, NW Natural, and Cascade Natural Gas (CNG) on qualifying rate schedules are eligible for the program. The program serves customers of these utilities in Oregon and customers of NW Natural in Southwest Washington. There are two distinct program tracks: Standard and Custom. The Standard track follows a prescriptive approach with an approved list of measures and associated incentives. The Custom track is designed to provide incentives for any other equipment or improvements with cost effective gas or electric savings that is not covered by the Standard track of the program. ICF International (ICF) is the current program management contractor (PMC), handling all implementation activities for the Standard and Custom program tracks.

Table 1 below shows the program achievements by year, state, and program track for 2014 and 2015. The majority of program savings come from the Custom track even though the majority of measures and projects occur within the Standard track. This reflects the fact that Custom projects are typically larger with greater savings.

Table 1: Summary of Program Achievements, 2014-2015

Year	State	Program Track	Measures	Projects	kWh Savings	Therm Savings
2014	OR	Custom	586	342	22,626,619	430,546
		Standard	1,803	1,016	8,146,820	454,341
	WA	Custom	28	13	0	72,607
		Standard	98	50	0	80,069
2015	OR	Custom	532	409	23,004,865	663,118
		Standard	1,483	1,256	5,790,038	421,815
	WA	Custom	13	12	0	39,719
		Standard	36	33	0	33,718
Total			4,579	3,131	59,568,342	2,195,932

Evaluation Methods

The two sources of information for this evaluation were a review of program documents and data, and interviews with various program actors. These interview subjects included program staff, utility staff, allied technical assistance contractors (ATACs), installation contractors (“contractors”), participants, and nonparticipants. Table 2 below summarizes the interviews completed for this evaluation. A total of 69 interviews were completed among all the various program actors listed below.

ATACs and program participants were given advanced notice by ICF that they would be contacted for interviews for this evaluation. Energy Trust staff coordinated the scheduling of interviews with the electric utilities. All other groups were contacted directly by Evergreen without prior notice from ICF or Energy Trust. All interviews were held by phone, with the exception of interviews with Portland General Electric and Pacific Power, which were held in-person at the respective utility’s offices.

Table 2: Summary of Evaluation Interviews

Program Actor	Length of Interview	Interview Target	Interviews Completed
Program Staff – Energy Trust, ICF, and RHT	1 hour	Up to 12	8
Electric Utilities – Portland General Electric and Pacific Power	2 hours	2	2
Gas Utilities – NW Natural and Cascade Natural Gas	1 hour	2	2
Clark PUD	30 minutes	1	1
ATACs	1 hour	10	13
Contractors – Trade Ally and Non-Trade Ally	30-45 minutes	15	12
Participants	20 minutes	30	23
Nonparticipants	5 minutes	Up to 10	8
Total		82	69

Key Findings and Recommendations

Overall, Energy Trust's Existing Buildings program appears to be working well, with the vast majority of program actors very satisfied with the collaboration and communication involved in keeping the program running smoothly.

Program staff highlighted the need to pursue hard-to-reach customers and deeper retrofits, as the program has been operating for 13 years and much of the readily available energy savings have been achieved. Energy Trust's utility partners are generally satisfied with the collaboration on marketing and outreach activities, with the gas utilities expressing a desire for a bit more regular communication with Energy Trust.

The allied technical assistance contractors (ATACs) we spoke with have also been satisfied with their involvement in the program, expressing that there is strong and clear communication with ICF International (ICF) and straightforward reporting requirements that make the program easy to navigate. Contractors also had positive feedback on the program, but we found that there is room for contractors to do more in marketing the program and available incentives.

Participants are also generally very satisfied with their participation experience and only had minor suggestions for improvement to the program, indicating that program

processes are working well overall. The small number of nonparticipants we interviewed brought to light that there is still a lack of awareness of incentives that are available for non-lighting equipment and upgrades.

Below are the overarching findings resulting from this evaluation and corresponding recommendations for improvements to Energy Trust's Existing Buildings program.

Finding: Program tracking data are generally complete and well maintained, but our review found some instances where trade ally contractors appear in both the trade ally and non-trade ally data (i.e. installer data) with different ID numbers. There are also cases where participants appear in the installer data alongside contractors when they installed their own equipment. This combination of trade allies, non-trade allies, and participants all included in the same set of installer data does not accurately reflect their roles in the program.

Recommendation: Energy Trust should consider implementing a quality control procedure for program data that cross checks trade ally data against other contractor data to help eliminate duplicate entries and ensure that trade allies are accurately identified and tracked. Additionally, participants with self-installed projects should be identified as such in the data with an additional data field, perhaps a binary variable, so that participants can be easily identified as distinct from contractors in the installer data.

Finding: We heard from program staff and contractors that there has been some confusion on the part of contractors about whether they need to sign up to be a trade ally for residential and commercial programs separately. Two contractors we spoke with expressed confusion on this point, mistakenly thinking that they were trade allies for all sectors if they had applied once.

Recommendation: Energy Trust should communicate to existing trade allies and those who apply in the future that if they want to be a trade ally for both residential and commercial programs, they need to apply for those designations separately. Where possible, the application process and forms should support such dual applications.

Finding: NW Natural would like to have more feedback on outcomes of collaboration and the program, and said that overall, it would like to have greater frequency of communications with Energy Trust. NW Natural also would like to have more input into marketing efforts. Similarly, Cascade Natural Gas (CNG) would like to have more opportunity to provide input up-front on commercial marketing efforts.

Recommendation: Energy Trust should provide more opportunities for regular contact with NW Natural and CNG and consider increasing collaboration on marketing with the gas utilities.

Finding: Clark Public Utilities (commonly known as Clark PUD) suggested that co-branded program materials may increase awareness of the Existing Buildings program in Southwest Washington.

Recommendation: Energy Trust should explore the opportunity for co-branding with Clark PUD on informational program materials in Clark PUD and NW Natural territory to increase customer awareness of Energy Trust incentives in Southwest Washington.

Finding: The Existing Buildings program relies heavily on its network of ATACs and trade allies to promote and bring projects into the program. Program staff reiterated the importance of this program design. ATACs and trade allies currently spread awareness of the program with existing customers and by word of mouth, but did not seem to understand that they are in fact relied on to bring in the majority of participation for the program. Most ATACs do not have a strong focus on marketing energy studies for the program, but some ATACs expressed an interest in getting more feedback on how many projects they are bringing into the program compared to other ATACs. Others mentioned that additional marketing support would be helpful, such as knowing what techniques have worked well for other ATACs to bring customers into the program.

Additionally, there may be an opportunity for lighting contractors to cross-promote non-lighting incentives offered by Energy Trust. Although we did not conduct interviews with lighting contractors, we heard from nonparticipants that their lighting contractors did not promote incentives for non-lighting upgrades. This would likely increase awareness among customers that make a lighting upgrade, but have yet to upgrade other equipment.

Recommendation: Energy Trust should make clear to ATACs and trade allies that the program design relies on them to initiate projects and should emphasize the program resources available to make that possible. Providing ATACs with additional information and tips for how to promote energy studies will likely help them take a more active role in seeking out customers for energy studies. Energy Trust should reiterate to trade allies that there are co-op marketing funds available for their use.

For lighting trade allies, Energy Trust should emphasize the importance of cross-promoting non-lighting upgrades and available incentives, and encourage these contractors to discuss the opportunity for additional upgrades with their customers. If they do not already do so, Evergreen Consulting Group staff should promote non-lighting upgrades anytime they are working on a lighting project. Lighting trade allies and Evergreen Consulting Group should be provided with sufficient information to enable them to provide customers with the appropriate point of contact or web link for non-lighting projects, and that information should be updated in a timely fashion.

Finding: Many ATACs reported an end-of-year slowdown in the processing of project paperwork by ICF due to an increase in projects; this increase was often spurred by bonus incentives announced in the fall of each year. Anticipating these bonuses, customers would delay projects until the bonus was announced. Under these circumstances, ATACs found that it was difficult for them to keep their customers' projects moving and avoided initiating new projects during this time, which resulted in a lull in activity once the bottleneck cleared. Recognizing this as a potential problem, Energy Trust made the decision to not offer end of year bonus incentives for gas measures in 2015.

Recommendation: ICF should work to maintain a relatively consistent level of program activity throughout the year and/or communicate with ATACs ahead of time that they should expect a slowdown in processing at certain times of year.

Finding: The main source of confusion and difficulty for customers, as reported by ATACs, is the issue of cost effectiveness. Many customers do not understand why an upgrade that saves energy would not receive an incentive, and ATACs reported that some customers would pursue additional upgrades that have savings but are not currently cost effective from Energy Trust's perspective and therefore ineligible for incentives. ATACs also experience occasional frustration when they find that a recommended upgrade is found to not be cost effective after ICF's review of the energy study.

Recommendation: Energy Trust should explore the option of allowing upgrades that will yield energy savings but are currently not considered cost effective. Incentives could be offered on a pro-rated basis so that they are in line with the magnitude of savings, even if small. This would likely encourage some customers to pursue additional upgrades beyond the low hanging fruit to achieve deeper savings, and would allow ATACs to make recommendations for any upgrades that would yield energy savings.

MEMO



Date: September 7, 2016
To: Board of Directors
From: Jay Olson, Sr. Program Manager – Commercial
Andrew Shepard, Sr. Project Manager, NW Natural Washington
Sarah Castor, Evaluation Sr. Project Manager
Subject: Staff response to the Existing Buildings Program Process Evaluation

The last process evaluation of the Existing Buildings program was completed in 2014 and examined the transition in 2013 from the previous program management contractor (PMC) to ICF International (ICF). The current process evaluation focused on the years 2014, 2015 and early 2016 with a more narrow evaluation scope of the standard and custom tracks of the program; the lighting track will be evaluated separately in 2017, as it crosses multiple programs in the commercial and industrial sectors.

The evaluation found that the Existing Buildings program is working effectively, with good communication between Energy Trust, ICF, allied technical assistance contractors (ATACs), trade allies and other contractors. Likewise, PGE and Pacific Power feel that they have good working relationships with Energy Trust commercial program staff. NW Natural and Cascade Natural Gas also reported that they have positive relationships with Energy Trust and expressed a desire for more communication with Energy Trust and more input into commercial marketing. Since receiving this feedback, Energy Trust has taken steps to increase communication with the gas utilities around marketing efforts. Energy Trust's current coordination activities with Clark Public Utilities are effective and the possibility of developing co-branded marketing materials, as recommended, is being explored.

Over the last few years, the program has increasingly relied on trade allies and equipment vendors to market incentive offerings and program services. This strategy has been effective in helping the program meet savings goals and reduce costs, and will be continued. As recommended by the evaluator, the program does encourage the cross-promotion of non-lighting upgrades by lighting trade allies where it is practical for the trade ally. The evaluator noted that some contractors are not aware that they must apply to be a trade ally for individual programs. In 2016, Energy Trust launched an online trade ally enrollment process aimed at making it easier for contractors to enroll for the first time or to enroll in additional programs.

The evaluator noted that ATACs and trade allies felt the program processes and experience were very similar between Oregon and Southwest Washington. Among Washington participants, most noted that they did not have difficulties applying for incentives from both Energy Trust and Clark Public Utilities, and all were satisfied with

their participation experience with Energy Trust. Neither allies nor customers suggested the need for any substantive changes to the program in Southwest Washington.

Finally, the evaluator recommended that Energy Trust consider incentivizing non-cost-effective measures at a reduced rate, proportional to the energy savings. Energy Trust is not able to incentivize measures that are not cost-effective, per our grant agreement with the Oregon Public Utility Commission. Energy Trust will continue efforts to make our cost-effectiveness guidelines easily understandable by customers and market actors, and pursue opportunities to add new cost-effective measures, as they are identified.

I Introduction

Evergreen Economics, along with PWP Inc., was hired by Energy Trust of Oregon (Energy Trust) to conduct a process evaluation of its Existing Buildings program. This evaluation focused specifically on the Standard and Custom program tracks in Oregon and Southwest Washington for the 2014 and 2015 program years. The Lighting track, Strategic Energy Management (SEM), pilots, and other initiatives are not addressed in this evaluation. This report presents the objectives, methods, and findings of this evaluation.

I.1 Program Background

The Existing Buildings program has been offered by Energy Trust since 2003 and provides energy study services and incentives for energy efficient upgrades to commercial buildings. Customers of Portland General Electric (PGE), Pacific Power, NW Natural, and Cascade Natural Gas (CNG) on qualifying rate schedules are eligible for the program. The program serves customers of these utilities in Oregon and customers of NW Natural in Southwest Washington. There are two distinct program tracks: Standard and Custom. The Standard track follows a prescriptive approach with an approved list of measures and associated incentives. The Custom track is designed to provide incentives for any other equipment with cost effective gas or electric savings that is not covered by the Standard track of the program.

Table 3 below shows the program achievements by year, state, and program track for 2014 and 2015. The majority of program savings come from the Custom track even though the majority of measures and projects occur within the Standard track. This reflects the fact that Custom projects are typically larger with greater savings.

Table 3: Summary of Program Achievements, 2014-2015

Year	State	Program Track	Measures	Projects	kWh Savings	Therm Savings
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Total			4,579	3,131	59,568,342	2,195,932

The program is delivered through a collaborative effort among Energy Trust, its funding utilities, the program management contractor (PMC), and trade ally contractors. Energy Trust collaborates with its funding utilities on outreach and marketing for the program to increase awareness among eligible customer segments and provide support to contractors. The implementation of the program and day-to-day activities are driven by the PMC, its subcontractors, and trade ally contractors.

ICF International (ICF) currently holds the PMC contract and has been in that role since 2013. ICF coordinates with Energy Trust program staff to design and implement the program as well as develop technical requirements, incentive amounts, and program procedures. ICF also coordinates communication with customers and trade allies to review project applications and provide incentives for eligible projects. ICF has subcontracted with RHT Energy Solutions (RHT) to provide program implementation and outreach support in Southern Oregon. RHT is also active as an allied technical assistance contractor (ATAC) for the program, conducting energy studies in the Southern Oregon region.

A network of trade allies provides services to customers for energy studies as well as the supply and installation of equipment or upgrades. ATACs are a specialized subset of trade ally contractors that provide customers with site evaluations and/or technical audit studies that evaluate opportunities for upgrades and make recommendations for improvements. ATACs coordinate with ICF to conduct these studies and bring customers into the program. Trade ally contractors play an important role in the marketing and promotion of the program to customers.

1.2 Evaluation Objectives

Evergreen Economics' evaluation focused specifically on the Standard and Custom program tracks in Oregon and Washington for the 2014 and 2015 program years. The Lighting track, Strategic Energy Management (SEM), pilots, and other initiatives are not addressed in this evaluation. The only aspect of this evaluation that addressed overarching commercial and industrial program activities was the interviews with utility staff with whom Energy Trust coordinates on marketing and outreach for all commercial and industrial programs.

This evaluation was designed to address the following primary research objectives for the Standard and Custom program tracks of the Existing Buildings program:

1. Document recent and planned program changes;
2. Document program delivery successes and challenges;
3. Assess satisfaction levels among program implementers and participants;
4. Assess the effectiveness of current program operations;
5. Identify opportunities for new measures, services, or target markets; and
6. Develop recommendations for program delivery improvements and program partner relationships.

Additionally, our evaluation considered the following research questions that we believe warranted specific attention:

1. How new projects are being identified in a mature program environment;
2. If and how small and medium businesses are doing comprehensive projects (beyond lighting) for deeper savings; and
3. If large businesses are placing increasing emphasis on energy efficiency, as reflected in formal capital planning or other organizational changes (e.g., dedicated energy management staff).

These questions were addressed in our evaluation using the methods described in the next section.

2 Evaluation Methods

This section describes the methods used in Evergreen Economics' evaluation of the Existing Buildings program. The two sources of information for this evaluation were a review of program documents and data, and interviews with various program actors. These interview subjects included program staff, utility staff, allied technical assistance contractors (ATACs), contractors, participants, and nonparticipants. Table 4 below summarizes the interviews completed for this evaluation. A total of 69 interviews were completed among all the various program actors listed below.

Table 4: Summary of Evaluation Interviews

Program Actor	Length of Interview	Interview Target	Interviews Completed
Program Staff – Energy Trust, ICF, and RHT	1 hour	Up to 12	8
Electric Utilities – Portland General Electric and Pacific Power	2 hours	2	2
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Clark PUD	30 minutes	1	1
ATACs	1 hour	10	13
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Participants	20 minutes	30	23
Nonparticipants	5 minutes	Up to 10	8
Total		82	69

2.1 Program Document and Data Review

As part of our background research and evaluation of program processes and management, Evergreen reviewed the program implementation manual, workflows for the Standard and Custom tracks, 2015 Marketing Plan, marketing materials, and Energy Trust program staff org chart. All of these documents were provided to us by Energy Trust

at the start of the evaluation. We also reviewed available resources on the Energy Trust commercial programs website.¹

Energy Trust also provided the Evergreen team with an extract of program tracking data for projects completed in 2014 or 2015. This was used for a review of program achievements as well as sampling for ATAC, contractor, participant, and nonparticipant interviews described below.

2.2 Program Staff Interviews

After an initial review of program documents and data, our first evaluation task was to conduct interviews with program staff at Energy Trust, ICF International (ICF), and RHT Energy Solutions (RHT). These interviews were completed early in the evaluation so that implementation details and changes, participation processes, current challenges and concerns, and emerging plans could inform the development of data collection instruments and be used as context for other findings.

We aimed to conduct up to 10 interviews with Oregon program staff and one to two interviews with Washington program staff. We ultimately conducted interviews with three staff members at Energy Trust (including one who manages the Washington program), four staff members at ICF, and one staff member at RHT. These interviews included staff involved in account management, marketing, trade ally relations (including ATAC relations), and technical engineering support for the program. The interview with RHT was designed to cover its roles both as a subcontractor to the program management contractor (PMC) in Southern Oregon and as an ATAC for the program.

The topics Evergreen aimed to cover with each interview, as relevant to the respondent's role and duties in the program, are as follows:

- Recent and planned program changes (e.g., implementation, design, new measures);
- Successes and challenges associated with recent program changes;
- Activities to increase participation within underserved markets;
- Challenges to the development of new measures;
- Effectiveness of current data sharing systems and communications;
- Impacts of recent marketing and targeting initiatives;
- Savings goal attainment in 2014 and 2015, and contributing factors;
- Differences between program offerings for gas in Oregon and Washington;

¹ <http://energytrust.org/commercial/equipment-upgrades-remodels/>

- Trends in prescriptive versus custom projects, and contributing factors;
- Participation growth and declines in program sub-markets;
- PMC customer referrals to the Solar Program and recent trends;
- Accuracy of savings forecasts and associated challenges;
- Progress of account management approach to projects planning and budgeting; and
- If and how internal communications have changed since the initial transition, and if streamlining is possible to reduce delivery costs.

2.3 Utility Interviews

The Evergreen team conducted four interviews with Energy Trust's utility funders, including Portland General Electric (PGE), Pacific Power, NW Natural, and Cascade Natural Gas (CNG). Energy Trust works with these funders to coordinate marketing and outreach to customers. We also conducted one interview with a Clark Public Utilities (commonly known as Clark PUD) staff member who manages the commercial and industrial programs that provide electric incentives for projects that may also receive gas incentives through Energy Trust in Southwest Washington.

Oregon Senate Bill 838 (SB838) allows the electric utilities to seek additional energy efficiency funding from ratepayers above the 3 percent public purpose charge established by Senate Bill 1149, to avoid having to purchase more expensive electricity; most of the SB838 funds go to Energy Trust to support program activity while a portion goes to the electric utility for marketing and outreach around energy efficiency.

Interviews with PGE and Pacific Power were conducted in person with relevant staff from the utility and Energy Trust present; the in-person, roundtable interview format allowed for detailed discussion of the collaboration processes and outcomes and reflected the high level of coordination between the two parties as a result of SB838. The interviews were arranged by the Energy Trust evaluation project manager and held at the respective utility's offices.

Interviews with the two gas utilities and Clark PUD were conducted over the phone and lasted approximately one hour for the gas utilities and 30 minutes for Clark PUD.

