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With:



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1 Executive Summary

This report covers the process evaluation of the 2022 and 2023 Existing Buildings Program ("the EB Program" or "the Program"), which provides financial incentives and technical support for energy-saving projects to qualifying businesses in Oregon and Washington. This is the first process evaluation of the EB Program since the 2019 evaluation of the 2017 and 2018 program years.

The program is implemented by a Program Management Contractor (PMC) with oversight by Energy Trust program management and marketing staff and operates through a network of trade allies and Allied Technical Assistance Contractors (ATACs) who help identify and implement energy efficient measures. In addition, Energy Trust coordinates and collaborates with funding utilities, certain state agencies, and community-based organizations (CBOs) that help Energy Trust serve their constituencies.

The goal of this process evaluation was to obtain feedback on program design and implementation that can be used by Energy Trust to deliver the Existing Buildings Program more effectively and efficiently. This included evaluating the effects of three key changes that occurred in 2021: the transition to a new PMC; the inclusion of multifamily projects, previously served by a separate program; and the removal of lighting measures from the Program for inclusion in a new Business Lighting Program.

Energy Trust identified multiple research questions, organized under four topic areas: program history, program operations, program experience, and future opportunities. This process evaluation addressed the research questions through a review of program documentation and activities and interviews with multiple groups: 25 program and implementer staff, 9 contacts from key stakeholder groups (funding utilities, collaborating state agencies, and CBOs), 10 ATACs, 48 non-lighting trade ally and non-trade-ally contractors, and 67 program participants.¹

The findings are organized under the four research question topic areas.

1.1 Program History

The ADM team investigated the effects of the transition to a new PMC (TRC) and the two major Program changes — the establishment of a separate Business Lighting Program and the incorporation of the multifamily sector into the Existing Buildings Program.

Findings from interviews with staff, ATACs, and contractors largely indicated satisfaction with the transition to a new PMC. Some challenges were identified relating to: 1) initial bottlenecks in serving customers, resulting from a compressed transition timeline; and 2) the quantity and complexity of subcontracts associated with complying with Energy Trust's new, as of 2021, Supplier Diversity Policy (SDP).

Staff reported that removing lighting from Existing Buildings and creating a stand-alone Business Lighting Program in 2021 was very disruptive to staff and customers and ultimately, Energy Trust chose to fold

¹ Lighting contractors were not interviewed for this evaluation as lighting projects in 2022 and 2023 were managed through the Business Lighting Program rather than the Existing Buildings Program.

downstream lighting measures back into Existing Buildings in Q3 of 2023 with full implementation happening in January 2024. Our data collection with market actors and participants (Section 6) did not indicate any challenges related to removing downstream lighting measures from Existing Buildings, although, as noted above, this evaluation excluded lighting contractors and so may not be able to present a complete picture from the market's perspective. Multiple Energy Trust and TRC staff persons, however, reported that removing lighting from the Program made it harder to engage with customers as lighting was often a "gateway" to other energy-saving projects. According to staff, prior to 2021, lighting served as an initial and accessible step for businesses to take before committing to other energy saving projects. Merging downstream lighting back into Existing Buildings provides that gateway from lighting to other energy saving projects subsequently and the possibility of recruiting more comprehensive energy saving projects.

According to staff, incorporating multifamily buildings measures into Existing Buildings has been challenging. Initially, multifamily properties and measures did not receive enough Program support, largely because the Program did not fully realize that the newly served populations would require a different approach compared to the Program's traditional populations. Staff reported recent efforts to increase support for the multifamily component of the program and they indicated that multifamily work has gone more smoothly in the latter half of 2023 and early 2024 compared to the 2021-22 timeframe. This is a result of the attention program staff have paid to multifamily including working with the residential program on outreach efforts. Feedback from the interviewed ATACs and contractors identified few or no downsides to the incorporation of multifamily projects into the Existing Buildings Program.

1.2 Program Operations

The research produced several key findings relating to program operations.

Contacts identified multiple Program successes. In particular, program staff were positive about efforts to achieve DEI goals, citing TRC's use of diverse suppliers for program implementation and TRC's outreach to priority populations, including non-English speakers, tribal populations, and rural populations. Contacts cited success in working with community-based organizations (CBOs) and affordable housing community staff and developing non-English collateral and hiring Spanish-speaking energy advisors.