Key topics discussed during these interviews included:

- Significant collaboration efforts completed in 2014 and 2015;
- Ongoing coordination with Energy Trust;
- Successes and challenges related to collaboration;
- Recommendations for improving collaboration processes and outcomes;

- Satisfaction with Existing Buildings program implementation, customer outreach, and marketing;
- Challenges of recruiting participants or completing projects;
- Feedback from customers; and
- Desired and anticipated program changes.

2.4 ATAC Interviews

Allied Technical Assistance Contractors (ATACs) have a key role in the program, as they provide site evaluations and technical audit studies directly to customers and understand the full range of project opportunities for many customers. The ATACs serve as important intermediaries between customers and the program, and the studies they provide identify energy saving opportunities and give customers a plan they can execute to achieve energy savings. The PMC assigns energy studies from customer requests to the ATACs, and ATACs can also recruit participants from among their own customer contacts. For this evaluation, the Evergreen team's goal was to interview approximately 10 ATACs that were active in the program in 2014 and 2015. We ultimately completed interviews with 13 ATACs that lasted about one hour each.

Evergreen received program data from Energy Trust, which included information on 44 ATACs that provided energy study services for the Existing Buildings program in 2014 and 2015. These data included company name, company location, number of studies completed, regions in which the studies were conducted, study incentive amounts, and contact information. We selected a sample of 15 ATACs to contact for interviews based on the volume of studies they had conducted and geographical areas served. Our sampling approach was primarily based on the volume of studies to ensure a good mix of perspectives from very active, moderately active, and less active ATACs. Sampling based on geography allowed us to speak with ATACs that serve customers throughout Oregon and Southwest Washington.

Once we selected 15 ATACs for our sample, we presented the proposed list of ATACs to Energy Trust and ICF staff for review and input. All ATACs in our original sample were approved, and ICF sent out emails in advance to each ATAC, letting them know our team would contact them for an interview regarding the Existing Buildings program.

Key interview topics that were discussed with the ATACs included:

- Customer base profiles (e.g., sector specialties, geographies served);
- Trends in study types (e.g., specific measures versus whole building, onsite versus remote studies);
- Most prevalent project opportunities and potential new program measures;
- Customer receptiveness to solar projects;

- Common barriers to project participation;
- Recommended sub-markets for additional targeting;
- Percentage of revenues derived from program projects and overall value of the Existing Buildings program;
- Energy study costs, expected changes and reimbursement issues (if any);
- Ease of program participation and processes for ATACs and participants;
- Satisfaction with PMC communications (e.g., program updates, studies feedback);
- Perceptions of PMC program marketing and independent marketing by ATACs;
- Satisfaction with the customer assignment process;
- Customers' perceptions of Energy Trust;
- Overall satisfaction with program participation;
- Suggestions for increasing project approvals by customer decision makers;
- Recommendations for process changes or cost reductions; and
- Additional program assistance needed.

2.5 Contractor Interviews

Numerous contractors support the Existing Buildings program by providing services that may include energy audits and analyses, project design, installation, and inspections. As noted in the Trade Ally Network Evaluation,² completed in 2014, a majority of program savings (~60%) derives from projects by contractors that are not formal Energy Trust trade allies. Contractors are lighting designers, HVAC technicians, and other installers that provide services directly to program participants. Contractors may design and specify equipment for customers independently, or work from a technical study developed by an ATAC. Like ATACs, trade allies are also liaisons between customers and the program.

For this evaluation, we aimed to complete 15 interviews with contractors that have installed upgrades for customers through the program. We ultimately completed 12 interviews, nine of those with trade allies and three with non-trade allies. These interviews lasted 30 to 45 minutes each on average, and respondents were offered an incentive. Trade allies were offered a \$50 incentive in exchange for their time, and non-trade allies were offered \$100 in an attempt to encourage responses from these busy contractors who have no direct obligation to the program or to Energy Trust.

We developed a sampling approach to select HVAC, plumbing, weatherization, and other non-lighting contractors from the program tracking data provided by Energy Trust. Based

² TRC Energy Services, Trade Ally Network Evaluation, November 26, 2014.
http://assets.energytrust.org/api/assets/reports/2014_Trade_Ally_Network_Evaluation_Report.pdf

on the volume of projects, associated savings, and geographic areas served, we selected a sample of 51 contractors to contact. We selected an approximately even split of trade allies and non-trade allies in this sample. Contractors were contacted by phone for interviews without prior notification from program staff. Trade allies were generally more receptive and available for interviews, while non-trade allies were difficult to reach, even with the enhanced incentive.

The key topics discussed with these contractors during the interviews included:

- Service scopes (e.g., audits, small versus large projects, design and/or installation) and target sectors (e.g., office, education, hospitals);
- Growing sub-markets and project types;
- Experience with new program measures;
- Reasons for customer project delays or cancellations, and potential solutions;
- Experience working with ATAC studies and staff;
- Experience working with the PMC;
- Responsiveness of Energy Trust to questions;
- Effectiveness of Energy Trust training and orientation;
- Understanding of multiple Energy Trust program offerings (existing versus new buildings), PMCs and ancillary programs (Small Business Energy Solutions and SEM);
- Strategies trade allies are using to bring new customers and projects to the program and/or increase efficiency levels;
- Marketing methods used and feedback on Energy Trust materials;
- Customers' perceptions of Energy Trust;
- Satisfaction with project application forms and incentives processing;
- Percentage of revenues derived from program projects and overall value of Existing Buildings program;
- Reasons for not becoming a trade ally (perceived benefits versus costs);
- Satisfaction with Energy Trust trade ally communications;
- Recommendations for program improvement and/or contractor relations; and
- Business assistance desired from Energy Trust.

2.6 Participant Interviews

A key component of this evaluation was the interviews with program participants to review their participation experience, see how their expectations compared to outcomes and to gauge satisfaction levels. Our goal with participants was to complete 30 interviews that lasted no more than 30 minutes each, to minimize the burden on these busy

professionals. We attempted to reach each participant in our sample up to four times by phone and email for an interview. After four unsuccessful attempts to reach a participant we considered that sample point exhausted. Ultimately, we were able to reach and complete interviews with 23 program participants.

Energy Trust provided program data on participant projects, which allowed us to select a sample for interviews. We selected a sample of participants that included those with projects in the Standard and Custom tracks, located in a variety of geographic regions (including Southwest Washington), from a variety of business types and project sizes.

Our proposed sample was sent to Energy Trust and ICF staff for review and approval. This was done to minimize survey fatigue by avoiding customers that have been contacted recently for other research. Once the sample was finalized, ICF sent out emails in advance to each participant, letting them know our team would contact them for an interview regarding the Existing Buildings program. This advance notice proved to be very successful, as there was a high response rate to our request for interviews.

Topics covered in our interviews with participants included:

- Sources of program awareness;
- Clarity of program offerings and participation requirements;
- Ease of program participation;
- Project selection process and constraints to project implementation;
- Motivations for program participation;
- Likelihood that projects would have been completed without the program incentives;
- Actual time commitment of program participation compared to expectations;
- Satisfaction with incentives calculation and payment process;
- Company value of energy efficiency;
- Presence of a strategic energy management plan;
- Prospects for future energy efficient upgrades;
- Satisfaction with ATACs and/or contractors utilized;
- Overall program satisfaction and the likelihood of recommending it to others; and
- Suggested program changes.

2.7 Nonparticipant Interviews

Our research also included interviews with nonparticipants to find out why they have not participated in the Existing Buildings program and how Energy Trust can best engage these customers. Our focus for this task was on customers who have not participated in

the Custom or Standard tracks of the program. Identifying nonparticipants from the general population was not feasible, so we utilized Energy Trust program tracking data to identify customers who have completed only lighting projects through the program.

Energy Trust provided the Evergreen team with a list of all Existing Buildings program participants that have completed a project since the start of the program in 2003. A flag for participants that completed only lighting projects was included to identify those that had not participated in the Standard or Custom tracks of the program. This flag was used to select a sample of nonparticipants that had completed a lighting project within the last five years for interviews. We contacted these nonparticipants by phone and completed eight interviews lasting about five minutes on average.

Topics covered in the nonparticipant interviews included:

- Awareness of Existing Buildings and other Energy Trust programs;
- Perception of Energy Trust and the program (if aware of it);
- Projects already completed with or without energy efficient upgrades;
- Reasons that Energy Trust incentives were not used (if upgrades were made);
- Prospects for future energy efficient upgrades;
- Type of assistance and incentives the customer would utilize;
- Likelihood of participating in the future; and
- Barriers to making energy efficient upgrades.

3 Evaluation Findings

This section presents our evaluation findings resulting from our review of program documents and data and interviews with program staff, utilities, allied technical assistance contractors (ATACs), contractors, participants, and nonparticipants.

3.1 Program Document and Data Review

The review of program documents and data primarily served to develop the Evergreen team's understanding of program processes and operations as well as to inform the development of interview guides with various program actors. The program implementation manual is very detailed and well organized, with clear sections describing each program process and the roles of all program actors. This document was the primary resource for information on program design to inform the evaluation and served as a useful reference tool throughout the evaluation.

Our review of program data included project data, contractor data, trade ally data, and ATAC study data. Overall, program data was well organized and thoroughly populated. Trade allies are tracked separately from other contractors, but our review found some cases where trade allies appear in both sets of data with different ID numbers. Implementing a quality control procedure for the data that cross checks trade ally data against other contractor data could help eliminate duplicate entries and ensure that trade allies are accurately identified and tracked accordingly.

Contractors for the Existing Buildings program are generally identified in the data as the "installer" of the equipment or upgrades. In cases where a participant installed their own equipment, the participant is listed as the contractor in the data. Including participants in the contractor data is not an entirely accurate representation of the participant's role in the program. To resolve this inconsistency, we would recommend a separate tracking mechanism for self-installed projects that does not include participants in the same category as contractors that supply, distribute, or install equipment. This could be as simple as including an additional field in the data that indicates which projects were self-installed, so that participants can easily be filtered out of the list of contractors.

3.2 Program Staff Interviews

Program staff interviews were completed early in the evaluation so that implementation details and changes, participation processes, current challenges and concerns, and emerging plans could inform the development of data collection instruments and be used as input for the final report. A total of eight interviews were conducted with program staff—four at Energy Trust, three with program management contractor (PMC) staff at ICF International (ICF), and one at RHT Energy Solutions (RHT)—to obtain a high level understanding of how the program works and what issues are currently most important to program success. Interviews covered overall program strategy and management, trade

ally management, marketing and outreach, implementation processes, and overall coordination and communications. Key trends that emerged are discussed below.

3.2.1 Reduced Savings Per Project

One of the main factors shaping the direction of the Existing Buildings program over the past few years and into the future is the overall trend to smaller savings per project, even as the number of projects and total savings have continued to increase. Over the life of the program, Energy Trust and its PMCs and trade allies initially pursued customers and projects with the biggest savings potential. As those “low hanging fruit” opportunities have become fewer in number, the focus has shifted to smaller projects, including custom projects and prescriptive measures, for both gas and electric savings. In the past few years, historically low gas prices have led to declining avoided cost, making it more difficult to meet or exceed gas savings goals specifically. With the cost of reaching, enrolling, and processing participants remaining relatively fixed regardless of project size, it has become more difficult for the program to cost-effectively reach its goals.

The Existing Buildings program has been gradually increasing gas incentives, as shown in Table 5, in order to encourage greater participation. For custom projects, gas incentives for gas-only and dual fuel measures went from \$2 per therm in 2014 and early 2015 to \$2.50 in August 2015 and \$3 in 2016. There has also been an increase in the combined incentive total cap for gas-only and dual fuel projects from 60 percent of project costs in 2014 to 70 percent in 2015 and 75 percent in 2016 to encourage combined gas-electric projects. Electric incentives for custom projects have remained constant at \$0.25 per kWh between 2014 and 2016, and the total incentive cap for electric-only projects has remained at 60 percent of total project cost. The higher gas incentives appear to have helped maintain interest; after declining from 2013 to 2014, average therm savings per custom project have remained relatively steady, even as kWh savings per custom project has continued to decline.

Table 5: Existing Buildings Custom Project Incentives 2014-2016

Project Type	Prior to August 15, 2015	August 15-December 31, 2015	As of January 1, 2016
Gas only	\$2/therm	\$2.50/therm	\$3/therm
	Up to 60% of project cost	Up to 70% of project cost	Up to 75% of project cost
Dual Fuel	\$0.25/kWh	\$0.25/kWh	\$0.25/kWh
	\$2/therm Up to 60% of project cost	\$2.50/therm Up to 70% of project cost	\$3/therm Up to 75% of project cost
Electric only	\$0.25/kWh	\$0.25/kWh	\$0.25/kWh
	Up to 60% of project cost	Up to 60% of project cost	Up to 60% of project cost

3.2.2 Shift to Trade Ally Delivery

Program managers explain that the smaller savings per project and the expense of direct program outreach to customers have led to the Existing Buildings program becoming increasingly trade ally-driven; that is, ATACs, contractors, distributors, and other trade allies are expected to serve as the marketing and delivery arm of the program. The program currently has about 230 non-lighting trade allies. Within the past two years, the PMC has expanded the role of its non-lighting trade ally coordinator from a part time to a full time position within the program and has also added a second trade ally coordinator to assist in trade ally outreach and coordination.

There have been notable successes with this approach – staff mentioned allies working with grocery stores, insulation contractors, and commercial cooking equipment distributors – but other allies have been slower to adopt a proactive marketing approach that incorporates program offerings. HVAC contractors in particular tend to wait until customers have an immediate need to replace equipment, especially for commercial rather than residential customers. The program does have cooperative advertising dollars available for trade allies, but few HVAC contractors employ advertising to build their nonresidential business. Moreover, some contractors believe that if they are a residential HVAC trade ally, they are automatically a commercial registered trade ally as well, which is not the case, so that they are ineligible for co-op advertising, discussed below.

One barrier to enrolling trade allies mentioned by staff was the requirement that allies carry a minimum level of liability insurance, with Energy Trust as a named insured. In addition, some allies are confused by Energy Trust’s organizational structure and the fact that Energy Trust has different PMCs for its Existing Buildings, New Buildings, and

residential programs. However, the PMC trade ally coordinator said that after the initial learning curve, trade allies are able to manage interaction with the various program representatives. The Evergreen team investigated these and other questions through interviews with contractors and ATACs.

3.2.3 Greater Emphasis on Marketing

Both the emphasis on smaller projects and the reliance on trade allies have meant an increased role for marketing and advertising over one-on-one outreach. Marketing and outreach to customers are coordinated with the utilities, although Energy Trust has the primary role of determining overall marketing strategy and messages. Energy Trust has access to utility customer data through a data sharing agreement, and uses that to support its commercial marketing and outreach efforts. Marketing plans are developed by the PMC and approved by Energy Trust, which keeps the utilities informed about program changes and outreach efforts through a major kickoff meeting before the start of each new program year and other meetings as needed throughout the year. (Energy Trust has been working very closely with the utilities on outreach to small, hard to reach, commercial customers for the Small Business Energy Solutions initiative, but that is outside the scope of this evaluation.) Marketing plans developed by ICF for the Existing Buildings program offer a consistent marketing message of “bring us in,” which was carried through 2015 into 2016.

In addition to print advertising, staff say that Energy Trust uses internet ads and social media to promote the Existing Buildings program. Utility advertising also supports the program by carrying the message to their customers; the utilities do some direct marketing to their customers about the program using the look and feel of the utility marketing efforts, but those materials always carry the Energy Trust logo. Most of this is done using Oregon Senate Bill 838 (SB838) funding, as noted in Section 2.3 above. The role of SB838 funds appears to have led to utilities becoming more involved in marketing and outreach efforts, including having their own outreach resources for selected market segments or customers. No concerns regarding interaction and coordination with utilities were expressed by program staff; coordination was also discussed in the interviews with utility staff conducted for the evaluation.

As mentioned previously, there is a cooperative marketing budget available to registered trade allies through the program; the available budget is up to \$2,000 per quarter per trade ally. A few HVAC allies are using the co-op funds, although they generally focus their advertising on residential customers, and program staff note that most allies do not use the full amount of co-op advertising available.

3.2.4 Operational Improvements

The push to increase marketing comes as the Existing Buildings program has also attempted to streamline operations by, for example, moving more of the application

process online. The PMC and Energy Trust customer and project tracking systems also have been better integrated, and the participation process has been made more efficient for custom projects. RHT stated that ICF has been upgrading and modifying project tracking software, which has improved the ease of internal processes. Since Energy Trust pays for the energy studies that identify and quantify custom savings opportunities, Existing Buildings program managers have sought to ensure that these studies focus on opportunities that are most likely to be implemented – both because the opportunities offer cost-effective returns and because the customer has access to funds to pay for them. The result appears to be more studies that are able to recommend readily implementable projects; this and other effects were investigated in interviews with ATACs.

3.2.5 Overall Communication and Coordination

All of the staff interviewed at both Energy Trust and ICF said that communications between the two organizations are frequent, productive, and effective. RHT also stated that it is in daily communication with ICF and that their coordination is strong. Energy Trust staff said they maintain regular communications with the utilities, particularly PGE and Pacific Power. While ICF management does not communicate directly with the utilities, necessary handoffs of project leads from utility account managers to Existing Buildings' program representatives appear to happen smoothly. However, when utilities provide leads to the program, they do not receive information on specifically which leads ended up participating and which ones did not. Under the terms of the data sharing agreement that allows Energy Trust to access utility billing data, Energy Trust provides a dataset of participants to the utilities on a monthly basis, but those participants are not linked directly back to leads. Again, this was investigated further during evaluation interviews with utility staff and is discussed in the next section.

3.3 Utility Interviews

Energy Trust collaborates with Portland General Electric (PGE), Pacific Power, NW Natural, and Cascade Natural Gas (CNG) on marketing and outreach for their commercial and industrial programs. Energy Trust also coordinates with Clark PUD to a lesser extent, as they provide electric incentives to customers in Southwest Washington for projects that may also receive gas incentives from Energy Trust. We spoke with staff from each of these utilities to get their insight and feedback on how this collaboration is working, what has been particularly successful or challenging, and where they see opportunities for improvement.

3.3.1 Overview of Collaboration

Of Energy Trust's utility funders, the electric utilities are most heavily involved in marketing and outreach for Energy Trust's commercial and industrial programs. PGE and Pacific Power each have in-person monthly meetings with Energy Trust's marketing staff to collaborate and strategize on marketing efforts. In addition to these scheduled in-person meetings, the electric utilities' marketing teams are in frequent weekly communication via

email or phone with Energy Trust staff, as needed. There are two large meetings each year between the electric utilities and Energy Trust. One of these is typically a planning meeting for marketing and outreach for the upcoming year, and the other is a mid-point progress meeting.

Energy Trust coordinates with electric utilities on the timing of marketing campaigns to ensure that Energy Trust campaigns do not overlap with utility marketing campaigns or plans. They also collaborate on marketing messages, co-branding efforts, and outreach to customers and contractors. Both electric utilities report that this collaboration is working well, and they have an open and clear communication process.

There is also a data exchange agreement in place between Energy Trust and the electric utilities, which stipulates that PGE and Pacific Power shall provide, on a monthly basis, customer billing data in exchange for program tracking data from Energy Trust.

The gas utilities, NW Natural and CNG, also have an annual coordination meeting and regular check-in meetings, usually centered around the sharing of information on program offerings and requirements. Like the electric utilities, the gas utilities appreciate this opportunity to coordinate with Energy Trust.

The Conservation Policy Manager at CNG, who is primarily responsible for liaison with Energy Trust, handles the coordination at multiple levels – albeit with support from other staff – from annual goal setting to making sure CNG customers are aware of the most recent program changes. After seven years, the individual in this position is retiring in the summer of 2016, so there will be a period of transition as his replacement initially shadows him and then takes over the role.

The current manager at CNG was generally pleased with his communications and interaction with Energy Trust. He noted that there is much more interaction on residential than commercial programs, but said that CNG would love to have a little more opportunity to provide input up front on commercial marketing efforts, citing the example of their review of bill stuffers for residential customers. He also pointed out that his utility's service territory in Oregon is geographically very dispersed, with a customer service presence that is primarily focused on operational concerns such as meters and supply, so CNG relies on Energy Trust to support its customers on energy efficiency issues.

A representative from NW Natural also said that they were more focused on residential programs, citing quarterly meetings with Energy Trust that primarily address residential issues. However, they have recently added staff to do more work with commercial customers. NW Natural does have a team of sector-focused account managers who provide referrals to the Existing Buildings program as needed.

Finally, collaboration between Clark PUD and Energy Trust is primarily limited to project-specific interactions regarding energy studies or incentives rather than large-scale marketing or outreach collaboration. Energy Trust coordinates with Clark PUD to co-fund energy studies for Clark PUD and NW Natural customers. They are typically in contact on a weekly basis to facilitate the coordination of energy studies and incentives. When Clark PUD finds that a customer is interested or eligible for gas incentives through Energy Trust, they will let the customer know about available incentives and put the customer in contact with Existing Buildings' staff. PMC staff take the lead from there and reach out to the customer about the program. Clark PUD reports that this transfer has been smooth and coordination has been going well.

3.3.2 Marketing and Customer Recruitment

PGE and Pacific Power both have a number of marketing campaigns each year targeting the commercial and industrial sectors. Energy Trust also conducts its own marketing efforts with its own branding that is separate from the utilities. Both electric utilities coordinate the timing of their marketing campaigns with Energy Trust so as not to overlap and flood the market. They also coordinate on messages so customers see and hear similar things about the available programs. Utility marketing is co-branded with the utility and Energy Trust logos to reinforce the partnership between the two.

PGE typically utilizes a direct mail approach, targeting customers on qualified rates. One of its biggest marketing campaigns is a sweepstakes each spring in which customers can enter to win \$1,000 toward energy efficiency improvements. This sweepstakes is marketed via direct mail, email, and newsletters. PGE finds that one of its biggest marketing challenges is finding new ways to talk about the same efficiency upgrades to keep marketing messages fresh and engaging. The partnership between Energy Trust and PGE has allowed better access to smaller customers that are harder for Energy Trust to identify and reach. PGE's outreach team focuses primarily on small and medium businesses, while ICF account managers focus primarily on larger customers. Both parties have found this complementary approach to work well for customer recruitment.

Pacific Power also focuses primarily on smaller businesses, and in 2015, it targeted small businesses for lighting upgrades through Energy Trust's Small Business Energy Savings initiative.³ For this effort, it coordinated with Energy Trust on which zip codes to target for outreach, and small businesses were identified by rate schedule. This campaign ran in the summer of 2015 and utilized a direct mail and email approach. Pacific Power reported that this was a very successful initiative because it was specifically designed to target hard-to-reach small businesses and to make it as easy as possible for them to participate.

³ PWP, Inc., Energy Trust Small Business Energy Savings (SBES) Initiative 2015 Process Evaluation Report, April 2016. http://assets.energytrust.org/api/assets/reports/SBES_Process_Evaluation.pdf

In 2015, Pacific Power and Energy Trust also tried a new marketing approach with TV advertisements, created by Energy Trust for the “My Business” campaign and co-branded with the Pacific Power logo. These were found to be very successful and brought in a lot of leads to Pacific Power that were then passed on to Energy Trust. Pacific Power also pursued an extra initiative, a historical buildings tour, which highlighted the opportunities for energy efficient upgrades in historical buildings.

Both PGE and Pacific Power conduct outreach through presentations at local chamber of commerce meetings, breakfast meet and greet events, and training and education workshops for businesses. New for PGE in 2016 will be an increased focus on door-to-door canvassing. Pacific Power will continue its TV advertising again in 2016 after the success of its 2015 TV marketing campaign. Pacific Power also plans to repeat its small business lighting initiative this summer and increase its efforts with email marketing that directs customers to the Energy Trust website.

There is less coordination on marketing and customer recruitment between Energy Trust and the gas utilities. When asked to identify collaborative successes, the NW Natural senior manager found it difficult “because we never hear the results,” adding that they would like to have more feedback. They also would like to have more input into marketing efforts, noting that, “if we don’t start the conversation, Energy Trust is unlikely to,” because Energy Trust staff is fully focused on program design and delivery. In summary, NW Natural said that the programs are well run and put out great, clear materials, but that “greater frequency of communications would help.”

There is currently no direct marketing of the Existing Buildings program by Clark PUD. It informs customers of available Energy Trust incentives by word of mouth through existing relationships between key account managers and customers; this is the approach to marketing and outreach for all Clark PUD commercial and industrial customers. Clark PUD makes an effort to share information about Energy Trust programs with its customers whenever possible, and believes there is an opportunity for marketing in the form of co-branded program materials for customers. Clark PUD mentioned that there has been some discussion of developing co-branded customer facing guides that are targeted for certain building types, which would include information on the program and available incentives. So far, this has not progressed beyond preliminary discussions, but Clark PUD thinks this is worth further consideration in the future. Clark PUD is aware that Energy Trust conducts marketing within its territory, but there is currently no co-branded marketing or outreach in Southwest Washington.

3.3.3 Customer Experience

All utilities Evergreen spoke with have a strong focus on providing their customers with the best possible experience in getting information about and participating in Energy Trust programs. PGE and Pacific Power both have procedures in place to direct interested customers to the appropriate Energy Trust program. Customers looking for information

on the utility websites are directed through links to the Energy Trust website for more information, and utility call center staff are trained to provide program information to interested customers and pass those leads along to Energy Trust. The electric utilities also have procedures in place to transfer project leads from account managers to Energy Trust.

Both PGE and Pacific Power conduct annual customer satisfaction surveys and have found that customers are aware of the programs and are satisfied with the information or services they have been able to obtain. The utilities believe it is important that their customers see them as a trusted resource for energy efficiency information, and that co-branding with Energy Trust helps show that the electric utilities and Energy Trust are partners in that effort. The electric utilities stated that they try to make the process as easy as possible for their customers to get information about available programs and to participate in those programs.

Clark PUD believes that the participation experience is fairly easy for its customers, and it tries to make it as straightforward as possible for customers to get incentives for electric measures through Clark PUD and for gas measures through Energy Trust. There were no major participation challenges reported by Clark PUD, aside from an occasional customer's confusion about why Washington business are eligible for incentives from an organization based in Oregon. Clark PUD stated that it easily resolves this confusion by explaining that incentives are available to NW Natural customers in Southwest Washington in addition to those in Oregon.

3.3.4 Program Design

PGE and Pacific Power get information about program plans for the upcoming year at their annual planning meetings with Energy Trust and additional updates throughout the year as any changes are made. Both utilities feel that this level of communication on program design is working well, and they are up to date on the latest program information. The only exception was mentioned by PGE; there was one case where it did not get an update on a bonus incentive for commercial kitchen equipment from Energy Trust and instead found the information online itself.

Like the electric utilities, NW Natural and CNG appreciate the sharing of information on program offerings and requirements, both at their annual coordination meeting and at regular check-in meetings. This level of communication on program changes appears to be working well for both gas utilities.

Clark PUD receives information about program updates from Energy Trust in a timely manner and has not had any issue with communications regarding program changes. In our interview with Clark PUD, we also inquired whether there were any major program changes coming up for their commercial and industrial programs, and found that there are only minor adjustments planned in the upcoming year. Clark PUD will be adjusting incentives for ductless heat pumps and ducted heat pumps available to small commercial

customers, with other small changes anticipated relating to updates from the Bonneville Power Administration implementation manual.

3.3.5 Suggestions for Improvement

For the most part, the utilities are all very satisfied with the level of collaboration and communication that they have with Energy Trust. Any suggestions for improvement to the collaboration process were fairly minor and aimed to improve the already strong partnerships between Energy Trust and the utilities.

One way the collaboration could be improved is by clarifying the roles of Energy Trust program staff. One utility noted that it regularly collaborates with Energy Trust's marketing staff on marketing efforts and that those staff members also provide them with program-related information and updates. There was some confusion as to why the program updates do not come from the Energy Trust program manager, and why the program manager is not more involved in discussions with the utility. This is not currently hindering communication on the program, but the utility thinks that additional clarity on the roles held by Energy Trust staff with respect to their titles would be helpful.

There has been some confusion at PGE around the data sharing agreement with respect to when and to whom Energy Trust is providing the monthly participation data. Energy Trust is aware of this issue and is currently working with PGE to clarify the data transfer process.

NW Natural would like to have more feedback on outcomes of collaboration and the program, and said that overall, it would like to have more frequent communication with Energy Trust. NW Natural also would like to have more input into marketing efforts. Similarly, CNG would like to have more opportunity to provide input up-front on commercial marketing efforts.

Clark PUD suggested that future outreach to customers might be improved by developing co-branded program materials to provide to customers. These co-branded materials could raise awareness about the program and help customers understand the coordination between Clark PUD and Energy Trust to provide them with both electric and gas incentives for projects.

3.4 ATAC Interviews

Our team exceeded the goal of ten interviews by conducting interviews with 13 ATACs actively involved in providing energy studies to participants of the Existing Buildings program. In total, we contacted 15 ATACs for interviews: 13 of these ATACs completed an interview, one did not respond to our request for an interview, and one declined to be interviewed.

The ATAC that declined to be interviewed responded to our email request for an interview to say that he was not happy with his experience as an ATAC for the program and did not want to be interviewed. The only feedback provided by this ATAC was that he does not feel that energy studies are being allocated fairly by RHT. This appears to be a misunderstanding on the part of the ATAC, as RHT does not have a role in assigning ATACs to projects. Unfortunately, the contact declined to provide any further information or feedback on their experience. This ATAC stated that they had conducted two energy studies since ICF has taken over the role of PMC.

Ten of the 13 ATACs interviewed are located in the Portland metro area and one each in Corvallis, Eugene, and Medford. As suggested by their locations, the majority of ATACs we spoke with serve the Portland metro area and the Willamette Valley. Many mentioned that their firms provide services anywhere in the state, including Central, Eastern, and Southern Oregon. Eight of the ATACs have completed energy studies for the program for customers of NW Natural in Southwest Washington.

3.4.1 Summary of Program Involvement

The 13 ATACs we spoke with varied quite a bit in the level of their involvement in the Existing Buildings program in 2014 and 2015. In those two years, the ATACs we spoke with had conducted anywhere between one and 73 studies. The ATAC that completed only one study noted that conducting energy studies is not the main focus of their business, and so they have not been very active in pursuing opportunities for studies. Of the ATACs that had completed more than one study, four have seen an increase in the number of studies in the last couple of years, two have noticed a decrease, and six said the number has stayed about even. The reasons cited by ATACs for an increase in the number of studies included an expanded focus on building this aspect of the ATAC's business and improved relationships with existing customers that return for additional studies. The two that reported decreases in studies attributed the decline to the departure of a staff member that had been bringing in a lot of studies for one ATAC and a decrease in demand for studies and upgrades by commercial customers for the other ATAC.

In terms of specialties in types of equipment or customers served by the ATACs, most stated that they work with any type of energy-using equipment and all commercial or industrial customers. Customer types that were frequently mentioned include healthcare facilities, schools (both K-12 and universities), office buildings, and local government buildings.

To get a sense of the impact that these energy studies have on the ATACs' business, we asked them to estimate the percentage of their total revenue that comes from conducting energy studies for this program. Four ATACs estimated that these studies bring in less than 1 percent of their total revenue, another four said that they make up no more than 5 percent of their revenue, two estimated it in the range of 5 to 10 percent, and three said it was somewhere between 15 and 25 percent of their revenue.

Five of the ATACs interviewed also work as installation contractors or energy service companies (ESCOs), providing turnkey solutions to customers by overseeing their project from start to finish. These ATACs believe it provides a more seamless program experience for their customers when they conduct the energy study and implement the recommended upgrades all under one roof.

3.4.2 Energy Study and Customer Trends

We asked ATACs a number of questions about trends they have observed with regard to energy studies and the types of customers for which they most frequently conduct studies. All ATACs mentioned HVAC systems and controls as two of the most common upgrades recommended in their studies, as these are applicable to all building types. A handful of ATACs also mentioned that retrocommissioning is a common recommendation. The ATACs did not indicate that there is any notable trend in the type of customers that pursue energy studies, with most citing that they have conducted energy studies for a variety of customers.

Energy studies are most frequently initiated in one of four ways: a customer with whom an ATAC has an existing relationship contacts them for a study, an ATAC suggests an energy study to an existing customer, a new customer contacts the ATAC directly to request a study, or the PMC refers a customer who wants a study to an appropriate ATAC. Of these scenarios, it is most common for an ATAC to conduct an energy study for an existing customer. Another way that energy studies are frequently initiated is through service contractors who are in regular contact with customers and recommend an ATAC and energy study to the customer.

We asked ATACs how often they conduct a whole building or whole site evaluation versus the more in-depth technical analysis study (TAS) of a few specific measures. The majority of ATACs stated that they conduct a TAS more often, as their customers often already have something in mind that they want to upgrade. Another reason given was that conducting a TAS is more cost effective for an ATAC than performing a whole site evaluation. Three ATACs conduct more whole site evaluations than TAS's, explaining that they can often find additional opportunities for upgrades that the customer did not know about. One ATAC emphasized the value that can be had in conducting the more comprehensive site evaluations, which allows the ATAC to prioritize which systems or equipment at the site should be upgraded.

ATACs provided mixed responses when asked whether they thought there are any types of customers not well served by the current program design. Small businesses were mentioned as a difficult customer segment to serve, especially when they need custom measures, which can be cost prohibitive, even with incentives. A few ATACs mentioned

that schools may not always be eligible for program incentives because of the requirements established in Oregon Senate Bill 1149 (SB1149),⁴ which requires that schools prioritize the use of school public purpose charge funds before pursuing additional incentives. Participation in the Existing Buildings program can be further complicated for schools due to the requirement to obtain written approval from the Oregon Department of Energy prior to receiving any incentives, and the fact that any measure already partially funded by SB1149 cannot receive additional incentives from Energy Trust.

3.4.3 Customer Perspectives

The customer participation process and barriers to participation were topics we also discussed with the ATACs. From their perspective, ATACs believe that the participation process is quite easy for the customer. In most cases ATACs described the process as the customer filling out some paperwork and signing a few forms, with the ATAC and PMC doing the rest. Some ATACs said the paperwork can be a challenge for some customers, but that ATACs and ICF will help customers fill out forms and show them what they need to do. Another difficulty customers have is understanding what it means for an upgrade to be cost effective and eligible for the program. Again, many ATACs help with this by explaining cost effectiveness in a way that makes it as easy as possible for the customer to understand. Another challenge ATACs have noticed is that the timing of study approval can be critical for customers, especially for schools where there is often a small window of opportunity for implementing upgrades during the summer or winter school breaks. One ATAC noted, however, that ICF is flexible and will fast-track study reviews when they know a customer has a short timeline to complete a project. Another ATAC noted that it can actually be the customer's internal processes that slow things down, particularly for government projects, so this appears to vary significantly depending on the type of customer.

We asked ATACs specifically about the challenge that participants may face in getting the right decision makers on board to complete a study and implement upgrades. A number of ATACs indicated that this can be difficult, but that most customers already have decision makers on board by the time they pursue an energy study. For those that do not, it often just takes longer for a project to result from an energy study once decision makers are on board and budget has been allocated for the project. One ATAC noted that ICF account managers will meet with building owners to discuss project details, and this can help with the barrier associated with decision makers. Other ATACs try to avoid this barrier altogether by looking for customers that already have budget set aside for upgrades. At least one ATAC mentioned that energy studies can sit stagnant in the customer's hands for quite some time and recommended that ICF follow up with

⁴ Oregon Department of Energy, SB 1149 Schools Program Guidelines, April 17, 2015.
http://www.oregon.gov/energy/SCHOOLS/Sb1149/Documents/SB1149_Schools_Program_Guidelines.pdf

customers who have completed a study over a year before but have not pursued any upgrades since. This is already part of ICF's implementation activities, and according to the Implementation Manual has been an effective approach to increase upgrade installation rates.

Overall, ATACs believe that customers view Energy Trust very positively, and appreciate the availability of incentives from funds that they pay into via the public purpose charge. Many ATACs noted that once customers get over any initial confusion about cost effectiveness and eligibility, they generally have a very positive experience with the program.

3.4.4 Marketing Practices

The majority of ATACs we interviewed do not directly market Energy Trust-sponsored energy studies. The majority said they promote energy studies by word of mouth through relationships with existing clients and to new clients that come to them for other energy services. ATACs will mention available incentives to any customer that is pursuing a project involving equipment or system upgrades. A few ATACs mentioned that they use the Energy Trust logo on some of their own materials or websites. None stated that they make use of available Energy Trust co-op funds for marketing, and most do not use available Energy Trust materials.

Most ATACs were not acutely aware of any specific advertising that Energy Trust does for its commercial and industrial programs. However, many ATACs noted that their customers are usually aware that incentives are available for upgrades, but often do not know about the specifics of Energy Trust's offerings.

A few ATACs had specific recommendations for how Energy Trust could improve marketing of the program. Two suggestions related to direct marketing and outreach were to continue focusing on trade-specific marketing through trade associations and to pursue in-person outreach for larger commercial and industrial customers. Another ATAC suggested that Energy Trust provide training for ATACs on how to market the program and bring in more energy studies. One ATAC recommended that Energy Trust advertise the fact that customers have paid into the program via a public purpose charge on their utility bills, and that these funds are available for them to use. Finally, one ATAC noted that while information on the Standard track of the program is easily accessible online, there is less information available on the Custom track and procedures that customers should follow to complete a custom project.

3.4.5 Communications with Energy Trust and PMC

Most ATACs that are very active in the program are in contact with PMC staff on a daily or near-daily basis. This typically includes email and phone communications on project-related topics. ATACs reported that communication is very frequent while they have active projects, and often slows between projects or while they are waiting for a study

review to be completed. All ATACs stated that communications with ICF are going well and that ICF staff are responsive and helpful. ATACs are most often in communication with ICF's account managers and engineering staff. Of the ATACs involved in the program for many years, all noted that communication with the PMC has greatly improved since ICF took over. ATACs are not often in communication with Energy Trust staff, as their primary point of contact for program-related information is ICF.

Almost all ATACs stated that they receive program updates from ICF in a timely manner and feel that they are always up to date on the latest program incentives, forms, and procedures. Only one ATAC noted that it finds it difficult to keep track of all program updates and to know what is the most current information that it should use.

3.4.6 Feedback on Program Processes

We asked ATACs for their feedback on a number of program aspects, including the customer assignment process for matching ATACs with a customer who requests an energy study, turnaround time for ICF review of energy study reports, actual study costs compared to reimbursement amounts, the reimbursement process, and differences in program processes for Oregon and Washington projects.

ATACs who have had studies assigned to them by ICF reported that this process has been working well and the handoff of the customer from ICF to the ATAC has been smooth. Typically, this transfer will occur via phone and email communications between ICF and the ATAC.

ATACs reported that turnaround times for ICF review of energy study reports are reasonable and usually completed within one to two weeks. If a review is taking longer than usual, ATACs noted that they usually check in with ICF staff and are able to quickly get a status update.

For site evaluations, ATACs generally feel that the standard reimbursement amount offered by Energy Trust is fair and that it corresponds with the going rate for engineering work and the level of effort required. Some ATACs stated that they lose a bit of money on the site evaluations, but make it up in other areas of their business, so it is not a major concern. For TAS's, ATACs are able to propose the cost of those studies to ICF and find that ATACs typically get those costs reimbursed in full. For all ATACs, conducting energy studies is not the primary focus of their business, and they typically do not expect to make a profit conducting this type of work. The ATACs reported that the reimbursement process itself works well and that although reimbursements can take much longer than 30 days to arrive, they are still dependable. Two ATACs suggested that ICF speed up the reimbursement process to provide payment within 30 days of receiving the ATAC's invoice. One ATAC suggested that Energy Trust allow for 80 percent of the study cost to be reimbursed up front with the remaining 20 percent paid after the study has been completed and reviewed.

For those ATACs that conduct work in Southwest Washington, none noted any difficulty with program processes when completing an energy study for customers in that region. They stated that the program process is very similar to the process in Oregon, with the only difference being that the customer needs to go through Clark PUD to get incentives for electric upgrades. Three ATACs noted that, if anything, coordinating the electric portion of the energy study and project with Clark PUD has occasionally been more difficult and less straightforward. One of these ATACs noted in particular that the timelines of completing studies, getting approvals, and the customer getting incentives can be uneven between Energy Trust and Clark PUD, but that this was due to delays from Clark PUD. Another noted that Clark PUD's requirements for study reports are less stringent, and it is sometimes less clear what is required.