Program staff also were largely positive about cross-program collaboration and referrals, and information from some market actor and program participant interviews provides evidence of successful cross-program referrals, although opportunities for improvement exist.

Feedback also pointed to successes with: 1) increasing interest in smart thermostats; 2) trade ally development; and 3) increasing the diversity of offerings in Southwest Washington.

Some difficulties existed relating to the transition to the new PMC, including with communication between Energy Trust and the PMC shortly after the transition. These included issues outside the control of the new PMC (a large backlog of projects from the outgoing PMC) as well as others more directly related to the new implementation team. The PMC has struggled to manage the quantity and complexity of its multiple subcontracts it engaged in to meet Energy Trust's 2021 Supplier Diversity Policy (SDP). This has had impacts on coordination between Energy Trust and outreach subcontractors, outreach contractor

performance, and measure development. For example, one staff person noted that one subcontractor needed training specific to working with tribes.

The Program also has had challenges in efforts to reach small businesses. They have tried developing a no-cost pilot program for commercial heat pumps in rural areas, providing smart thermostats via a direct install effort, and collaborating with the Business Lighting program on outreach efforts to small businesses. The no-cost pilot has been partially successful but would require a co-funding arrangement with other agencies to be cost effective, and some staff expressed concern about the ability to transition to a co-funded arrangement. While the pilot phase has led to installations of efficient equipment in rural areas, it is unclear whether those types of projects will persist without a co-funder. Outreach efforts with Business Lighting were well-intentioned but often difficult to operationalize, and finding affordable measures that comply with cost-effectiveness tests has been difficult.

Another challenge related to the use of community-based liaisons (CBLs) to help guide the Program to achieve its DEI goals. Program staff reported the purpose of CBLs was to help provide ways to better serve priority customers, including by reviewing program marketing material to make sure they were culturally appropriate. Staff indicated there was a misalignment between what the program was expecting from the CBLs and the feedback they were receiving from CBLs. Ultimately, the CBL network was paused in 2024 because the CBL process was not working as envisioned.

Other identified operational challenges related to the establishment and tracking of DEI goals and metrics, carrying out timely process revisions and database updates needed to merge multifamily into the Program, and changes to incentive check processing that made it difficult for customers to document the receipt of incentives.

1.3 Experience of Customers, Market Actors, and Collaborators

The research produced the following key findings relating to the experiences of customers, market actors, and program collaborators.

Customers. Interviews with program participants provided insights into how customers learn about the program and make decisions about equipment upgrades. Consistent with prior research, results showed that contractors and vendors — typically found through online searches — are key players in making customers aware of the Program. They also are key players in helping identify equipment to install for Standard projects but are less involved in Custom and Direct Install projects. Program representatives played larger roles in the latter project types, conducting site assessments to identify needs, assessing savings potential through technical studies or less formal means, and identifying available incentives.

Contractors and program representatives frequently helped with incentive applications. The types of assistance ranged from providing instructions on how to complete the application to providing supporting documentation to completing the application on behalf of the customer, and a large majority of customers said such assistance was helpful.

Participating customers indicated generally positive experiences with the overall participation experience, and nearly all those with plans for additional energy upgrades said they would work with Energy Trust on such projects.

Finally, analysis of the participant interviews found that a higher percentage of Direct Install participants were first-time participants. Thus, the Direct Install offering has been successful at reaching out to one group of priority customers – small businesses. As indicated below, feedback from ATACs and contractors suggests some additional efforts to reach small businesses may be valuable.

ATACs. ATACs largely reported positive experiences with the current PMC. Most indicated the transition to the new PMC was uneventful or even "seamless." Eight of the 10 interviewed ATACs offered positive or neutral comments about the new PMC, with the positive comments focusing on improvements to forms and templates or more generally to improved operations. The context of comments suggests that the primary value of these improvements has been to make clearer what is expected in a technical study.

However, five interviewed ATACs noted various concerns, two of whom appeared, on balance, to be dissatisfied with the new PMC. Specific concerns related to the consistency of the staff's skill level, a perceived change in how studies were assigned, and long project review times.