ATACs that have been involved in the program for many years noted an improvement in the program when ICF became the PMC. Only one ATAC noted a rough transition period between PMCs, in particular relaying his experience that there was a four-month "shut down" period when ICF took over that negatively impacted his business and ability to conduct energy studies. Other ATACs had positive things to say about the transition to ICF as PMC, and that things have only improved since then. They reported that program processes and forms are very clear and easy to follow and that any questions they have are quickly resolved by PMC staff. In particular, a number of ATACs mentioned the usability of standardized templates and the usefulness of the cost effectiveness calculator that the PMC has made available for ATACs to use during energy studies.

A challenge mentioned by more than one ATAC regarding the PMC is the slowdown at the end of each year when ICF is reviewing an influx of studies that have been submitted prior to year-end. ATACs noted that in some cases this influx is due to bonus incentives that bring in more studies to meet program goals, but that everything gets bogged down while those are reviewed. ATACs stated that this makes it difficult for them to keep customer projects moving through the program, and results in a lull in program activity at the start of the next year once the bottleneck is cleared. The ATACs that raised this issue would prefer that energy study activity is kept relatively constant throughout the year rather than stimulated each fall by bonus incentives.

3.4.7 Overall Satisfaction and Suggestions for Improvement

Aside from the one difficulty mentioned above regarding end-of-year slowdowns, all ATACs we spoke with were satisfied or very satisfied with the program. A few had recommendations for improvement, primarily centered on providing additional support and information to ATACs or suggestions regarding cost effectiveness and measure eligibility.

The suggestions for improvements to support for ATACs included providing information on successful techniques other ATACs have used to bring in new projects, providing more information on which types of measures would not be approved (such as web-connected

thermostats or other behavioral measures), and including ATACs in the end-of-project incentive payment deliveries to acknowledge their contribution. One suggested that ICF do more to bring in projects for ATACs rather than rely on ATACs to initiate energy studies. Another would like to see more information on the total number of studies for the program to gauge the magnitude of their contribution and how they are doing compared to other ATACs.

A common suggestion to resolve cost effectiveness challenges and increase measure eligibility was to allow for measures that are not currently cost effective by Energy Trust standards but that do have energy savings with longer paybacks. One contractor suggested that Energy Trust do this by pro-rating incentives, which would encourage customers to pursue any project where there will be energy savings. Suggestions related to cost effectiveness and measure eligibility were mentioned by four of the 13 ATACs Evergreen interviewed.

In addition to these suggestions, the main recommendation from ATACs already mentioned above was for ICF to keep an even flow of projects throughout the year, rather than a big increase in the fall that creates a bottleneck at the end of the year. Another suggestion already mentioned was to prioritize processing of paperwork for participants with short project timelines, such as schools and other customers with time constraints.

3.5 Contractor Interviews

The Evergreen team completed 12 interviews with contractors; nine with trade allies and three with non-trade allies. Each interview was between 30 and 45 minutes in length on average. The following sections detail the findings of these interviews.

3.5.1 Trade Ally Findings

Overall, the trade allies were generally receptive and available for interviews. Interviewed trade allies had been registered trade allies for an average of seven years, with the length of time ranging from one to 13 years. Four interviewed trade allies have been in the program for more than 10 years. The interviewees covered a broad geographical range across Oregon and Southwest Washington, from Medford to Tacoma and from the Oregon Coast to central Oregon. Table 6 below provides a summary of the type of contracting services provided by the interviewees and the program track(s) in which they have participated.

Table 6: Summary of Trade Ally Equipment Type and Program Track Frequency

Equipment Type	Number of Contractors
Large HVAC	2
Small HVAC	2
Controls	3
Roofing	1
Weatherization	2
Lighting	1
Program Track	
Custom Only	5
Standard Non-Lighting Only	2
Custom and Standard Non-Lighting	2

Of the nine trade allies interviewed, seven work with gas and electric equipment, one works with electric equipment only, and one does not deal with gas or electric equipment as they are solely a roofing contractor. The trade allies also served a wide range of the market, from small commercial and retail to large manufacturing, large commercial, grocery, and institutional facilities. Three trade allies work solely with Energy Trust's Existing Buildings program, while two have also been involved with the industrial programs, three participate in the residential programs, and one participates in the New Buildings program. One trade ally also installs lighting through the Existing Buildings Standard Lighting track.

Summary of Program Involvement

There was significant variation across the interviewed trade allies in terms of the level of program involvement. Among the eight trade allies who provided information, on average the contractors completed 10.25 projects in 2015, ranging from a low of two projects to a high of 19 projects.⁵ These projects made up approximately 12 percent of company revenues on average. Seven of these trade allies had not noticed any significant changes in their projects for the Existing Buildings program between 2014 and 2015. One

⁵ These figures are for eight of the nine trade allies interviewed, as one was unable to comment on the number of projects completed.

trade ally, who only joined the program in 2015, has seen a significant increase in their overall projects between 2014 and 2015, which they attributed to a general market increase in construction, both new and existing building remodeling. Another trade ally noted that while their project volume through Energy Trust programs has not changed significantly, they are doing more work through the Bonneville Power Authority commercial and industrial programs, which they attributed to more generous incentives.

Seven of the interviewed trade allies have completed projects in both Oregon and Southwest Washington. Four of these respondents noted that there was no observable difference in the program process or requirements between the two regions. Three respondents did notice differences in the program between the two regions.

The first trade ally explained that they only install electric equipment, so their projects are not eligible for incentives through Energy Trust in Southwest Washington.

The second respondent claimed that it was more difficult to do projects in Washington, stating “a lot of our projects are a mixture of gas and electric measures, and it is hard to coordinate the incentives between Energy Trust and the Washington utilities,” resulting in slower payment of incentives and sometimes slowing of a project. This interviewee explained that this was more often a problem with the Washington utilities and not Energy Trust. This interviewee also stated that general awareness of Energy Trust is lower in Washington.

Lastly, the third trade ally also claimed that projects in Washington were more difficult to complete, claiming that the “program isn’t as streamlined for trade allies in Washington. In Washington, Energy Trust works mainly on customer relations rather than vendor relations; in Oregon they work with the vendor more than the customer. This can leave the vendor a bit lost and it can slow down the process and makes it harder for the vendor to know what the incentives are.”

Among the nine trade allies, only one noted a change to the program that made it more difficult for them to participate in the program. This interviewee, an installer of ductless heat pumps servicing the small retail and commercial segment, explained that starting in 2016 they have been required to conduct additional work to prove energy savings over other technologies. They have found this an onerous requirement that often slows down the project and has resulted in projects being rejected from the program or clients backing out of projects because the process has taken too long.⁶ As a result, they have not completed any projects since December 2015.

⁶ This installer explained that because their projects are typically just the sale and installation of one ductless heat pump, they have a short time frame and any delay can cause the project to fail.

The remaining eight trade allies could not identify any changes to the program that had negatively impacted their ability to participate in the program. Three did note that the program has become easier to participate in over the past year due to staffing changes, improved paperwork, and changes that have made it easier to collaborate with ICF's engineers.

While trade allies noted that the program processes are generally easy for them to navigate, they do occasionally face challenges, particularly with the Custom track. The challenges mentioned include:

- Complex projects that often require additional design or engineering work;
- Obtaining utility bills for energy studies;
- The permitting process;
- Energy studies that can sometimes take more time than expected; and
- Lack of customer knowledge of energy efficiency.

In each case, trade allies noted that Energy Trust staff were always willing and available to help if possible.

Project Trends

As noted above, the trade ally contractors provide services to a broad range of customer types. Table 7 shows the number of trade allies that mentioned serving each of the market sectors listed in the table.

Table 7: Summary of Trade Ally Market Sectors Served

Market Sector	Number of Contractors
Institutional (Schools, Hospitals, Universities)	4
Manufacturing	4
Office Buildings	4
Large Commercial	3
Municipal	3
Retail	3
Grocery	2
Small Commercial	2
Warehouses	2

Two trade allies claimed to have observed a changing trend in the types of customers that are participating in the program. The first trade ally stated that they have seen an increase in marijuana growing operations that have very large loads. These have so far only been bids for work, and no actual projects have started; however, the contractor explained that the people running these operations do not fully understand the costs or codes to cool and ventilate large spaces and will have to be educated about energy efficiency. However, these projects, if initiated, would fall under Energy Trust's Production Efficiency program, rather than Existing Buildings. This trade ally did note that there has been an influx of more knowledgeable people entering from out of state that understand costs and may value energy efficiency. This trade ally has also seen an increase in the number of commercial remodels, as people are more willing to spend on projects than they have been in previous years. Lastly, this trade ally noted that there has been an increase in national franchises moving into existing spaces, but these businesses tend to specify standard efficiency in their building contracts. The second trade ally stated that because Energy Trust increased the incentive for electronically commutated motors (ECMs), they have seen an increase in projects for this technology, particularly in convenience stores.

Three trade allies highlighted specific types of customers that may not be well served by the program. The sectors identified are:

- **Small commercial and retail:** While lighting has been able to penetrate this sector well due to high awareness among business owners of lighting programs, small business owners tend to be less aware of other qualifying technologies, particularly HVAC. One contractor suggested that Energy Trust could market more to small businesses to raise awareness of opportunities specific to small businesses.
- **Assisted living facilities:** Trade allies reported that there is a lack of knowledge of Energy Trust programs among these facilities because of high facility manager turnover and the entry into the market of out of state organizations.⁷
- **Schools:** Many schools, particularly in rural areas, do not have mechanical ventilation systems, but rather rely on manually opening windows to control indoor air quality in the winter. One trade ally suggested this could be an area on which Energy Trust could focus.
- **Restaurants:** According to one trade ally "95% of restaurants don't know of rebates" because of high staff turnover and out of state entrants. Many restaurants operate inefficient cooking equipment, such as fryers and steamers. The one trade ally that provided this opinion is an equipment installer, rather than a food service

⁷ Assisted living facilities are served by the Multifamily program rather than Existing Buildings. However, stand-alone nursing homes and rehabilitation facilities are eligible for the Existing Buildings program.

equipment vendor, and may not be aware that food service equipment vendors heavily promote the program to their customers.

Customer Perspectives

In general, trade ally contractors stated that the program was easy for customers to participate in, and the overall customer experience was very positive. Of the four trade allies who have conducted projects through the Standard program track, all said the process was “very easy”. Of the seven trade allies who have conducted projects through the Custom track, all thought it was generally an easy process, with two exceptions. One trade ally stated that while the Custom track is fairly easy, it is less easy than the industrial program as there are three more forms that have to be completed. The second trade ally, the installer of ductless heat pumps in the small commercial sector noted previously, stated that the new requirements for an energy study for their ductless heat pump sales has made it infeasible for them to participate in the program due to the delays this requirement causes for the customer.

We asked trade allies specifically if customers had any difficulty in getting projects approved by decision makers at their company. Four respondents noted this as a challenge. Each of these trade allies served larger commercial clients. These contractors noted that this is an issue for the following type of customers in particular:

- **Large organizations.** Businesses of this size often have challenging lines of communication making it hard for a facilities manager to move these projects into the view of key decision makers.
- **Small organizations.** These customers are often cash-strapped, and have already budgeted for their existing costs of operations; therefore capital investment in new equipment can seem too risky.
- **Businesses that rent or lease space.** Customers that do not own the property present challenges because building owners do not want to invest in energy efficiency equipment when renters are paying the operation costs.
- **Grocery stores.** These customers are difficult to engage at this time because they have recently had to expend a significant amount of capital on installation of chip reading credit card readers, reducing the funds available for energy efficiency retrofits.

Among all trade allies who noted the customer challenge of obtaining approval from decision makers, they all noted that a common issue is clients primarily being concerned with the upfront cost of equipment rather than considering the lifecycle cost of the equipment, and the savings over time that can be achieved. All four trade allies believe that Energy Trust's Existing Buildings program makes a significant impact in helping customers overcome this and other challenges.

Lastly, the trade allies believe that their customers view Energy Trust in a very positive light. Some notable quotes include:

“Energy Trust has close to 100% name recognition, [we] always use Energy Trust incentives in marketing projects.”

“Customers perceive Energy Trust as a trusted energy advisor. As an organization that is trying to do the right things and help conserve energy.”

“Customers have seen Energy Trust as a huge offering and something they can use to get their company streamlined.”

Marketing Practices

In general, trade allies have a positive view of Energy Trust’s marketing efforts, and several use the availability of the Existing Buildings program in their own marketing efforts. Trade allies suggested two areas for potential improvement of Energy Trust marketing efforts:

1. Improve or increase marketing to specific niches of the market, such as HVAC or controls; and
2. Target a marketing effort to small commercial building owners to try and shift this market further toward energy efficiency.

Four of the nine respondents explicitly stated that they use the Existing Buildings program and available materials in their marketing efforts. Specifically they use Energy Trust branding in their own promotional materials or websites, and they use the Existing Buildings’ program information sheets and incentive brochures.

While all trade allies were aware of the cooperative marketing funds, it appears that these funds may not be utilized frequently, with only three trade allies stating that they had accessed this resource. Only one of these trade allies was able to tell us what the funds were used for. In this trade ally’s case, the funds were used to purchase radio advertisements. This trade ally expressed a desire for Energy Trust to hire a marketing firm with these co-op funds to assist contractors, as contractors are not marketing experts.

Across the board, all nine trade allies stated that they were receiving all the support they required to participate in the program.

Program Communication and Training

All nine trade allies have participated in an Existing Buildings training session at least once. Four stated that they had not participated in one for a significant period of time. All nine trade allies felt that the training was a very good introduction to the program and always provided interesting and relevant information.

Likewise, all nine trade allies receive the *Insider Newsletter* distributed by Energy Trust. Four respondents claimed to read the *Insider Newsletter* and stated that it was valuable to them, providing them with new information and exposing them to new projects happening in the Northwest.

With regards to communication, again the feedback was very positive with all nine trade allies stating that communications with Energy Trust and ICF were good. One respondent noted that the quarterly lunch meetings have been a boost to contractor interest and knowledge.

Feedback on Program Processes and Overall Satisfaction

Of the nine trade allies, six stated that the majority of their business comes from existing customers, while three stated that new customers were their main business. The three contractors who stated that new customers were their main business provided services to smaller clients or sold standalone products. Among all trade allies, none were aware of any leads that originated from the Energy Trust trade ally list on the Energy Trust website. Typical methods of obtaining new leads mentioned by the trade allies were word of mouth (mentioned by six), referrals (mentioned by five), through their own advertising or marketing efforts (mentioned by three), and one each mentioned cold calls and trade shows.

Three trade allies reported that they have worked on projects involving an ATAC. Two of these respondents said that the ATACs were easy to work with, the project handoff process was smooth, and that the energy studies conducted were helpful to the overall project. One trade ally stated that in the past, the energy study process and working with ATACs had at times been prohibitively slow, and the results of the energy study were often more pessimistic than the contractor thought was fair. However, this contractor also said that the energy study process and working with ATACs has improved recently and has become more prompt and fair.

All trade allies stated that the incentive application forms were easy to work with and had no suggestions for improvement. Likewise with incentive processing, all respondents were happy with the turnaround time of incentives, and had not heard any complaints from customers.

Toward the end of our interviews, we asked the trade allies about their general satisfaction with the Existing Buildings program and if they had any general recommendations for improvement of the program. All respondents expressed a positive view of the program and reported high levels of satisfaction in general.

Suggestions for Improvement

Although trade allies are generally satisfied with the program, some did have suggestions for improvements to the program. The suggested areas for improvement were:

- One trade ally noted that the program is set up very well for lighting contractors, who are very good at sourcing new jobs and completing projects quickly. He explained, however, that there are missed opportunities because the lighting contractors do not engage in any cross-marketing efforts, or suggest potential for other energy efficiency upgrades. This trade ally also noted that lighting contractors often do not explain the interactive effects of lighting on HVAC requirements, which is an important consideration and something that Energy Trust should encourage or require.
- One trade ally suggested that Energy Trust identify or create additional opportunities for trade allies to meet to discuss new program offerings.
- One trade ally recommended the addition of a new measure, stating that there is a strong market for condensing gas rooftop HVAC provided they are equipped with safety devices to ensure acid condensate will not leak.
- One trade ally suggested that Energy Trust should push gas radiant heaters more aggressively, stating that there is potential for these in outdoor seating areas, warehouses, and production facilities. It is worth noting that some of these locations would fall under Energy Trust's Production Efficiency program.

3.5.2 Non-Trade Ally Findings

The Evergreen team interviewed three non-trade ally contractors that collectively have accounts with high-end grocery stores, discount grocery stores, refrigerated warehouses, restaurants, and convenience stores.⁸ One contractor has been completing program projects for six years, another contractor has been completing projects for four years and the other contractor (a relatively new employee) could not confirm their company's participation tenure. One of the companies primarily serves the Portland Metro area, while the other two companies serve all parts of Oregon and have national operations.

Two of the companies had never been trade allies before. One interviewee was not aware of this program opportunity, and another company is conservative regarding how much promotion they do, so they "have enough boots on the ground when existing clients call for services." The last contractor believed they had been a trade ally for the past two to three years; however, they were not listed as a trade ally on Energy Trust's website.

⁸ Evergreen made over 72 attempts via phone and email to recruit 28 companies for non-trade ally interviews. Two interviews were also initiated and completed with trade allies that were included in the non-trade allies contact data provided to Evergreen.

Summary of Program Involvement

One of the companies, which only serves a high-end grocery chain in Oregon, specializes in the following types of projects: electronically commutated motors (ECMs), refrigeration case LED lighting and glass door retrofits, and overhead lighting. This company only does about six projects a year in Oregon, which are mostly prescriptive projects. The vast majority of project savings are electric; only a few projects result in gas savings if the store has a gas rooftop HVAC unit. This company derives 80 percent of its Oregon revenues from Energy Trust's Existing Buildings program.

The second company – which serves discount grocery stores, refrigerated warehouses, and convenience stores – primarily does LED lighting, ECMs, and refrigerated case retrofits. Almost all savings are electric, and all Energy Trust projects have been prescriptive. (In other states, occasional custom projects involve complete case replacements, retro-commissioning high-pressure controls, and adjusting floating head and suction pressures.) This company completed 11 Energy Trust projects in 2015, “which was probably more than was done in 2014,” because Energy Trust's rebates increased in 2015.

The last company only does water heater replacements for restaurants and convenience stores (as well as multifamily buildings), and the majority of projects are prescriptive with gas savings. This company completes about 100 Energy Trust projects annually, and this volume has been growing slightly “because more folks are concerned about energy now and want Energy Trust rebates.”⁹

Project Trends

None of the contractor interviewees noted any significant project trends. One grocery contractor only serves one Oregon client with consistent project needs, and the other grocery contractor staff member was too new to describe recent project trends. The water heater contractor had not noticed any large changes regarding the types of water heaters going in.

Customer Perspectives

All three contractors reported that it is very easy for their customers to complete prescriptive projects through Energy Trust's program. All of the contractors do any calculations that are required, complete all forms and incentive applications, and interact with Energy Trust or ICF if needed. Essentially, their customers just need to review and sign the paperwork that will be submitted for each project.

⁹ All of the companies had done a few projects in Southwest Washington, but no respondents could remember notable program differences, except for likely different rebate levels.

One of the grocery contractors collects and forwards the program incentives to their customers, reduced by a small administrative processing fee. Customers of the other two contractors prefer to sign over their incentives to contractors, and have their invoices reduced by the incentive amount, less a small administrative fee. These two contractors noted that the incentive redirection is a convenience to customers, and a program feature most utilities do not offer. None of the contractors noted any dissatisfaction with Energy Trust's incentives processing or turnaround time.

A key challenge for grocery clients is uncertainty regarding future store remodels; stores that are likely to undergo a comprehensive remodel will defer energy efficient retrofits in the short term. Once a specific type of project is approved and implemented successfully at one store, however, company management tends to quickly approve similar projects at other stores (not being considered for remodels). For restaurant and convenience store water heater projects, a common barrier is the relatively low cost of hot water heating (compared to other building expenses), and the fact that so many service calls are for emergency replacements. That said, the contractor we interviewed has been able to upsell energy efficient equipment in some emergency cases.¹⁰

All customers have their own payback or return-on-investment (ROI) requirements (none were divulged), and all of the contractors have to prove "the business case" for completing projects with Energy Trust incentives. The two grocery contractors confirmed that Energy Trust's rebates are definitely important to their customers' financial assessments, and one noted that, compared to other utility programs, "Energy Trust's rebates have clear expectations and little red tape, so there are few surprises later." This contractor stated that they have more confidence that Energy Trust's rebates will be "final" when presenting to their client's management.

Marketing Practices

None of the companies use Energy Trust materials in their marketing, but all mention the availability of program rebates to prospective clients. One grocery contractor does no direct marketing in Oregon and relies on customer referrals/word of mouth for new projects. The other grocery contractor was not familiar with their (national) sales staff's marketing practices in detail. Lastly, the water heater contractor relies on companies with failed water heaters to call him, at which point he "tells them to replace with something energy efficient and get an Energy Trust rebate - it's a very simple process." This contractor is currently promoting the rebates more heavily than in the past, because more businesses appear to be interested in energy efficiency.

¹⁰ In contrast, multifamily property owners are much more inclined to proactively plan out water heater replacements, according to the interviewee.

None of the contractors were aware of co-op marketing opportunities that are available to trade allies, with one indicating they may explore this further. One was familiar with the program's website information, noting that it is "very comprehensive and gets the key points across." None of the contractors were familiar with other forms of program marketing, however.

Program Communication and Training

Two of the contractors (or their sales staff) hear about program updates and changes from the Existing Buildings PMC, and both were very complimentary. One noted that they are highly satisfied with program communications, and that PMC staff "is on top of his job, he takes care of it all." The other contractor stated that they hear about program updates promptly, PMC staff are very responsive and clear in their guidance, and communications "are not overbearing" – which is important because she gets lots of utility program emails.

The other contractor learns about program changes by making inquiries to Energy Trust staff, asking "What's the latest on the incentives?" Energy Trust staff usually reply quickly by email, and the contractor also learns about incentives changes from their grocery clients.

Regarding the *Insider Newsletter*, one contractor does not receive this, one does but does not read it, and the other contractor gets and reads it. According to this last contractor, the newsletter is valuable in describing specific measures that she can then inform sales staff about.

Only one contractor had attended a program training session. According to them, "It was good use of time and it was good to hear updates straight from programs. You can ask questions, and I don't want to do everything by email – I already get tons of these."

Feedback on Program Processes and Overall Satisfaction

The three contractors were generally satisfied with Energy Trust's program, noting the following positive attributes:

- The program forms are easy to understand and set clear expectations; according to one contractor, it is one of the easiest programs in the US in which to participate.
- Refrigerator doors used to get custom incentives, but are now prescriptive, resulting in much less "hassle" for contractors and their customers. This has also increased the number of projects the grocery contractors are doing.
- Energy Trust rebates increased generally in 2015, resulting in more projects.
- Energy Trust has a good selection of prescriptive rebates overall, which are easy for company sales staffs to promote.
- The prescriptive rebates are processed quickly enough "with no hassles."

- The program rebates are very valuable to customers – they allow many projects to proceed that would not otherwise.

When asked to describe their overall satisfaction with their program experiences, one contractor was “highly satisfied”, one gave a rating of “7 out of 10” and one was “somewhat satisfied.” This last contractor also does many water heater projects in multifamily buildings, and was not happy that Energy Trust auditors often provide “inappropriate” recommendations to his existing customers.

Suggestions for Improvement

Following are suggestions that the interviewed contractors offered as potential program improvements:

- Focus more recruitment energy on small convenience stores. These small franchises have limited budgets for energy efficient upgrades, and there is large savings potential nationally. (One contractor would pursue this sector more aggressively if more rebates become available.)
- Have Energy Trust staff inform their contractor contacts of rebate changes more proactively. (Based on our limited interviews, it appears that PMC staff are proactive about this.) One contractor said they would consider measures differently during their audits and specifications with more current knowledge about program rebate levels, which affect the ROI calculations.
- Energy Trust should consider adding new prescriptive rebates for the largest refrigeration cases. According to one interviewee, the US Department of Energy (DOE) has different classifications of case sizes than Energy Trust, and there is demand for energy efficient cases of 50 cubic feet or larger. These projects are “hard to sell” as custom projects.
- Energy Trust could put co-branding opportunities more “in front of contractors” on the program website, with messaging that “we can help you.”
- Tell customers how much rebate they get *per kWh saved*, rather than *per linear foot of lighting*, which is not very intuitive to customers.
- Improve rebate check labeling, so customers are clear which project measures each check is for.

3.6 Participant Interviews

Evergreen Economics completed 23 in-depth interviews with commercial customers that participated in Energy Trust's Existing Buildings program in 2014 or 2015. As shown in the tables below, participants ranged in business type and size and completed a variety of projects including both custom and standard projects for boilers, HVAC systems, building controls, and insulation, along with several custom energy studies. As shown in Table 8, 18 participants completed projects within Oregon, while the remaining five received

Existing Buildings incentives for projects completed within Southwest Washington. The most common business types, as shown in Table 9, included K-12 schools, groceries, and offices (with five of each type being interviewed), several of which completed multiple projects across different facilities. Table 10 below shows that while eight of the 23 participants received incentives through the Standard track of the program, the majority (n=15) of participants completed a project through the Custom track, including 10 participants that completed both Custom and Standard projects. Table 11 below shows the variety of incentivized measures that were installed by participants we interviewed. Besides energy studies, the most frequently incentivized measures among interviewees were controls, HVAC, lighting, and refrigeration.

Table 8: Summary of Interviewed Participants by State

State	Number of Participants
Oregon	18
Washington	5
Total	23

Table 9: Summary of Interviewed Participants by Business Type

Business Type	Number of Participants
College/University	1
Convenience Store	1
Data Center	1
Grocery	5
Gym/Athletic Club	1
Hospital/Medical Office	1
K-12 School	5
Multifamily Property	1
Office	5
Warehousing and Storage	2
Total	23

Table 10: Summary of Interviewed Participants by Program Track

Program Track	Number of Participants
Both Custom & Standard	10
Custom	5
Standard	8
Total	23

Table 11: Summary of Interviewed Participants by Measure Type

Measure Type	Number of Participants
Boiler	3
Building Controls	4
Building Controls (HVAC controls)	2
Ceiling Insulation	3
Chiller	2
Controls	6
Energy Study	8
Heat Recovery	1
HVAC	5
Lighting	5
Lighting Controls	1
Motor	4
Power Strip	1
Refrigeration	5
Server Virtualization	1
Tanked Water Heater	1
VFD	2
VFD (Boiler)	2

3.6.1 Program Awareness and Information Sources

The two most common ways that participants initially learned about the Existing Buildings program were through an ICF account manager contacting them directly (n=9) or through contractors and electricians (n=7). Other ways that participants learned about the Existing Buildings program included through a co-worker or someone else at their company that knew of the program (n=3), through a utility representative (n=2), through Energy Trust's website (n=1), and through a local electronics and appliance retailer (n=1).

All of the participants that learned about the Existing Buildings program through an ICF account manager said that the information the account manager provided them, including an outline of the proposal for the project, was the most valuable information source in deciding to participate in the program. Similarly, for participants that learned about the program through a contractor or electrician, six out of seven said that the contractor's recommendations and information regarding the program was the most valuable information source in deciding whether or not to participate in the program. Other sources that participants said were valuable in the decision process included the program description on the Energy Trust website (n=3) and information directly related to the cost savings and incentive levels provided by co-workers familiar with the program (n=2).

3.6.2 Customer Participation Experience

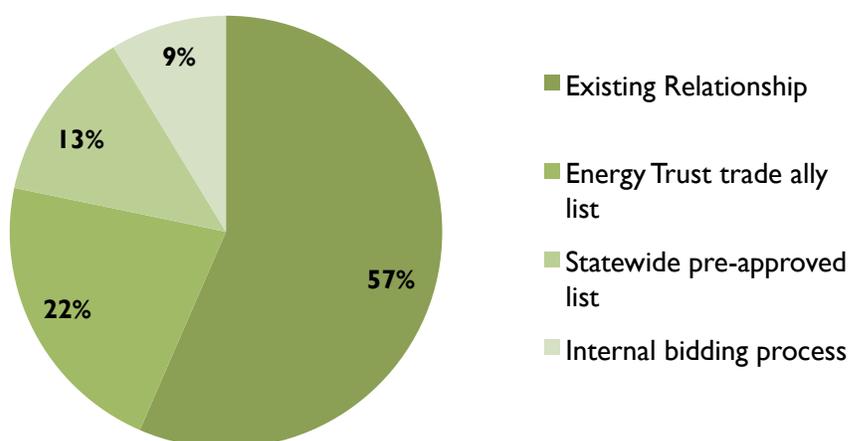
Overall, 21 out of 23 participants said the Existing Buildings' program requirements and processes were clear and easy to understand, especially with assistance from their contractors, installers, and ICF staff. One of the participants – who completed an insulation project – said that the processes were relatively clear and easy to understand, but required some knowledge of insulation types to understand the program qualifications. Lastly, one participant did not feel that the requirements and processes were clear and easy to understand, primarily because they felt that there was insufficient communication between their company, their contractors, and ICF staff, creating "too many layers" and confusion with regards to the project costs, incentives, and responsibilities.

Nevertheless, the vast majority of participants said it was very easy to participate in the Existing Buildings program, with an average score of 4.6 out of 5, where 1 was "very difficult" and 5 was "very easy." Only two participants provided scores below a 4, primarily due to difficulties they encountered with their contractor and the coordination process, not directly with Energy Trust or the program itself.

In selecting contractors, as shown in Figure 1, a majority of participants said they chose their contractor based on an existing relationship with that contractor, either personally or through a recommended source (n=13). Additionally, some participants that received public funding said they chose their contractor from a pre-approved statewide list (n=3),

while others selected their contractors from the Energy Trust trade ally list (n=5).¹¹ Two contractors also noted they selected their contractor through an internal bidding proposal process that they arranged with multiple available contractors in their area. Participants also said that the contractors they worked with generally told them about other available Existing Buildings incentives, although some participants (n=5) said their contractors did not inform them of additional incentive opportunities either because they were already aware of the available incentives or because their contractor specialized in a particular measure type.

Figure 1: Method of Contractor Selection



Additionally, in accordance with the Custom track of the Existing Buildings program, 15 out of 23 participants completed an energy study to identify potential upgrades. Multiple participants noted some confusion with the energy study process, as two said they did not know the energy study was part of the Energy Trust program, while an additional two said they were unsure if they had a study completed because it would have been done over two years prior to our interview. Overall, participants that were familiar with their energy study (n=11) said the study was influential in determining the efficiency improvements they decided to make, with an average score of 4.1 out of 5, where 1 was “not at all influential” and 5 was “very influential.” Participants that said the energy study was very influential noted that the study did an excellent job of highlighting several potential efficiency upgrades and easily outlined savings and payback estimates for participants. However, despite the relatively high average influence score, multiple

¹¹ Four of these participants completed Custom track projects and used the ATAC that completed their energy study as the contractors for the project.

participants provided a score below 4 because they already had an idea of what types of upgrades they wanted to make prior to the energy study being completed, and felt the energy study was merely a way to reinforce their existing plans.

Ten out of the 11 participants familiar with their energy study also mentioned that the study made additional recommendations that they did not choose to implement. For example, six out of 11 said they did not choose certain recommendations, such as commercial chillers, because the estimated payback period was too long. Additionally, two participants said they did not implement some recommendations because they overlapped with the efficiency upgrades they ended up completing, while two participants noted they did not choose to make the recommended upgrades on large-scale items such as boilers and heat pumps because of the significant capital investment they required.

A majority of participants (n=13) said they did not have any difficulty in getting their project completed, with no reported challenges within their company or with the program. For the 10 participants that did cite minor difficulties, only two said the difficulties had to do with the program itself. One of those participants said they felt the project approval process took longer than expected because of their remote location, while the other said the incentives came in slower than expected. Otherwise, the most common difficulties included issues with internal funding and approval (n=4), contractor performance (n=3), and the overall project timeline (n=2).

Overall, 19 out of 23 participants said the length of time their energy efficient upgrade took to complete was as expected or even shorter than expected. All four of the participants that noted the project took longer than expected said the extended length was not due to problems with the Existing Buildings program itself, but rather was due to contractor performance (n=2), the manufacturer not supplying equipment on time (n=1), or internal company issues (n=1).

In addition to the Energy Trust incentives, the five Washington participants were also eligible for incentives provided by Clark PUD for electricity savings. Four out of the five Washington participants said they have had no problems getting rebates from Clark PUD, while one Washington participant said Clark PUD “generally takes a lot longer” in providing incentives and that they still have not received their incentive from Clark PUD for their Existing Buildings project completed at the end of last year.

3.6.3 Participation Barriers and the Importance of Incentives

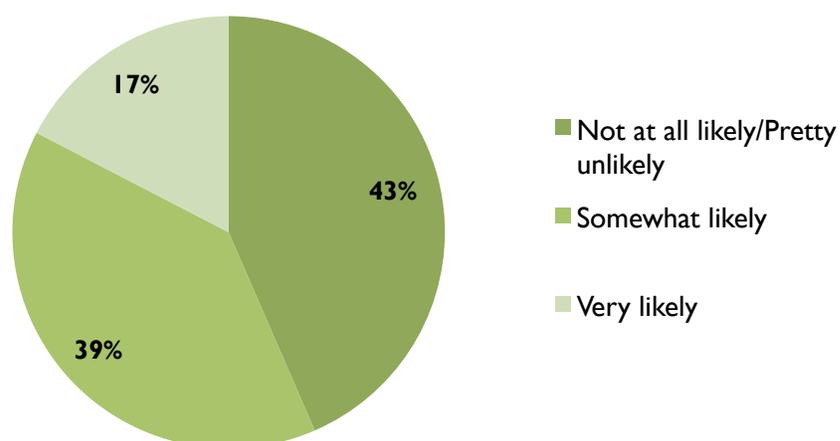
Of the participants we spoke with, almost half (n=11) said they encountered absolutely no barriers in their company for being able to participate in the Existing Buildings program. A majority of the remaining participants noted that while in general it was fairly easy for their company to participate in the program, they did encounter some minor barriers

when deciding to participate. The most common barriers mentioned by participants included:

- Difficulty in getting the necessary internal funding and corporate support (n=6);
- The program timelines – including the amount of time the projects took and the lag in receiving incentives (n=3);
- Understanding the program qualifications (n=2);
- Becoming aware of the Existing Buildings program and possible incentives (n=2); and
- Required paperwork for participation (n=1).

However, despite these program barriers, only four participants said they would be very likely to make the same upgrades had the program incentives not been available. As shown in Figure 2 below, a vast majority of participants said it would have been very unlikely or not at all likely that they would have completed the same energy efficient upgrades had they not received program incentives (n=10) or were only somewhat likely to complete the same energy efficient project (n=9).

Figure 2: Likelihood to Make Same Upgrades without Program Incentives



Participants that said they were not at all likely or pretty unlikely to complete the same energy efficiency project without the available incentives noted that they would not have been able to complete the same projects because the incentives accounted for between 25 and 50 percent of the total project cost and consequently made the project financially feasible for their company. As one participant explained:

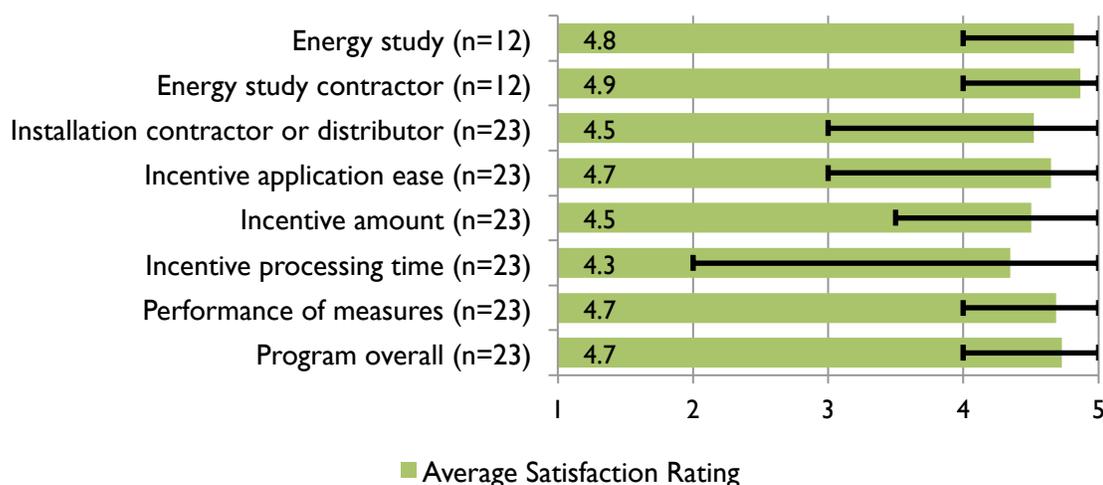
“It was make or break really...we really depended on the rebate, especially with four boilers being purchased. It really could have stopped the project upfront without the rebates. That worked out as a great partnership.”

For participants that said they were still somewhat likely to complete the energy efficiency project without incentives, several noted that the incentives did help push forward the project and allowed them to complete certain parts of their project (e.g. building controls) that they may have had to wait for otherwise. The four participants that said they would have completed their energy efficient project regardless said they already had the necessary funding without the incentives and were previously interested in making efficiency upgrades.

3.6.4 Participant Satisfaction

Participants expressed very high satisfaction with the program overall, with an average rating of 4.7 out of 5, where 1 was “very unsatisfied” and 5 was “very satisfied.” All participants gave a satisfaction rating of 4 or 5 for the program overall. Figure 3 shows the average satisfaction ratings in green; the black bars show the minimum and maximum ratings for each aspect of the program. All participants we spoke with expressed satisfaction (by giving a rating of 3.5 or higher) with the energy study, contractor who performed the energy study, incentive amount, and performance of the measures.

Figure 3: Participant Satisfaction with Various Aspects of the Program



Of the three participants who expressed some dissatisfaction or neutral satisfaction with the incentive processing time (by giving a rating of 2 or 3), two said that the long processing time created problems for the accounting department. By the time the incentives were received, the project books had already been closed and there was no way to attribute the incentives to the project. This created a problem for management because the project appears to have gone over budget, and the incentives are recorded as unrelated

income. The third dissatisfied participant said the processing consistently takes at least 90 days, which is a long time to wait when they have to pay all costs upfront, but they did not explicitly mention problems with accounting procedures for the incentive.

The participant who gave a neutral rating to their satisfaction with the installation contractor (by rating their level of satisfaction as a 3) said that the contractor did not install all of the equipment correctly, returning two times before getting it right. They also had a confusing issue where the contractor did not follow the typical process for applying for incentives and charged them less for the project, but then required that the participant hand over half of the incentive that Energy Trust sent to the participant. The participant was concerned that the contractor was taking advantage of them, but after further research on this project, our evaluation team confirmed that it was a misunderstanding between the contractor and participant on how the incentives would be paid.

The participant who gave a neutral rating to their satisfaction with the ease of preparing the incentive application (by rating their level of satisfaction as a 3) said it was a little confusing because they did not know enough about the equipment they were replacing. This participant did not receive an energy study, which may have been able to provide them with the information they needed.

3.6.5 Customer Energy Practices and Plans

Just under one third (30 percent) of participants we spoke with have a strategic energy management plan in place. An additional 35 percent indicated that while they do not have a formal plan, their company has a general policy or direction to look for opportunities that would reduce energy use and costs.

Most of the participants (78 percent) are planning to make additional changes or upgrades to equipment in the next two years, and a few others (13 percent) said they were at least considering it. Of the 19 participants who are at least considering improvements, 74 percent are *very likely* to pursue incentives through Energy Trust. The two who said they are only *somewhat likely* to pursue Energy Trust incentives explained that they rely on their contractors and distributors to find incentives for their projects (n=1) or they are only eligible to receive Energy Trust incentives for measures with gas savings (n=1).

3.6.6 Suggestions for Improvement

Despite the high satisfaction with the Existing Buildings program, many of the participants had recommendations for improving the program further. They suggested that Energy Trust:

- Allow upgrades to auxiliary structures (e.g. conditioned recreation centers) to qualify for incentives, not just the main structure/building (n=1);

- Assign a single program representative or point of contact for businesses doing both lighting and non-lighting projects (n=1) or who are completing a series of projects spanning multiple years (n=1);
- Add more HVAC systems (n=1) and lighting (n=1) to the list of qualified measures;
- Reduce paperwork repetitiveness for businesses completing many simultaneous projects (e.g. one project per floor or one per tenant in large buildings);
- Increase incentives to shorten payback times (n=2); and
- Increase marketing efforts in Washington (n=1).