Half of the interviewed ATACs were unaware of any specific program goals regarding outreach to reach priority populations, and those who were aware of such goals did not recall receiving specialized training about identifying minority-owned businesses. Eight respondents were unaware of any specific Energy Trust outreach strategies for reaching priority populations, although two noted that studies targeting priority communities received a higher priority from the Program than did some other studies.

Four of the 10 interviewed ATACs described specific instances when Program staff referred the customer to another Energy Trust program to do additional work, all four of whom reported that the referral process was smooth.

ATACs also largely reported that their customers were satisfied with the technical studies, although a few ATACs identified some challenges, mainly relating to communication from the PMC or its subcontractors.

Trade allies and other contractors. Consistent with customer reports, trade allies and other contractors often reported assisting with incentive applications – Program trade allies were much more likely to complete the applications for customers than were other contractors, and HVAC contractors were more likely to do so than other contractors.

Contractors generally reported positive experiences with the Program. In particular, Program trade allies said working with the Program helped their business. About one-third of the interviewed contractors highlighted their interactions with Program staff as helpful or responsive to questions.

However, about one in six interviewed contractors (trade allies as well as non-trade allies) said that at least some incentives were insufficient. This made up about half of the contractors who reported doing building shell work.

The same number of contractors (mainly trade allies but some non-trade allies) offered comments about the application process. The nature of the comments tended to differ for the two groups, with trade allies more likely to indicate a desire for an online portal for completing or checking the status of completed applications, and non-trade allies more likely to comment that more generally about the long or complicated application forms or process.

Nearly as many reported some level of insufficiency in communication with Energy Trust. Again, both trade allies and non-trade allies offered such comments, with the nature of the comments tending to

differ for the two groups. Trade allies' comments tended to be more specific, focusing on not knowing who the key program contact is for a specific type of project, while the non-trade allies' comments were more about a lack of program information or delays in communication from Energy Trust.

Community Based Organizations (CBOs). CBO contacts reported good communication with Energy Trust and an effective approach to engaging priority populations. Contacts pointed to hands-on engagement with program participants and frequent communication with Energy Trust and PMC staff. They also particularly highlighted the fact that Energy Trust gave them the lead in outreach and customer engagement but provides them the resources they need to carry out those activities. Their strong relationships with community members and their position as a trusted source of information and services means that community members are more likely to receive services through engagement with CBOs than through engagement with Energy Trust. Contacts suggested that application materials be made available in additional languages, and one contact also suggested that Energy Trust share more promotional materials with CBOs.

Funding utilities. Utility contacts characterized their relationship with Energy Trust and the Existing Buildings program positively and generally indicated that Energy Trust is doing a good job targeting priority populations. Two respondents, however, indicated suggested some changes to the nature of their communication with Energy Trust (e.g., including program staff in meetings) to provide more information into when and why programmatic changes are occurring and more input into the planned changes.

Collaborating state agencies. Representatives from the two collaborating state agencies underscored how much simpler and easier programs have become because of their formal partnerships with Energy Trust. Contacts pointed to greater clarity about available services for their customers (school districts and housing managers), a streamlined application process, and increased benefits to the communities served, as working together toward shared goals has allowed them to not only serve more customers but also provide more comprehensive and robust offerings. The primary concern they identified was that Energy Trust sometimes changes incentive amounts mid-project, due to funding cycle schedules.

1.4 Future Opportunities

Program staff identified several energy savings measures or services that are in development or being considered. These include continuation and expansion of efforts that are currently ongoing, such as the recently implemented Multifamily SEM effort and carrying out lighting and smart thermostat direct-install efforts in rural areas. It also includes the possibility of transitioning the no-cost pilot program for commercial heat pumps in rural areas to a regular offering, co-funded by other agencies. Staff also identified some possibilities that are not necessarily in current planning but may be part of future efforts. These included using utility usage data to identify energy saving opportunities and targeting customers with marketing to realize those opportunities; working with schools and other institutions that are pursuing electrification projects; and working to understand how the Program can be leveraged to support Energy Trust's work on Solar For All.²

² Energy Trust received grant money from the U.S. Environmental Protection Agency (EPA) to support adding solar projects across Oregon, including in multifamily properties. Source: *Oregon receives \$86 million to help more*

Both ATACs and contractors identified that saving money continues to be the primary driver of investing in energy efficiency. Several ATACs also identified stronger building codes as a driver, and one ATAC suggested that concerns about climate change and the social impacts of high-energy buildings will motivate greater efforts to reduce energy use, particularly among institutions with health- or social-oriented missions.