In general, the feedback we received from participants was overwhelmingly positive. For example, one participant said that the Existing Buildings program helped them justify the project by providing clear cost, energy savings, and payback information for them to review. Based on this participant's experience managing buildings in other states, large upgrade projects are nearly impossible without a program like this. Another participant said that this program has a unique approach for project design; it does not focus too much on energy savings and payback. Instead, the Existing Buildings program showed them how the project would increase the value of their building as an asset (e.g. allowing them to increase rent), which helped them get the attention of their investors.

3.7 Nonparticipant Interviews

Evergreen Economics completed five full and three partial interviews with commercial customers that received incentives from Energy Trust for lighting projects but had not participated in the Custom or Standard tracks of the Existing Buildings program. The three partial interviews were completed with respondents that did not have time to complete a full interview. As shown in Table 12 below, nonparticipants varied in business type and size and completed lighting projects between 2010 and 2014. A majority of nonparticipants stated they were in charge of managing their company's incentivized lighting project; however, three of the nonparticipants noted they had relatively little involvement with the Energy Trust project besides providing approval and working with an electrician.

Table 12: Nonparticipant Interviews Summary

Nonparticipant	Lighting Project Year	Business Type	Interviewee Job Title
1	2013	Day Care Facility	VP Director
2	2013	Commercial Glass	General Manager
3	2012	Computer Repair	Office Manager
4	2013	Commercial Property	Owner
5	2010	Grocery	Owner
6	2014	Museum	Facility Manager
7	2014	Ski Shop	Owner
8	2014	Commercial Glass	Owner

3.7.1 Summary of Projects and Other Upgrades

Overall, seven out of eight nonparticipants said that their company had not completed any additional projects through Energy Trust programs over the last five years, either for lighting measures or other commercial upgrades. The only nonparticipant that said they had completed an additional Energy Trust qualifying project said they were currently replacing their exterior lights with qualifying LEDs.

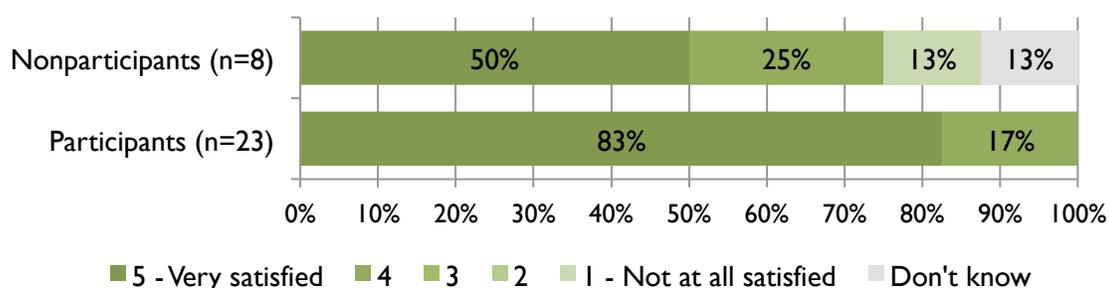
Additionally, four of the nonparticipants said their company had made other major equipment upgrades over the last five years that did not receive an incentive from Energy Trust. These major equipment projects included a water heater replacement, commercial and multifamily property lighting replacements, upgraded refrigerated cases, and a storefront remodel. The two nonparticipants that completed the water heater replacement and the refrigerated cases upgrade said they did not pursue an Energy Trust incentive for the project because they did not know incentives existed for those measures or because they were unsure of the program qualifications. The nonparticipant that completed several commercial and multifamily property lighting replacements did not pursue incentives because their contractor advised them not to, given the relatively low incentive levels and because the nonparticipant was unsatisfied with their previous involvement with Energy Trust. Specifically, the nonparticipant noted that the incentivized lighting equipment they used “went bad” shortly after the installation, despite being recommended by an Energy Trust representative.

3.7.2 Program Awareness and Perceptions

Four of the nonparticipants first learned about the program through the electrician or lighting contractor they hired, one read about it in a newsletter, one had participated in this program in the past (over five years ago), and the other two were not sure how they heard about it. Two people mentioned that a secondary source of information was valuable in their decision to complete a lighting project: one visited the website and one read about the rebates in their bill stuffer. None of these nonparticipants mentioned being contacted by an Energy Trust program representative, compared to 40 percent of participants who cited this direct contact as their primary source of program awareness.

Figure 4 shows that nonparticipants were quite satisfied with the program, with 75 percent of respondents rating their satisfaction as at least 4 out of 5; one respondent gave the lowest possible rating and the last person was not sure what rating to give. It is notable that the nonparticipants (i.e. lighting-only participants) reported lower satisfaction on average than participants (i.e. those with non-lighting measures).

Figure 4: Program Satisfaction Comparison



The nonparticipant who rated their satisfaction as a 1 out of 5, the lowest possible rating, explained that many of the incentivized LEDs burned out only six months after installation. These lamps were under warranty, but the manufacturer did not have replacements in stock. The fixtures they had installed were specially designed for these non-standard LEDs, so they ended up purchasing new non-LED lamps and fixtures. This experience caused them to distrust LEDs and be frustrated with Energy Trust for promoting these products. While this evaluation did not examine the lighting portion of the Existing Buildings program, it is important to note that this nonparticipant's prior experience with Energy Trust lighting incentives has affected their overall view of Energy Trust offerings. One of the other nonparticipants who was not "very satisfied" with the program reported that this was because they had trouble getting their project completed, as the contractor they hired was too busy to schedule the installation.

The same nonparticipant that rated their satisfaction as a 1 out of 5 was also the only one to report that their lighting contractor told them about some of the non-lighting incentives available through Energy Trust, which included weatherization, new construction, LEED

certification, and others. After learning about these opportunities, they were very interested in the incentives, and someone at Energy Trust gave them a list of certified contractors they could talk to about the project. The contractor they eventually called actually advised him not to pursue incentives through Energy Trust because the planning, inspections, and overall time burden would end up costing him more than the incentives were worth.

Four of the remaining seven nonparticipants we spoke with said they were aware of some non-lighting Energy Trust incentive opportunities for residential customers, but did not hear about them through their contractor or anyone at Energy Trust. Two of these people know about the incentives because their businesses sell residential measures that are incentivized by Energy Trust. All four of these people indicated that they would be at least somewhat likely to participate in the residential Energy Trust programs, assuming that they qualify for the incentives.

3.7.3 Challenges and Future Prospects

Some of the challenges preventing these nonparticipants from installing additional energy efficient upgrades include:

- **Budget** (n=3), which might be alleviated with higher incentives.
- **Scheduling** (n=1) - after Energy Trust approved their lighting project, it took more than six months to schedule the actual installation with the contractor.
- **Being a tenant** (n=1) - this nonparticipant plans to look for Energy Trust incentives if this changes.
- **No worthwhile measures** (n=1) that they have not already installed. This business's only end-uses are lighting and HVAC, and they stated that their lighting has already been upgraded, and that the efficient heaters incentivized do not work in their climate.
- **Poor recommendations** (n=1) - some of the measures that had been suggested to this nonparticipant were not the right fit for their business.

Four of the nonparticipants Evergreen interviewed said that they were at least considering making additional changes or upgrades in the next two years. These projects include additional lighting upgrades (n=2), HVAC (n=2), and other various projects across the different commercial and residential properties they own (n=1). Of these four interviewees considering future projects, two said they are very likely to pursue incentives or services through Energy Trust for these upgrades, one does not think their project will qualify for incentives, and the last does not think the incentives are high enough to be worth the effort of participating.

3.7.4 Suggestions for Improvement

When asked what types of incentives or services they would be interested in receiving from Energy Trust, the nonparticipants asked for a commercial energy audit (n=1), heating system upgrades (n=1), or traditional/non-LED lighting (n=1). One person could not think of any specific measures, but they “would love any help [they] can get” (n=1). In general, some said that the Energy Trust offerings would be more appealing if they had higher incentives (n=2) and/or more qualified measures (n=1).

4 Key Findings and Recommendations

Overall, Energy Trust's Existing Buildings program appears to be working well, with the vast majority of program actors very satisfied with the collaboration and communication involved in keeping the program running smoothly.

Program staff highlighted the need to pursue hard-to-reach customers and deeper retrofits, as the program has been operating for 13 years and much of the readily available energy savings have been achieved. Energy Trust's utility partners are generally satisfied with the collaboration on marketing and outreach activities, with the gas utilities expressing a desire for a bit more regular communication with Energy Trust.

The allied technical assistance contractors (ATACs) we spoke with have also been satisfied with their involvement in the program, expressing that there is strong and clear communication with ICF International (ICF) and straightforward reporting requirements that make the program easy to navigate. Contractors also had positive feedback on the program, but we found that there is room for contractors to do more in marketing the program and available incentives.

Participants are also generally very satisfied with their participation experience and only had minor suggestions for improvement to the program, indicating that program processes are working well overall. The small number of nonparticipants we interviewed brought to light that there is still a lack of awareness of incentives that are available for non-lighting equipment.

Below are the overarching findings resulting from this evaluation and corresponding recommendations for improvements to Energy Trust's Existing Buildings program.

Finding: Program tracking data are generally complete and well maintained, but our review found some instances where trade ally contractors appear in both the trade ally and non-trade ally data (i.e. installer data) with different ID numbers. There are also cases where participants appear in the installer data alongside contractors when they installed their own equipment. This combination of trade allies, non-trade allies, and participants all included in the same set of installer data does not accurately reflect their roles in the program.

Recommendation: Energy Trust should consider implementing a quality control procedure for program data that cross checks trade ally data against other contractor data to help eliminate duplicate entries and ensure that trade allies are accurately identified and tracked. Additionally, participants with self-installed projects should be identified as such in the data with an additional data field, perhaps a binary variable, so that participants can be easily identified as distinct from contractors in the installer data.

Finding: We heard from program staff and contractors that there has been some confusion on the part of contractors about whether they need to sign up to be a trade ally for residential and commercial programs separately. Two contractors we spoke with expressed confusion on this point, mistakenly thinking that they were trade allies for all sectors if they had applied once.

Recommendation: Energy Trust should communicate to existing trade allies and those who apply in the future that if they want to be a trade ally for both residential and commercial programs, they need to apply for those designations separately. Where possible, the application process and forms should support such dual applications.

Finding: NW Natural would like to have more feedback on outcomes of collaboration and the program, and said that overall, it would like to have greater frequency of communications with Energy Trust. NW Natural also would like to have more input into marketing efforts. Similarly, Cascade Natural Gas (CNG) would like to have more opportunity to provide input up-front on commercial marketing efforts.

Recommendation: Energy Trust should provide more opportunities for regular contact with NW Natural and CNG and consider increasing collaboration on marketing with the gas utilities.

Finding: Clark Public Utilities (commonly known as Clark PUD) suggested that co-branded program materials may increase awareness of the Existing Buildings program in Southwest Washington.

Recommendation: Energy Trust should explore the opportunity for co-branding with Clark PUD on informational program materials in Clark PUD and NW Natural territory to increase customer awareness of Energy Trust incentives in Southwest Washington.

Finding: The Existing Buildings program relies heavily on its network of ATACs and trade allies to promote and bring projects into the program. Program staff reiterated the importance of this program design. ATACs and trade allies currently spread awareness of the program with existing customers and by word of mouth, but did not seem to understand that they are in fact relied on to bring in the majority of participation for the program. Most ATACs do not have a strong focus on marketing energy studies for the program, but some ATACs expressed an interest in getting more feedback on how many projects they are bringing into the program compared to other ATACs. Others mentioned that additional marketing support would be helpful, such as knowing what techniques have worked well for other ATACs to bring customers into the program.

Additionally, there may be an opportunity for lighting contractors to cross-promote non-lighting incentives offered by Energy Trust. Although we did not conduct interviews with lighting contractors, we heard from nonparticipants that their lighting contractors did not

promote incentives for non-lighting upgrades. This would likely increase awareness among customers that make a lighting upgrade, but have yet to upgrade other equipment.

Recommendation: Energy Trust should make clear to ATACs and trade allies that the program design relies on them to initiate projects and should emphasize the program resources available to make that possible. Providing ATACs with additional information and tips for how to promote energy studies will likely help them take a more active role in seeking out customers for energy studies. Energy Trust should reiterate to trade allies that there are co-op marketing funds available for their use.

For lighting trade allies, Energy Trust should emphasize the importance of cross-promoting non-lighting upgrades and available incentives, and encourage these contractors to discuss the opportunity for additional upgrades with their customers. If they do not already do so, Evergreen Consulting Group staff should promote non-lighting upgrades anytime they are working on a lighting project. Lighting trade allies and Evergreen Consulting Group should be provided with sufficient information to enable them to provide customers with the appropriate point of contact or web link for non-lighting projects, and that information should be updated in a timely fashion.

Finding: Many ATACs reported an end-of-year slowdown in the processing of project paperwork by ICF due to an increase in projects; this increase was often spurred by bonus incentives announced in the fall of each year. Anticipating these bonuses, customers would delay projects until the bonus was announced. Under these circumstances, ATACs found that it was difficult for them to keep their customers' projects moving and avoided initiating new projects during this time, which resulted in a lull in activity once the bottleneck cleared. Recognizing this as a potential problem, Energy Trust made the decision to not offer end of year bonus incentives for gas measures in 2015.

Recommendation: ICF should work to maintain a relatively consistent level of program activity throughout the year and/or communicate with ATACs ahead of time that they should expect a slowdown in processing at certain times of year.

Finding: The main source of confusion and difficulty for customers, as reported by ATACs, is the issue of cost effectiveness. Many customers do not understand why an upgrade that saves energy would not receive an incentive, and ATACs reported that some customers would pursue additional upgrades that have savings but are not currently cost effective from Energy Trust's perspective and therefore ineligible for incentives. ATACs also experience occasional frustration when they find that a recommended upgrade is found to not be cost effective after ICF's review of the energy study.

Recommendation: Energy Trust should explore the option of allowing upgrades that will yield energy savings but are currently not considered cost effective. Incentives could be offered on a pro-rated basis so that they are in line with the magnitude of savings, even if

small. This would likely encourage some customers to pursue additional upgrades beyond the low hanging fruit to achieve deeper savings, and would allow ATACs to make recommendations for any upgrades that would yield energy savings.

Appendix A – Program Staff Interview Guide

This appendix contains the interview guide used in conducting interviews with program staff at Energy Trust, ICF, and RHT.

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

PROGRAM STAFF INTERVIEW GUIDE

FINAL 1/22/16

Objectives:

- Gather program staff feedback as part of the process evaluation of the Existing Buildings Program and to inform other evaluation tasks.

Audience:

- Energy Trust, ICF, and RHT staff

Respondent Role

- 1) First, can you briefly summarize your role in planning or implementing the Existing Buildings program, how long you have been in this role, and which implementation staff and market actors you primarily work with?

Program Design and Participation Processes

- 2) (For primary program management staff) Please walk through the current program **participation process** for participants, ATACs, and contractors in the **Standard** program track. (Discuss project applications, required trainings, incentive payment, etc.).
- 3) (For primary program management staff) How are these participation processes different for the Custom program track? (Discuss project applications, required trainings, studies/site evaluations, incentive payment, etc.).
- 4) Does the program **design or participation process** differ between Oregon and Washington in any way? If so, how do they differ?
- 5) Let's talk about key program **design** changes since January 2014. We'll have questions about how the program is delivered/implemented a little later.
 - a) Have there been any large changes to the design of the program or requirements for participation?
 - b) How have equipment incentive levels changed?
 - c) What new measures were introduced in 2014 and 2015?
 - i) What has the uptake been for these new measures?
- 6) What impacts **to program participants** have you observed or heard about due to recent changes?

- 7) What impacts **to program actors** – ATACs and trade allies – have you observed or heard about due to recent changes?
- 8) Are there any ways the participation process could be improved for participants?
- 9) How about for ATACs and contractors?

Program Implementation

- 10) How has the program **implementation** changed since January 2014? Here I'm referring to the daily activities staff like you do to operate the program. For instance, are there any new staff roles, internal operational procedures, or new training formats/content? We'll talk about marketing and outreach a little later.
- 11) How does program **implementation** differ between Oregon and Washington?
- 12) How is program implementation coordinated between the Standard and Custom tracks and with the lighting and other program tracks?
- 13) Can you give a quick overview of how program status and issues are communicated between Energy Trust and ICF?
- 14) How do Energy Trust and ICF communicate and coordinate with the utilities? Are there any outstanding concerns or issues? (Probe on communication with Clark Public Utilities and Cascade/NW Natural if not mentioned)
- 15) Could communications between Energy Trust, ICF and the utilities be improved in any way? (Probe on Clark Public Utilities and Cascade/NW Natural if not mentioned)
- 16) What aspects of program implementation have improved or worked particularly well since January 2014?
- 17) What are currently the biggest challenges for program implementation? (*Consider staff/funding levels, logistical challenges, new measure planning/creation, cost-effectiveness, recruiting, etc.*)
- 18) Where are the biggest opportunities to increase operational efficiencies, program participation or participant satisfaction?

Planned Program Changes (Design, Implementation)

- 19) What program design or implementation changes are planned for the next 12 months?

- 20) Why are these changes planned? For instance, are they to reduce implementation costs, increase participation or address likely state equipment standard changes?
- 21) (IF NOT MENTIONED) What (if any) new measures will be introduced the rest of the year?
- 22) How are potential new measures identified and screened, generally?
- 23) How well is this process working?

Overall Market and Program Goals

- 24) What percent of eligible commercial customers do you think are aware of the Existing Buildings program?
- 25) What percent of eligible commercial customers would you say have participated in the program?
- 26) Is awareness or the perception of the Existing Buildings program changing among businesses?
- 27) What trends have you noticed in Standard and Custom projects in 2014 and 2015?
(Project/equipment type, project size, sectors, repeat customers, etc.)
 - a) What factors contributed to these trends?
 - b) Are you satisfied with the current mix of Standard and Custom projects, both relative to each other and to Lighting projects? Why or why not?
- 28) To meet the goal of encouraging participants to go beyond lighting only projects, how does the program support participation in either the Standard or Custom tracks for customers who were planning to do only lighting (probe for role of lighting trade allies, follow-up by ICF, ATACs)?
 - a) What do you see as the greatest remaining barriers to lighting participants pursuing additional Standard or Custom measures?
- 29) What were the project and savings goals for this program in 2014 and 2015? Are goals set separately for the Standard and Custom tracks or only for the EB program overall?
 - a) Were these goals met for electric savings? For gas? By utility territory? By program track (if applicable)?
 - b) What key factors caused you to meet/not meet these goals?
- 30) What are the goals for this program in the next 12 months?
- 31) What do you think the biggest challenges will be meeting these goals?

Recruitment and Marketing

- 32) What challenges, if any, are you experiencing recruiting different types of program participants? (Probe if needed)
- a) By sector
 - b) By size of customer
 - c) Standard vs. Custom track
 - d) Smaller or hard-to-reach businesses
 - e) By geographic region
- 33) How are you trying to overcome these challenges? (Specifically probe on new initiatives to target hard-to-reach businesses)
- 34) How well do you think ATACs and contractors are marketing the Existing Buildings program to their commercial customers, and why do you say that?
- 35) How else does the program currently market the program to customers? Please summarize the types of media that are used and key messages. (Consider website and recent campaigns, newspaper advertising, specific messaging)
- 36) Have there been any major changes to marketing in 2014 or 2015?
- a) IF YES: Why did you make these changes?
- 37) (IF NOT MENTIONED) What are the biggest challenges in marketing this program?
- 38) Are you planning any further marketing changes? Why is that?

ATAC/Trade Ally Coordination

- 39) Is the number and distribution of ATACs and trade allies adequate to ensure consistent marketing and delivery of the Existing Buildings program?
- 40) Are there plans to:
- a) Increase the number of ATACs or trade allies?
 - b) Increase the involvement of ATACs and trade allies who are already signed up with the program (i.e., those who are currently not very active)? How would that be done?
- 41) Have there been any issues associated with getting new trade allies or ATACs fully up to speed on program requirements and processes?

42) What are the greatest challenges associated with engaging trade allies and ATACs fully with the program?

Coordination with Solar Program

43) Can you describe the integration between the Existing Buildings program and solar offerings? What is the current procedure for referring customers to the solar program?

44) Is the integration of these two programs working well from an implementation standpoint? What could be improved?

45) How do you think the promotion of solar offerings to program participants could be improved?

Evaluation Next Steps

46) For our evaluation we'll be conducting interviews with ATACs, contractors (both trade allies and non-trade allies), participants and non-participants. Are there any specific questions you would like us to ask these different program actors?

47) Are there any other topics or issues we did not cover that you think would help inform our evaluation?

Those are all our questions. Thanks for your time and good information!

Appendix B – Utility Interview Guides

This appendix contains three separate interview guides used for interviews with the electric utilities (Pacific Power and PGE), gas utilities (NW Natural and Cascade Natural Gas), and Clark PUD.

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

ELECTRIC UTILITY INTERVIEW GUIDE

FINAL 3/29/16

Objectives:

- Gather utility feedback on collaboration with Energy Trust and PMC staff, utility role in marketing and recruitment, satisfaction with program design and collaboration outcomes.

Audience:

- Portland General Electric and Pacific Power
 - The group interviews with Portland General Electric and Pacific Power will be conducted in person with Energy Trust staff present

Introduction

[Attendees will fill out nametags with first and last name and company name.]

Hi everyone, thank you all for taking the time to meet today. My name is John Boroski and I'm with Evergreen Economics. With me here today is Jenny Fraser, also from Evergreen Economics, and Phil Willems on the phone from PWP. Our team has been hired by Energy Trust to conduct an evaluation of their Existing Buildings program. We're going to spend the next hour and a half discussing [Portland General Electric's, Pacific Power's] coordination with Energy Trust on the marketing and delivery of commercial and industrial programs.

*PPT slide – Evergreen template:

<p>Process Evaluation of Energy Trust's Existing Buildings Program</p> <p>Focus on Coordination of Marketing and Delivery for Commercial and Industrial Programs</p>
--

If you haven't already done so, please fill out a nametag with your first and last name and company, so that we can all easily identify each other. For note taking purposes, we'll record this meeting. When you speak up with a comment, please identify yourself by first name and company. Any comments you make will **not** be attributed to you directly in our evaluation report, so please feel free to speak honestly during today's discussion.

For today's meeting, there are six main topics we will cover, those are:

- Name and role of each attendee
- Overview of utility and Energy Trust collaboration
- Marketing and recruitment
- Customer experience with Energy Trust programs

- Program design
- Final thoughts and comments

*PPT slide – Evergreen template:

Main topics for discussion today:

- Name and role of each attendee
- Overview of utility and Energy Trust collaboration
- Marketing and recruitment
- Customer experience with Energy Trust programs
- Program design
- Final thoughts and comments

Throughout the meeting, we'll use PowerPoint slides to help everyone follow along with the questions and stay on topic. For all questions, we'll pose the question to the group and allow time for both [PGE/Pacific Power] and Energy Trust staff to respond to the question.

Respondent Role

*PPT slide – Evergreen template:

Your role in Energy Trust's Commercial and Industrial Programs

- Name and role at organization
- Role with respect to Energy Trust programs
- Time in current role
 - If role has changed in the last two years, please explain
- Which program and staff you primarily work with

- 1) First, can each of you briefly summarize your role at your organization, how long you have been in this role, and how do you support Energy Trust commercial and industrial program activity? We'll go around the room and give everyone a chance to respond. [Probe for which program/staff the utility respondents primarily work with]

Utility and Energy Trust Collaboration

*PPT slide – Evergreen template:

Overview of Utility and Energy Trust Collaboration

- Please give an overview of the communication and collaboration process.
- What were the most significant collaboration efforts in 2014 and 2015?
- What have been the biggest successes you've had in collaborating?
- What challenges have you experienced in collaborating?
 - How were those challenges addressed or resolved?

- 2) Can you give an overview of the communication and collaboration process between [PGE or Pacific Power] and Energy Trust?
- 3) What were the most significant collaboration efforts between [PGE or Pacific Power] and Energy Trust in 2014 and 2015? [Probe on collaboration regarding program design, marketing, increasing projects/program savings and maintaining a high level of customer satisfaction]
- 4) What are the biggest successes have you had in collaborating?
- 5) What challenges have you experienced collaborating?
 - a) How were those challenges addressed or resolved?

Marketing and Recruitment

*PPT slide – Evergreen template:

Marketing and Recruitment

- What is [PGE's/Pacific Power's] role in marketing and participant recruitment?
- How is program marketing coordinated between [PGE/Pacific Power], Energy Trust, and PMC staff?
- What marketing and recruitment efforts was [PGE/Pacific Power] involved in during 2014 and 2015?
- What went well in marketing and recruitment during this time?
- What challenges were there in recruiting program participants?
- Any desired changes to marketing and recruitment in 2016?

- 6) What is [PGE or Pacific Power]'s role in marketing and participant recruitment?

- 7) How is the program marketing coordinated between [PGE or Pacific Power], Energy Trust, and PMC staff? [Probe on regular marketing calls, written marketing plans, coordination of marketing messages and branding]
- 8) What marketing and recruitment efforts was [PGE or Pacific Power] involved in during 2014 and 2015?
- 9) What went well in marketing and recruitment during this time?
- 10) What challenges were there in recruiting program participants?
- 11) What changes to marketing and recruitment would you like to see implemented in 2016, if any?

Customer Experience

*PPT slide – Evergreen template:

Customer Experience with Energy Trust Programs

- Do customers know where to get information on Energy Trust programs?
- How well are [PGE/Pacific Power] staff able to answer customer questions about the programs?
- What is the process for directing customers to programs when they are interested in participating?
 - How well does this work?
- How satisfied have customer been with Energy Trust programs?
- What (if any) specific feedback have you heard from customers about the programs?

- 12) Do customers typically know where to go to get information on Energy Trust programs?
- 13) How well are [PGE or Pacific Power] staff able to answer customer questions about the programs or direct them to where they can find an answer?
 - a) If needed: Are there sufficient resources (time/budget) for utility staff to address customer questions and direct them to programs?
- 14) What is the process for directing customers to programs when they are interested in participating? How well does this handoff work?
- 15) How satisfied have customers been with Energy Trust programs?

16) What kinds of specific feedback have you heard from customers about the programs?

Program Design

*PPT slide – Evergreen template:

Program Design

- How does [PGE/Pacific Power] receive updates regarding program changes?
- What do you think are the main participation barriers?
- What opportunities do [PGE/Pacific Power] see for future program design, if any?

17) How does [PGE or Pacific Power] receive updates regarding program changes? [Probe, if not mentioned: does the Conservation Advisory Council (CAC) serve as a source for information about program updates, incentive level changes, etc.?.]

18) What do you think are the main participation barriers?

19) This is a question just for [PGE/Pacific Power] staff: What opportunities do you [PGE or Pacific Power] see for future program design?

Final Thoughts and Wrap-Up

*PPT slide – Evergreen template:

Final Thoughts and Comments

- Could communications between Energy Trust and [PGE or Pacific Power] be improved in any way?
 - Are there any outstanding issues or concerns?
- What recommendations do you have for improving the collaboration process?
- What, if anything, would improve the outcomes of collaboration?
- Any other thoughts on the topics we discussed today, or anything else we didn't cover?

20) Thinking about the collaboration process overall, could communications between Energy Trust and [PGE or Pacific Power] be improved in any way?

a) Are there any outstanding concerns or issues?

21) What recommendations do you have for improving the collaboration process? What, if anything, would improve the outcomes of collaboration with Energy Trust? [Probe to see if role responsibilities are clear, if not already mentioned.]

22) Do you have any other thoughts or comments on the topics we discussed today?

a) Would you like to discuss these now, or at a later time?

Those are all our questions. Thanks for your time today and good information!

Please don't hesitate to contact us if you have any additional thoughts on the topics we discussed today. Our contact information is shown on the PowerPoint slide if you need to get in touch with us. We may follow-up with some additional questions once we review the notes from our meeting today.

*PPT slide – Evergreen template:

Thank You!

- Contact Information:
 - John Boroski: boroski@evergreenecon.com
 - Jenny Fraser: fraser@evergreenecon.com
 - Phil Willems: philwillems@comcast.net

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

GAS UTILITY INTERVIEW GUIDE

FINAL 3/29/16

Objectives:

- Gather utility feedback on collaboration with Energy Trust and PMC staff, utility role in marketing and recruitment, satisfaction with program design and collaboration outcomes.

Audience:

- Cascade Natural Gas and NW Natural
 - These interviews will be conducted by phone

Introduction

Note: Interviews will be scheduled by email with utility contacts provided by Energy Trust.

Hi, this is _____ calling from Evergreen Economics. Is now still a good time to discuss [NW Natural's/Cascade Natural Gas'] coordination with Energy Trust staff on commercial and industrial programs?

If yes: Great, let's get started.

If no: When is a good time to reschedule our interview?

Respondent Role

- 1) First, can you briefly summarize your role at your organization, how long you have been in this role, and how you support Energy Trust commercial and industrial program activity? [Probe for which program/staff the utility respondents primarily work with]

Utility and Energy Trust Collaboration

- 2) Can you give an overview of the communication and collaboration process between [NW Natural/Cascade Natural Gas] and Energy Trust?
- 3) What were the most significant collaboration efforts between [NW Natural/Cascade Natural Gas] and Energy Trust in 2014 and 2015? [Probe on collaboration regarding program design, marketing, increasing projects/program savings and maintaining a high level of customer satisfaction]
- 4) What are the biggest successes have you had in collaborating?
- 5) What challenges have you experienced collaborating?
 - a) How were those challenges addressed or resolved?

Marketing and Recruitment

- 6) What is [NW Natural/Cascade Natural Gas]’s role in marketing and participant recruitment for Energy Trust programs?
- 7) How is the program marketing coordinated between [NW Natural/Cascade Natural Gas], Energy Trust, and PMC staff? [Probe on regular marketing calls, written marketing plans, coordination of marketing messages and branding]
- 8) What marketing and recruitment efforts was [NW Natural/Cascade Natural Gas] involved in during 2014 and 2015?
- 9) What went well in marketing and recruitment during this time?
- 10) What challenges were there in recruiting program participants?
- 11) What changes to marketing and recruitment would you like to see implemented in 2016, if any?

Customer Experience

- 12) Do customers typically know where to go to get information on Energy Trust programs?
- 13) How well are [NW Natural/Cascade Natural Gas] staff able to answer customer questions about the programs or direct them to where they can find an answer?
 - a) If needed: Are there sufficient resources (time/budget) for utility staff to address customer questions and direct them to programs?
- 14) What is the process for directing customers to programs when they are interested in participating? How well does this handoff work?
- 15) How satisfied have customers been with Energy Trust programs?
- 16) What kinds of specific feedback have you heard from customers about the programs?

Program Design

- 17) How does [NW Natural/Cascade Natural Gas] receive updates regarding program changes?
- 18) What do you think are the main participation barriers?
- 19) What opportunities do you [NW Natural, Cascade Natural Gas] see for future program design?

Final Thoughts and Wrap-Up

- 20) Thinking about the collaboration process overall, could communications between Energy Trust and [NW Natural/Cascade Natural Gas] be improved in any way?
- a) Are there any outstanding concerns or issues?
- 21) What recommendations do you have for improving the collaboration process? What, if anything, would improve the outcomes of collaboration with Energy Trust? [Probe to see if role responsibilities are clear, if not already mentioned.]
- 22) Do you have any other thoughts or comments on the topics we discussed today?
- a) Would you like to discuss these now, or at a later time?

Those are all our questions. Thanks for your time today and good information!

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

CLARK PUD UTILITY INTERVIEW GUIDE

FINAL 2/23/16

Objectives:

- Gather utility feedback on collaboration with Energy Trust and PMC staff, utility role in marketing and recruitment, satisfaction with program design and collaboration outcomes.

Audience:

- Clark PUD
 - This interview will be conducted by phone

Introduction

Note: Interview will be scheduled by email with the utility contact provided by Energy Trust.

Hi, this is _____ calling from Evergreen Economics. Is now still a good time to discuss Clark PUD's coordination with Energy Trust staff on commercial and industrial programs?

If yes: Great, let's get started.

If no: When is a good time to reschedule our interview?

Respondent Role

- 1) First, can you briefly summarize your role at Clark PUD, how long you have been in this role, and how you support Energy Trust commercial and industrial program activity? [Probe for which program/staff the utility respondents primarily work with]

Utility and Energy Trust Collaboration

- 2) Can you give an overview of the communication and collaboration process between Clark Public Utilities and Energy Trust?
- 3) What were the most significant collaboration efforts between Clark Public Utilities and Energy Trust in 2014 and 2015? [Probe on collaboration regarding program design, marketing, increasing projects/program savings and maintaining a high level of customer satisfaction]
- 4) What is the level of coordination with Energy Trust regarding customers and their energy efficiency projects?
 - a) How well is this coordination working?
 - b) What could be improved?
- 5) What are the biggest successes have you had in collaborating?

- 6) What challenges have you experienced collaborating? [Probe on whether there were any challenges due to the design of Energy Trust programs]
 - a) How were those challenges addressed or resolved?

Marketing and Recruitment

- 7) What is Clark Public Utilities' role in marketing and participant recruitment for Energy Trust programs?
- 8) How is Energy Trust involved in the marketing and recruitment for Clark Public Utilities' commercial and industrial programs?
- 9) How is the program marketing coordinated between Clark Public Utilities, Energy Trust, and PMC staff? [Probe on regular marketing calls, written marketing plans, coordination of marketing messages and branding]
- 10) What marketing and recruitment efforts was Clark Public Utilities involved in during 2014 and 2015?
- 11) What went well in marketing and recruitment during this time?
- 12) What challenges were there in recruiting program participants?
- 13) What changes to marketing and recruitment would you like to see implemented in 2016, if any?

Upcoming Program Changes

- 14) Are there any changes planned for Clark Public Utilities' commercial and industrial programs in the following areas?
 - a) Incentive offerings?
 - b) Eligible measures?
 - c) Marketing?
 - d) Outreach?

Final Thoughts and Wrap-Up

- 15) Thinking about the collaboration process overall, could communications between Energy Trust and Clark Public Utilities be improved in any way?
 - a) Are there any outstanding concerns or issues?

- 16) What recommendations do you have for improving the collaboration process? What, if anything, would improve the outcomes of collaboration with Energy Trust? [Probe to see if role responsibilities are clear, if not already mentioned.]
- 17) Do you believe there are additional opportunities for collaboration with Energy Trust beyond what is currently done?
- a) If yes, what are those opportunities?
- 18) Do you have any other thoughts or comments on the topics we discussed today?
- a) Would you like to discuss these now, or at a later time?

Those are all our questions. Thanks for your time today and good information!

Appendix C – ATAC Interview Guide

This appendix contains the interview guide used in conducting interviews with Allied Technical Assistance Contractors (ATACs).

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION
ALLIED TECHNICAL ASSISTANCE CONTRACTOR (ATAC) INTERVIEW
GUIDE
FINAL 3/8/16

Objectives:

- To gather feedback from ATACs regarding their experience with the program, challenges they have faced in participating, and their perception of the customer's experience with the program.

Audience:

- 10 Allied Technical Assistance Contractors (ATACs)

Introduction

Hi, this is [name] calling from Evergreen Economics. We are conducting an evaluation of Energy Trust's Existing Buildings program and would like to talk to you about your experience as an allied technical assistance contractor for the program. We have some questions that may take up to an hour to go over, so is there a good time that we can set aside an hour to discuss the Existing Buildings program? [Setup a time to call back or offer to complete the interview now if they are available]

All of your responses will be kept confidential; nothing that you say will be attributed to you in our evaluation.

Respondent Role and Company Information

- 1) First, can you briefly summarize your role as an ATAC for the Existing Buildings program, how long you have been active in the program, and which program staff at ICF or Energy Trust you primarily work with?
- 2) What geographical areas does your company serve?
- 3) What types of projects do you specialize in as far as:
 - a) Gas vs. electric equipment
 - b) Customer segment or business type [do not read list, but mark as indicated]: office buildings, retail, schools, grocery stores, restaurants, warehouse/storage, other (specify)
 - c) End use or equipment type [do not read list, but mark as indicated]: chillers, chilled water systems, cooling towers, refrigeration, boilers, steam systems, hot water systems, water heating, ventilation, rooftop HVAC units (RTUs), office equipment (plug loads), food service equipment, industrial equipment, pumping, heat recovery, server rooms/server closets, other (specify)

- d) Other specialty (specify)
- 4) Are there certain types of customers (i.e., sectors or types of businesses) that you most often conduct energy studies for?

Summary of Program Involvement

- 5) Approximately how many energy audits or technical studies did your company complete for the Existing Buildings program in 2015? In 2014? Why did the number increase/decrease?
- 6) About what percent of your revenues would you say comes from completing technical studies for this program?
- 7) Do you also serve as an installation contractor for customers through this program?
- a) If so, approximately what percent of your revenues would you say comes from completing installation projects for which you have provided studies through this program? And from projects for which you did not provide studies?
- 8) (For ATACs based in the Portland/Vancouver area): Do you do work for this program in both Oregon and Washington?
- a) If yes, do you find that there are any differences in the program processes or requirements in Oregon vs. Washington? (If yes, ask for details and associated impact, if any)
- 9) Have there been any changes to the program in the last couple of years that improved or reduced your ability to participate in the program?
- a) If so, what were the changes and how did they affect your participation?

Customer Profiles and Study Types

- 10) What types of measures do you most frequently recommend in your energy studies?
- a) Does this vary by customer type or sector?
- 11) How often do customers request a whole building study versus a study for a few individual measures?
- a) What characteristics distinguish these customer types?
- 12) (If ATAC does equipment installations as well): What type of equipment do you most frequently install for customers of this program?
- 13) Are there certain types of customers (sectors or business types) that you think are not well served by the current program design? Why is that?

Customer Experience with the Program

Now we have some questions about your and your customers' experience with the program.

- 14) First, we'd like to discuss how custom projects are initiated. How often do you experience each of the following scenarios, and which scenarios are most likely to lead to a completed project:
 - a) A customer with whom you have a relationship asks for a study
 - b) A new customer approaches you with an idea for a project or study
 - c) You approach the customer with an idea for a project or study
 - d) An Existing Buildings staff member contacts you to suggest a study or project
 - e) An Existing Buildings staff member contacts you with a request from a customer for a study
 - f) Some other scenario (please describe)

- 15) Overall, how easy do you think it is for customers to participate in this program?

- 16) What are some of the most common challenges customers face when deciding to pursue a custom project through this program? (If appropriate) Are those different for gas and electric customers?

- 17) And how effectively does the program help customers overcome those challenges?

- 18) Do customers have difficulty getting projects approved by the appropriate decision makers at their company?
 - a) For which customer types is this a key barrier, and why?
 - b) How do you think this could be addressed?

- 19) How often do customers request an energy study that includes a solar project?
 - a) How receptive have customers been to solar projects that you recommend in your energy studies? Why do you think that is?

- 20) How do you think your customers perceive Energy Trust? And how do they perceive the Existing Buildings program, specifically?

Communications and Marketing

- 21) How do you use the availability of the Existing Buildings program in your marketing? Which Energy Trust materials, if any, do you use in your marketing?
 - a) What types of customers do you focus on, if any?

- 22) How satisfied are you with the level of marketing support provided specifically to ATACs by the program? Why do you say that?

- 23) What do you think of the marketing done by Energy Trust for this program overall? What about the marketing done by trade ally installation contractors (if you are aware of any)?
- 24) How do you think the marketing of the program could be improved to better support the ATACs?

Interactions with PMC, Customer Assignment Process, Study Costs and Reimbursement Process

Now we have some questions about your interactions with program implementation staff and experience with the program processes.

- 25) How often are you in contact with Existing Buildings program staff? How do you usually communicate? (Probe: phone, email, etc.)
- a) How are those communications going?
- 26) Are you getting the support you need from program staff to complete energy studies for the program? (Probe on whether questions they may have are answered/resolved in a timely manner, if they receive program updates in a timely manner, if they have easy access to all the forms and documents they need, etc.)
- 27) How satisfied have you been with the customer assignment process for matching you with customers who need energy studies? (Probe on whether they have been getting too many/too few assignments, etc.)
- a) Why do you say that?
- 28) What do you think could improve the customer assignment process?
- 29) How satisfied have you been with the turnaround time for ICF's review of energy study results?
- 30) How do the actual costs of conducting an energy study compare to the reimbursement you receive from Energy Trust?
- 31) How well does the current reimbursement process work for you? Why do you say that?
- 32) What do you think could improve the reimbursement process?
- 33) Is there additional program assistance you'd like to have from ICF or Energy Trust?