ATACs and contractors identified a range of opportunity areas for energy savings. Some of the suggestions related to specific customer types, such as K-12 schools, multifamily properties, and high energy users, such as data centers and server farms. Other opportunity areas were broadly related to specific end uses, such as more advanced building management systems, improved refrigerants, continued use of heat pumps to replace other heating technologies, and improvements in electric heating technologies in general to facilitate increased building electrification. In two cases, the suggestion was about achieving certain needs through improved equipment – specifically, achieving better indoor air quality and noise reduction through equipment improvements. Respondents also identified retro commissioning as an opportunity area.

1.5 Conclusions and Recommendations

The information collected from our research points to a generally successful program despite some challenges with the transition to a new PMC and with some of the program changes that occurred in 2021. The findings summarized above and detailed in the body of this report produced the following conclusions and recommendations.

Conclusion 1: The Program has made achievements towards addressing Energy Trust's DEI goals. Energy Trust and the implementer have supported DEI work by doing things like hiring bilingual energy advisors, expanding their work with CBOs, providing marketing collateral in multiple languages, offering food and childcare services along with the multifamily SEM offering, and establishing relationships with affordable housing agencies. Furthermore, the PMC sought to work with a range of diverse suppliers to implement the program and worked with CBLs to inform program development. These efforts began a process that can be built on in the future. However, some of the many efforts taken did not go as smoothly as hoped, in particular: 1) the use of CBLs to help develop culturally appropriate outreach material; and 2) field staff's interactions with tribal communities. The decision to pause the CBL network in 2024 allows Energy Trust and TRC to assess whether and how CBLs can be used more effectively or whether a different approach may be appropriate. While several staff contacts suggested the Program has had success in developing culturally appropriate collateral (which the CBLs were meant to assist with), it may still be possible to use outside assistance to improve on them as well as to help with training field staff to work with tribal groups.

Recommendation 1a: Energy Trust and TRC should assess whether it may still be valuable to use the CBL network for the purpose of helping develop cultural appropriate outreach material or should examine alternative approaches to doing so; if it is concluded that the CBL network is still

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households add solar. Accessed on January 29, 2025. https://blog.energytrust.org/oregon-receives-86-million-to-help-more-households-add-solar/

valuable, Energy Trust and TRC should ensure that the scope of work and expected deliverables are clearly understood.

Recommendation 1b: Energy Trust and TRC also should assess the training needs of field staff in how to work with tribal communities and identify the most appropriate training sources, including whether the CBLs may be among those sources.

Conclusion 2: The addition of multifamily measures and exclusion of lighting measures – which started in 2021 at the same time as the transition to the new PMC – resulted in many challenges for program staff. Although the changes in the program implementation did not appear to affect how trade allies and non-trade ally contractors worked with Energy Trust, the challenges that program staff experienced could have been exacerbated by the simultaneous change in implementers. Recent staff efforts, including working with the residential program on outreach efforts, appear to have decreased the challenges relating to the multifamily component of the Program in the latter half of 2023 and early 2024 compared to the 2021-22 timeframe. Further, feedback from the interviewed ATACs and contractors identified few or no downsides to the incorporation of multifamily projects into the Existing Buildings Program.³

Recommendation 2: Energy Trust should consider limiting the number of program changes that are implemented at any given time, to allow program staff to absorb and adapt to the changes. Program staff should prioritize planned changes and roll them out over a period of time – perhaps a minimum of 6 months and as much as a year for each change. If feasible, it may be advisable to engage a change management consultant to ensure that proposed program changes are thoroughly discussed internally, with all potentially involved program staff, to identify and plan to mitigate potential internal challenges.