Recommendations for Improvement

We just have a few more questions; we're almost done.

34) Do you have any recommendations for improving any program processes? (Probe on improvements to reduce costs or to make the program easier to participate in)

Final Thoughts and Wrap-up

35) Overall, how satisfied would you say you are with your involvement in the Existing Buildings program?

a) If needed: why do you say that?

36) Do you feel that the program provides value to your business? Why or why not?

37) Are there any other topics or issues we did not cover that you would like to talk about?

Those are all our questions. Thanks for your time and good information!

Appendix D – Contractor Interview Guide

This appendix contains the interview guide used in conducting interviews with both trade ally and non-trade ally contractors.

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

CONTRACTOR INTERVIEW GUIDE

FINAL 3/8/16

Objectives:

- To gather feedback from contractors regarding their experience with the program, challenges they have faced in participating, and their perception of the customer's experience with the program.

Audience:

- 15 contractors, including Trade Allies and non-Trade Allies

Introduction

Hi, this is [name] calling from Evergreen Economics. We are conducting an evaluation of Energy Trust's Existing Buildings program and would like to talk to you about your experience as an installation contractor/vendor/distributor for the program. We can offer you a \$50 incentive in exchange for your time if you complete an interview with us. Our interview questions may take about 45 minutes to complete, so is there a good time that we can set aside 45 minutes to discuss the Existing Buildings program? [Setup a time to call back or offer to complete the interview now if they are available]

All of your responses will be kept confidential; nothing that you say will be attributed to you in our evaluation.

Respondent Role and Company Information

- 1) First, can you briefly summarize your role as a contractor for the Existing Buildings program, how long you have been active in the program, and which program staff at ICF or Energy Trust you primarily interact with?
- 2) What geographical areas does your company serve?
- 3) What types of projects do you specialize in as far as:
 - a) Gas vs. electric equipment
 - b) Customer segment or business type
 - c) End use or equipment type
 - d) Program track:
 - i) Custom
 - ii) Standard Non-Lighting
 - iii) Standard Lighting
 - e) Other (specify)

- 4) Are you an approved Energy Trust Trade Ally?
- a) If yes:
 - i) How long have you been a Trade Ally?
 - ii) Have you ever lost your Trade Ally status with Energy Trust? If so, how did you get your status back and how hard was it to regain that status?
 - b) If no:
 - i) Have you ever been a Trade Ally in the past?
 - (1) If yes: Why are you no longer a Trade Ally? Have you pursued regaining Trade Ally status with Energy Trust?
 - (2) If no: Why have you not chosen to become a Trade Ally?
- 5) Are you involved in any other Energy Trust programs besides the commercial Existing Buildings program? (Probe: New Buildings, residential programs, etc.)

Summary of Program Involvement

- 6) [For installation contractors:] Approximately how many installation jobs did your firm complete for the Existing Buildings program in 2015? In 2014? Why did the number increase/decrease?
[For vendors/distributors:] Approximately how many equipment sales did your company make for the Existing Buildings program in 2015? In 2014? Why did the number increase/decrease?
- 7) [For installation contractors:] About what percent of your revenue would you say comes from installation jobs for this program?
[For vendors/distributors:] About what percent of your revenue would you say comes from equipment sales for this program?
- 8) [For those based in the Portland/Vancouver area:] Do you do installations/sell equipment for this program in both Oregon and Washington?
- a) If yes, do you find that there are any differences in the program processes or requirements in Oregon vs. Washington? (If yes, ask for details and associated impact, if any)
- 9) Have there been any changes to the program in the last couple of years that improved or reduced your ability to participate in the program?
- a) If so, what were the changes and how did they affect your participation?

Customer Profiles and Study Types

- 10) [For installation contractors:] What types of measures do you most frequently install for customers of this program? (Probe: HVAC, food service, insulation, weatherization, lighting, other?)
[For vendors/distributors:] What types of equipment do you most frequently sell to customers of this program? (Probe: HVAC, food service, insulation, weatherization, lighting, other?)

- 11) How often does a project involve a single measure versus multiple measures?
- a) Have you noticed any trends regarding single measure projects versus more comprehensive retrofits? If yes, what do you think is causing this? (Probe on rebate levels/changes, economic conditions, integrated technologies, etc.)
- 12) Have you noticed any trends in the types of customers (i.e., sectors or types of businesses) that are participating in the program?
- 13) Are there certain types of customers (sectors or business types) that you think are not well served by the current program design? Why is that?

Customer Experience with the Program

Now we have some questions about your customers' experience with the program.

- 14) Overall, how easy do you think it is for customers to complete a project through the **Standard** track of the Existing Buildings program?
- 15) And how easy do you think it is for them to complete a project through the **Custom** track of the Existing Buildings program?
- 16) What are some of the most common challenges customers face when implementing a retrofit project through this program? (Probe: are there any common issues that cause delays or cancellations of projects?)
- a) Do the challenges differ by Standard and Custom projects?
 - b) [Probe if not already mentioned:] Have customers had any difficulty in getting projects approved by decision makers at their company?
 - i) If yes, for which customer types is this a key barrier?
- 17) And how effectively does the program help customers overcome those challenges?
- 18) How do you think your customers perceive Energy Trust? And how do they perceive the Existing Buildings program, specifically?

Marketing and Communications with PMC and Energy Trust

- 19) How do you use the availability of the Existing Buildings program in your marketing? Which Energy Trust materials, if any, do you use in your marketing?
- a) What types of customers do you focus on, if any?
- 20) (If contractor is a Trade Ally): Do you make use of Energy Trust's Trade Ally cooperative marketing funds for your own marketing purposes?

- a) If yes:
 - i) What type of marketing do you do with those funds? (Probe: print, tv, radio ads, flyers, etc.)
 - ii) What amount of funds did you use in 2014? In 2015?
 - b) If no:
 - i) Why have you not used the coop marketing funds offered by Energy Trust?
- 21) (If contractor is **not** a Trade Ally): Are you aware of the coop marketing funds that Energy Trust has available to its Trade Allies?
- a) (If aware): Is this something that would be valuable to you and your firm?
- 22) What do you think of the marketing done by Energy Trust for this program overall?
- 23) How do you think the marketing of the program could be improved?
- 24) Are you getting the support you need from Energy Trust to participate in the program? (Probe on whether questions they may have are answered/resolved in a timely manner, if they receive program updates in a timely manner, if they have easy access to all the forms and documents they need, etc.)

Program Trainings and Communication

- 25) Have you participated in a training session or workshop for the Existing Buildings program?
- a) If yes: How did that go? Did it adequately prepare you to work on projects for the program?
- 26) (If contractor is a Trade Ally): Do you receive the Insider Newsletter distributed by Energy Trust to Trade Allies?
- a) If yes: Do you read these newsletters and do they provide value to your firm?
- 27) How satisfied have you been with Energy Trust's communication with you regarding the program? Why do you say that?
- 28) Is there additional program assistance you'd like to have from Energy Trust?

Program Processes

- 29) How do you typically get leads on Existing Buildings projects? Do projects typically come from your existing customers or do new customers reach out to you for their Existing Buildings project?
- a) How often do customers find you using the Trade Ally list on the Energy Trust website?

- 30) For custom projects that were initially scoped by an ATAC, how does the “handoff” to your company typically occur?
- 31) How has your experience been working with ATAC energy studies and staff? Why do you say that?
- 32) Are the program’s incentive application forms easy to work with?
- a) Do you have any suggestions for improving program forms?
- 33) How satisfied have you and your customers been with the turnaround time for incentive processing? Why do you say that?

Recommendations for Improvement

We just have a few more questions; we’re almost done.

- 34) Do you have any recommendations for improving any program processes? (Probe on improvements to reduce costs or to make the program easier to participate in)
- 35) Do you see any opportunities for new measures that should be added to the program that are currently not offered?

Final Thoughts and Wrap-up

- 36) Overall, how satisfied would you say you are with your involvement in the Existing Buildings program?
- a) If needed: why do you say that?
- 37) Do you feel that the program provides value to your business? Why or why not?
- 38) Are there any other topics or issues we did not cover that you would like to talk about?

To make sure that we can get you your \$50 incentive for talking with us today, can I confirm your name and get the mailing address where it should be sent? [Confirm name and record mailing address]

Those are all our questions. Thanks for your time and good information!

Appendix E – Participant Interview Guide

This appendix contains the interview guide used in conducting interviews with program participants.

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

PARTICIPANT INTERVIEW GUIDE

FINAL 3/17/16

Objectives:

- To gather feedback from participants regarding their experience with the program, challenges they may have faced in participating, and their satisfaction with various aspects of the program.

Audience:

- 30 participants, approximately 20 in Oregon and 10 in Washington

Introduction

Hi, this is [name] calling from Evergreen Economics. We are conducting an evaluation of Energy Trust's Existing Buildings program and would like to talk to you about your experience participating in the program. Do you have about 30 minutes to talk now or should we set up a call for another time? [Continue below, or setup a time to call back]

[If needed:] Our records show that you completed a project in [month and year] that included incentives from Energy Trust for the following improvements: [list measures shown in program data]. These improvements were made at [project address]. Does this sound familiar? If not, is there someone at your company that was involved in this project that we could speak to? [Get correct contact if needed, otherwise continue]

All of your responses will be kept confidential; nothing that you say will be attributed to you in our evaluation.

Respondent Role and Company Information

We'll start with some information about you and your company.

- 1) First, what is your job title?
- 2) Can you briefly summarize your role in the project that received an incentive from Energy Trust's Existing Buildings program?

(Again,) Our records show that you completed a project in [month and year] that included incentives from Energy Trust for the following improvements: [list measures shown in program data]. These improvements were made at [project address].

- 3) Has your company completed more than this one project through the Existing Buildings program?

- a) If yes, please tell me which of the following types of projects and in what year:
 - i) Lighting (if yes enter YEAR) _____
 - ii) Non-lighting Standard (if yes enter YEAR)
 - iii) Non-lighting Custom (if yes enter YEAR)
 - iv) Other (enter equipment type and YEAR)
 - v) Don't know
- 4) Did your company install other major equipment or make improvements in 2014 or 2015 that did not receive an incentive from Energy Trust?
 - a) If yes, what was installed?
 - b) Why did that not receive an incentive?

Program Awareness and Motivations

- 5) How did you first hear about the Existing Buildings program? This is Energy Trust's program that offers incentives to commercial customers who make energy efficiency improvements. [Probe if needed: contractor, ATAC/energy study, Existing Buildings Account Manager, Energy Trust website, building owners/managers association, Energy Trust ad, word of mouth, etc.]
- 6) And what information source was most valuable to you in deciding to participate in the program? [Do not read list of options]
- 7) What, if any, were the main barriers to your being able to participate in the program?
- 8) If the Energy Trust incentives had not been available, how likely would you have been to install the same energy efficient equipment?
 - a) Not at all likely
 - b) Somewhat likely
 - c) Very likely
 - i) Why do you say that?

Program Participation Experience

Now I have a few questions about your experience participating in the program.

- 9) Did you feel that the program requirements and processes were clear and easy to understand?
 - a) If not, what did you have difficulty with? What would have helped you with understanding the requirements or processes?
- 10) On a scale from 1 to 5, with 1 being "very difficult" and 5 being "very easy," how easy do you feel it was to participate in the program?
 - a) Why do you give that rating?

- 11) [If participant completed a Standard project] How did you select the contractor or vendor who provided the improvements for which you received an incentive? [Probe for whether contractor approached them, they used the Energy Trust website, or had existing relationship etc.]
- 12) [If participant completed a Custom project:] Did you have an Allied Technical Assistance Contractor, also called an ATAC, complete an energy study for you to identify energy efficiency improvements?
- 13) [If participant completed a Custom project:] How was the ATAC who completed your energy study selected? [Probe for whether ATAC approached them, they selected ATAC, ICF assigned ATAC, etc.]
- 14) [If participant completed a Custom project:] How influential was your energy study in determining the improvements you chose to make? Please tell me on a scale from 1 to 5 where 1 is “not influential at all” and 5 is “very influential.”
 - a) Why do you give that rating?
- 15) [If participant completed a Custom project:] Did the energy study make any recommendations that you DID NOT implement? If yes, why didn’t you implement those?
- 16) Did you have any difficulty in getting your project completed, either due to hurdles within your company or due to challenges with the program? [Probe: sign-off from internal management staff, program processes, program paperwork, etc.]
 - a) If so, what was the cause of the difficulty and how did you overcome it?
- 17) How did the length of time to complete the project compare to your expectations?
 - a) If shorter or longer than expected, what do you believe accounted for the difference?
- 18) [If participant is in Washington:] Did you have any trouble getting a rebate from Clark PUD for any improvements in your project that provided electricity savings?
 - a) If yes, what was difficult about that process?
- 19) Did the contractor or ATAC you worked with inform you about other incentives available through the Existing Buildings program or other Energy Trust programs?

Participant Satisfaction

Now I have a few questions about your satisfaction with various aspects of the program. For all questions, please tell me how satisfied you are on a scale from 1 to 5 where 1 is “not at all satisfied” and 5 is “very satisfied.”

[For any rating less than a 4 ask: "Why do you give that rating?"]

- 20) How satisfied were you with:
- a) [If participant completed a Custom project:] The energy study you received?
 - b) [If participant completed a Custom project:] Your interaction with the ATAC that conducted your energy study?
 - c) The installation contractor or vendor/distributor that you worked with?
 - d) The ease of preparing the incentive application?
 - e) The incentive amount you received?
 - f) The time it took it to process and receive your incentive?
 - g) The performance of the measure or measures for which you received the incentive?
 - h) The program overall?
- 21) How likely are you to recommend the program to other businesses? Please tell me on a scale of 1 to 5 where 1 is “not at all likely” and 5 is “very likely.”

Customer Practices and Plans

Now I have a few questions about your company’s energy use practices and plans for future upgrades.

- 22) Does your company have a strategic energy management plan in place?
- 23) Does your company have plans to make any additional changes or upgrades to equipment in the next two years?
- a) If so, how likely are you to pursue incentives through Energy Trust for those improvements? Would you say not at all likely, somewhat likely, or very likely?
 - i) If not at all likely, why is that?

Recommendations for Improvement and Wrap-Up

We just have a couple more questions; we’re almost done.

- 24) Do you have any recommendations for improving the program? [Probe on improvements to make the program easier to participate in, types of equipment eligible for incentives, incentive levels, payment process, etc.]
- 25) Are there any other topics or issues regarding the program that we did not cover that you would like to talk about?

Those are all our questions. Thanks for your time and good information!

Appendix F – Nonparticipant Interview Guide

This appendix contains the interview guide used in conducting interviews with nonparticipants.

ENERGY TRUST EXISTING BUILDINGS PROCESS EVALUATION

NONPARTICIPANT INTERVIEW GUIDE – Lighting-Only Participants

FINAL 4/8/16

Objectives:

- To gather feedback from nonparticipants on why they have not participated in the program and how Energy Trust can best engage these customers.

Audience:

- 10 nonparticipants that have not participated in the Custom or Standard tracks of the program

Introduction

Hi, this is [name] calling from Evergreen Economics. Our firm has been hired by Energy Trust of Oregon to conduct an evaluation of their program that offers incentives and services to commercial customers for installing energy efficient upgrades. We are contacting you because Energy Trust would like to know how they can better serve their commercial customers. We'd like to speak with someone at your company who is involved in making decisions about energy efficient upgrades. Would that be you or someone else at your company? [Continue once correct contact is on the line]

[Repeat intro above if new contact, then:] Do you have about 15 minutes to talk now or should we set up a call for another time? [Continue below, or setup a time to call back]

[If needed:] This is an evaluation of Energy Trust's program that offers incentives and services to businesses that purchase and make energy efficient upgrades such as lighting, HVAC, insulation, food service equipment, insulation, etc. Energy Trust is interested in hearing from commercial customers that have installed lighting through the program but not other energy efficient upgrades.

All of your responses will be kept confidential; nothing that you say will be attributed to you or your company in our evaluation.

Confirm Respondent is Nonparticipant

- 1) Before we start, can I confirm with you that your company has only received an incentive from Energy Trust for lighting? [If needed:] Our records show that you completed a lighting project in [month and year of project] that included an incentive from Energy Trust.
 - a) [If confirmed, continue to Q2]
 - b) [If respondent says they did not receive any incentive, continue with questions from "true nonparticipant" interview guide]
 - c) [If respondent has received an incentive for something other than lighting:] Thank you for your time but we're looking for businesses that have not received an incentive from Energy Trust for anything other than lighting. Those are all the questions I have for you today.

Respondent Role and Project Information

Thanks. Let's start with some information about you and your company.

- 2) First, what is your job title?
- 3) Can you briefly summarize your role in the lighting project that received an incentive from Energy Trust's program?

(Again,) Our records show that you completed a lighting project in [month and year] that included incentives from Energy Trust.

- 4) Has your company completed more than this one lighting project through the Energy Trust program in the last five years?
 - a) If yes, please tell me which of the following types of projects and in what year:
 - i) Lighting (if yes enter YEAR) _____
 - ii) Other (enter upgrade type and YEAR) – [END INTERVIEW IF THEY HAVE RECEIVED OTHER INCENTIVES: Thank you for your time but we're looking for businesses that have not received an incentive from Energy Trust for anything other than lighting. Those are all the questions I have for you today.]
 - iii) Don't know
- 5) Did your company install other major equipment or make upgrades in the last five years that did not receive an incentive from Energy Trust?
 - a) If yes, what was installed?
 - b) Why did you not pursue an incentive for that upgrade?

Program Awareness and Perceptions of Energy Trust

- 6) How did you first hear about the Energy Trust program? [If needed: This is the program that provided you with an incentive for your lighting equipment.]

[Probe if needed: contractor, equipment vendor/distributor, energy auditor/energy study, Energy Trust Account Manager, Energy Trust website, building owners/managers association, Energy Trust ad, word of mouth, etc.]

- 7) And what information source was most valuable to you in deciding to participate in the program? [Do not read list of options]
- 8) How satisfied are you with your experience with the program overall? Please tell me how satisfied you are on a scale from 1 to 5 where 1 is "not at all satisfied" and 5 is "very satisfied."
 - a) Why do you say that?

- 9) At the time you received your lighting incentive, did the contractor or Energy Trust program staff tell you about incentives available for non-lighting measures? If so, which ones did they tell you about?
- 10) Have you considered any of the measures they told you about? If yes, when do you think you might install those? If no, why not?
- 11) Are you aware of any other Energy Trust opportunities, either for commercial businesses or residential customers?
- 12) [If aware of any other opportunities:] How likely are you to participate in any of these programs in the future? Would you say not at all likely, somewhat likely, or very likely?
- a) Why do you say that?
- 13) What is your perception of Energy Trust offerings in general?
- a) Why do you say that?

Challenges and Future Prospects

- 14) What challenges, if any, prevent you from installing energy efficient upgrades?
- 15) What could help you overcome those challenges?
- 16) Does your company have plans to make any additional changes or energy efficient upgrades in the next two years?
- a) If so, what types of energy efficient upgrades are you likely to make?
- b) And how likely are you to pursue incentives or services through Energy Trust for that upgrade? Would you say not at all likely, somewhat likely, or very likely?
- i) If not at all likely, why is that?
- 17) What type of incentives or services from Energy Trust would you be most interested in? [Probe on: energy studies to identify upgrades, incentives for equipment: HVAC, insulation, hot water, appliances, refrigeration, food service, controls, etc.]
- 18) What, if anything, would make the Energy Trust offerings more appealing to you?

Final Thoughts and Wrap-Up

We just have a couple more questions; we're almost done.

- 19) Is there anything we haven't already discussed that Energy Trust can do to serve you better? [Probe on improvements to make the program easier to participate in, types of products eligible for incentives, incentive levels, payment process, etc.]



20) Is there anything else regarding Energy Trust and its offerings that you would like to talk about?

Those are all our questions. Thanks for your time and good information!