Conclusion 3: Incorporating multifamily measures and properties into Existing Buildings has mostly worked well. There were some initial challenges to incorporating multifamily work into Existing Buildings, such as a lack of marketing resources directed at multifamily, but the Program is addressing those challenges. Additionally, the Program is working on identifying measures and services that work for multifamily, including the SEM for multifamily services, and continuing to work with state agencies to find co-funding opportunities for measures that do not meet cost-effectiveness tests when funded solely by one organization.

Recommendation 3: Continue to look for co-funding opportunities and processes that will support adoption of efficiency measures in multifamily properties. Energy Trust and state agencies have started the process to work together towards this end, however, the state agencies funding cycles differ from Energy Trust's funding cycle which has resulted in changes in incentives mid-project, which can cause confusion and frustration among participants. Continue to look for ways to overcome these funding cycle challenges such as locking in an incentive amount early in the process and not changing that incentive amount mid-project.

³ We also note that the COVID pandemic also could have exacerbated the situation, as it affected how work was done (more remote working and meeting). This possibly contributed to the shortened transition timeframe or the turnover in PMC staff. However, we are not certain how this would affect our recommendations, other than to avoid significant program changes when major external events are occurring.

Conclusion 4: Contractors and ATACs are generally satisfied with their participation with Energy Trust, but Energy Trust may be able to improve contractors' program experience. Most trade allies noted that their involvement with Energy Trust has helped their business opportunities, and many contractors appreciated the helpful interactions they had with Energy Trust representatives. However, a subset of contractors (both trade allies and non-trade allies) offered some suggestions for improvement, the most common of which were to increase incentives (especially for windows), improve communication with Energy Trust, and improve the application process in various ways (e.g., offering online applications and improving explanations of what qualifies).

Recommendation 4a: With the understanding that Energy Trust and TRC attempt to establish incentive levels that are high enough to induce the adoption of energy efficient technologies in a cost-effective manner, we encourage Energy Trust and TRC to review incentives for windows and possibly other shell measures.

Recommendation 4b: Energy Trust and TRC should review outreach to non-trade allies to identify opportunities for improvement. In particular, the program may consider sending periodic e-blasts to *all* known non-trade ally contractors — or, at least, all those that have done any Energy Trust projects — with current program information. The e-blasts should include an option to unsubscribe from further contact.

Recommendation 4c: Energy Trust and TRC should review the information included on outreach materials (e.g., *The Insider* e-newsletter) sent to trade allies to ensure that they identify all key program contacts for various project types, if they do not already do so.

Recommendation 4d: Energy Trust and TRC should continue to review the application forms and processes to ensure they are clear and as easy to complete as possible. This may particularly help with obtaining more applications through non-trade ally contractors, as they were more likely to comment on this concern. This may also argue for more proactive communication with this group (see Recommendation 4b) to provide clear information on the application process.

Recommendation 4e: Energy Trust and TRC should consider the feasibility and benefits of creating an online portal to allow contractors to check the status of submitted applications.

Conclusion 5: Non-HVAC contractors, especially building shell contractors, are not as likely to complete incentive applications for customers, something almost all HVAC contractors do. In some cases, this may reflect important differences in the contractor-client relationship between HVAC and other contractors. HVAC contractors may be willing to invest the time to assist with application because doing so represents a small proportion of the project cost and may help ensure continued work with the client (e.g., to maintain the equipment). By contrast, the commodity-like nature of some other measure types may mean that additional time and effort beyond installation may cut into a contractor's margin.

Recommendation 5: Energy Trust may want to investigate reasons why non-HVAC contractors are less likely to help complete incentive applications. What is it about building shell projects or contractors that make them resistant to completing incentive paperwork, or why do HVAC contractors see it as important to complete the incentive paperwork? Learning this may help Energy Trust and the PMC devise approaches to incent such contractors to assist with

applications, increasing customer satisfaction and possibly increasing the number of projects completed.

Conclusion 6: Energy Trust decided to apply the SDP to the EB contract in 2021, requiring the implementer to use at least 20% of its contract award with diverse suppliers. To satisfy that requirement, the new implementer engaged 17 different firms, many which had not worked with Energy Trust before and may not have had a full understanding of Energy Trust and their programs. The implementer showed commitment to complying with the SDP by finding so many suppliers. However, in that process, they may have selected more supplier subcontractors than they could reasonably manage. Furthermore, some of these subcontractors may have needed more guidance or support, especially in the early phases of the implementer's overseeing of the Program. Progress has been made in improving some of the challenges with subcontractors for the current contract, but the potential remains for similar challenges to arise in future contracts.

Recommendation 6: Energy Trust should require that proposals to provide implementation services include plans to provide adequate orientation, training, and support to subcontractors that may be unfamiliar with Energy Trust programs and requirements. The proposal should further demonstrate that the primary contractor and any proposed subcontractors have the capacity to provide the required orientation, training, and support.



MEMO

Date: 3/25/2025

To: Energy Trust Board of Directors

From: Patrick Urain, Senior Program Manager, Commercial

Amanda Zuniga, Program Manager, Commercial

Leila Shokat, Evaluation Project Manager

Subject: Staff Response to Process Evaluation of the 2022-2023 Existing Buildings Program

The Process Evaluation of the Existing Buildings Program (the EB program or the program), conducted by ADM, sought to understand how the program has evolved in recent years, document key successes and challenges, and identify opportunity areas for the program. To address these objectives, ADM interviewed Energy Trust and Program Management Contractor (PMC) staff, and external collaborators the program works with on marketing, co-funding efficiency projects, and promoting offers to priority customers. Additionally, ADM interviewed allied technical assistance contractors (ATACs), trade ally and non-trade ally installation contractors, and customers who participated in the program between 2022 and 2023. All interviews were conducted in the second half of 2024. Findings and recommendations from this evaluation will inform the development of the upcoming request for proposals for program management, especially with regards to subcontractor training and internal resource planning, discussed below.

The evaluation found overall, customers, collaborators and market actors have very positive experiences with the program. While the program experienced some internal challenges in recent years with organizational changes and a transition to a new PMC, interviews indicated the support customers and trade allies receive from the program was not noticeably disrupted.

In 2021, the Existing Buildings Program expanded to include multifamily customers, previously served by a standalone program. The transition presented some initial challenges, with not enough internal resources focused on the multifamily sector. However, staff reported improvements as the program strengthened its multifamily focus, introduced new offers like Strategic Energy Management (SEM) and collaborated with the Residential Program on marketing efforts. The integration of multifamily into Existing Buildings went largely unnoticed externally, highlighting the program's ability to adapt while keeping the market stable. Looking ahead, ensuring the program has the resources it needs will be key to sustaining its success and continuing to serve the multifamily sector effectively.

An area of emphasis for the Existing Buildings Program in recent years has been evolving the program's approach to Anti-racism, Equity and Inclusion (AEI). Based on guidance from community partners in 2022, the program shifted to the use of the term AEI to focus beyond diverse representation and highlight that lack of racial diversity in both program delivery and participation may be due to systemic inequities such as discrimination, structural inequalities and bias. The program's AEI work spans multiple areas of the program including outreach, marketing and the design of offers.

The evaluation highlighted areas where the program has worked to advance AEI goals and where the program is continuing to develop and improve on this work. Success areas included expansion of language access in outreach materials, hiring bilingual outreach staff and energy advisors, and working alongside and deferring to community-based organizations (CBOs) to reach priority customers through trusted, established networks. The program is constantly learning and improving how it brings in diverse perspectives to shape its design. Although the Community-Based Liaison (CBL) Network was discontinued in 2024, program staff and management continue to work with small businesses and CBOs to help ensure offers reflect the needs and experiences of historically underserved communities. This approach is evolving as the program innovates and learns best practices, aiming to create more inclusive, effective solutions while staying committed to AEI.

Energy Trust's Supplier Diversity Program plays a crucial role in its commitment to better serving underserved and underrepresented communities while creating more opportunities for small, diverse and community-based businesses. Existing Buildings was the first major Energy Trust program to adopt new supplier diversity guidelines in 2021. This evaluation highlights opportunities to further improve how programs can work with diverse suppliers, benefiting both customers and workforce development in our industry. The program will ensure program management contractors have clear internal communication channels, a robust training and onboarding process for newer subcontractors, and will explore opportunities to simplify contracting processes.

The evaluation also identified opportunities to improve trade ally experience with the program. These include streamlining forms and application processes, providing an online application tracking portal, and offer program contact points for trade allies to reach out to with specific questions. The program is exploring options to improve the customer and trade ally experience through digitization. This feedback and the related recommendations will help the program understand how digitization could improve the trade ally experience.

The evaluation demonstrated the Existing Buildings Program's co-funding relationships with state agencies and CBOs have strengthened in recent years. Collaborators report positive experiences working with Energy Trust and believe these strong co-funding relationships have enabled customers to pursue efficiency projects more easily. One challenge highlighted in the evaluation is Energy Trust's budgeting timelines do not always match project timelines, which can sometimes lead to changes in incentive levels mid-project. With a transition to multiyear planning and a focus on digitization, the program will explore ways of addressing this challenge, possibly including a process to reserve incentives for a project, to avoid mid-project incentive level changes. Addressing administrative challenges will continue to be important as the program seeks additional co-funding opportunities in the future.

One area that continues to be a challenge for the program is serving small business customers. The evaluation highlighted the direct install channel as a success area in reaching new small business customers, and the program continues to explore new direct install offers. The program is researching best practices and innovative approaches used by energy efficiency initiatives at the local, regional and national levels to serve small business customers. This includes examining outreach strategies, tailored incentive structures and program delivery models that effectively engage these customers in other markets.

2 Introduction

This report covers the process evaluation of the 2022 and 2023 Existing Buildings Program ("the EB Program" or "the Program"). This is the sixth process evaluation of the EB Program and the first since the evaluation of the 2017 and 2018 program years, completed in 2019. The EB Program now includes the multifamily sector, which is covered in this evaluation. The Existing Multifamily Program was a separate program until 2021. Its most recent process evaluation was completed in 2020 and covered the 2018 and 2019 program years.

Implemented by a Program Management Contractor (PMC), with oversight by Energy Trust program management and marketing staff, the Program provides financial incentives and technical support to qualifying businesses in Oregon and Washington, focusing on energy-saving projects. It operates through a network of trade allies and Allied Technical Assistance Contractors (ATACs) who help identify and implement measures for various types of facilities, including offices, multifamily housing, and government buildings. In SW Washington, the Program offers specific gas-saving measures for NW Natural customers, functioning under a different regulatory framework.

The Program features both custom and prescriptive measures for energy savings. Custom projects undergo energy studies conducted by ATACs, while prescriptive measures use established savings estimates reviewed by Energy Trust engineers. Direct Install measures were available, primarily for lighting and smart thermostats, but the Program is now exploring new direct install opportunities.

The Program also includes Energy Performance Management services, which comprises Commercial Strategic Energy Management, Commercial Pay-for-Performance, and Building Operator Certification. However, those services are being evaluated separately and were not included in the scope of this evaluation.

Energy Trust coordinates and collaborates with several outside organizations to leverage the support that each offers to increase energy efficiency in a variety of building types:

- Energy Trust coordinates with Clark Public Utilities to promote custom projects in Southwest Washington and share costs and savings from those projects.
- Since 2020, the EB Program has worked with the Oregon Department of Energy's (ODOE) Energy Efficient Schools Program to support energy efficiency projects in K-12 public schools.
- Since 2020, the EB Program has worked with the Oregon Housing and Community Services' (OHCS)
 Oregon Multifamily Energy Program to support efficiency upgrades for income-qualified electric multifamily customers.
- The EB program collaborates with community-based organizations (CBOs) to increase access to program offerings.

The Program underwent several changes in 2021. First, Energy Trust selected a new PMC, TRC, to implement the Program in January of 2021, taking over from the previous implementer, ICF. Currently, TRC works with over 17 subcontractors to deliver program services.

TRC took over the Program as the COVID-19 pandemic was disrupting business operations and while the Program was undergoing two notable changes in design and approach:

- 1. Separation of lighting into a new stand-alone program. Prior to 2021, commercial lighting measures were part of Existing Buildings and in 2021 Energy Trust split those measures into a new program called Business Lighting. Lighting represented most Existing Buildings projects prior to 2021. In 2020 Energy Trust offered bonus lighting incentives to encourage projects during the height of the pandemic. These bonuses resulted in a flood of projects that carried over to 2021 causing further disruption to the transition.
- 2. Inclusion of Multifamily properties and measures into Existing Buildings. Prior to 2021, Energy Trust maintained a stand-alone program for Multifamily properties and measures. This changed in 2021 when Energy Trust chose to integrate these properties and measures into the Existing Buildings Program.

Additionally, in 2021, Energy Trust renewed its focus across all programs, including Existing Buildings, on recruiting individuals and businesses that have historically been underserved by their programs. Energy Trust published a DEI Operations Plan in 2018 and revised it in 2021, around the time TRC took over implementing the Existing Buildings Program. Energy Trust published a DEI Operations Plan in 2018 and revised it in in 2021, around the time TRC took over implementing the Existing Buildings Program. As part of these efforts, Energy Trust developed a Supplier Diversity Policy (SDP) to increase contracts with diverse businesses certified through the Certification Office for Business Inclusion and Diversity (COBID). The SDP⁴ was included in the contracting requirements for the 2021 Existing Buildings Program Management Contract request for proposals, requiring a certain percentage of the value of the contract to go towards SDP qualifying firms. Therefore, the Existing Buildings' PMC contract with TRC was the first program management contract for which the SDP was implemented. The SDP was implemented more widely across large Energy Trust contracts in 2022, and was updated in 2024 to expand the qualification criteria beyond COBID-certified businesses.⁵

This process evaluation documents program changes since the last process evaluations; gives an overview of the Program's current structure, delivery and implementation strategy, and effectiveness in serving customers; and takes a forward-looking approach to understand how the Program needs to evolve to be successful in the future.

The goal of this process evaluation was to obtain feedback on program design and implementation that can be used by Energy Trust to deliver the Existing Buildings Program more effectively and efficiently. Specifically, the evaluation aims to answer the research questions and objectives identified in Table 2-1.

This process evaluation addressed these research questions and objectives through the following data sources and research activities: a review of program documentation and activities and interviews with

⁴ Energy Trust officially adopted the Supplier Diversity Policy in 2022. As they developed the policy in 2020 and 2021, Energy Trust decided to make key parts of it, like the 20% spend on diverse suppliers, part of the contract for the Existing Buildings evaluation.

⁵COBID is an Oregon program that aims to promote diversity, inclusion, and economic opportunities for disadvantaged business enterprises, minority-owned businesses, woman-owned businesses, businesses owned by service-disabled veterans and emerging small businesses.

program and implementer staff, a variety of external collaborators and stakeholders, program participants, both trade ally and non-trade-ally contractors, and ATACs. Lighting contractors were not interviewed for this evaluation as lighting projects in 2022 and 2023 were managed through the Business Lighting Program rather than the Existing Buildings Program .

The remainder of this report is divided into six sections. Immediately following this section, Section 3 describes the research methods. Sections 4 through 7 present the results and findings from the data collection as they pertain to four primary topics identified in in Table 2-1. Finally, Section 8 presents our conclusions from those findings and the recommendations for continued program success.

Table 2-1: Evaluation Research Questions

Торіс	Research Question
Program History	How has the transition to a new PMC for Existing Buildings and a separate program for Business Lighting affected the Program?
	How has the incorporation of Existing Multifamily into Existing Buildings affected the Program?
	What recent changes have been made to the Program, and what changes are planned for the next year?
Program Operations	What successes has the Program experienced? What challenges has the Program encountered? How did they, or do they, plan to address them?
	Is communication between Energy Trust and the PMC effective and timely? Are the right people included in communications and program planning?
	How is the PMC managing its subcontractors? Are roles and responsibilities clearly defined, and is communication flowing well? How has subcontracting affected current operational processes such as program design, marketing, measure development, and outreach?
	How is the Program supporting Energy Trust's Diversity, Equity and Inclusion Operations Plan and ensuring equity in its program offerings?
	How does the EB program support referrals and customer participation in other Energy Trust programs, such as the Residential program, Business Lighting and Renewable Energy?
	How can Energy Trust and/or the PMC improve processes to increase efficiency for the organization and equity for customers?
Experience of Customers,	What strategies is the Program using to reach out to priority customers and trade allies, and how effective have those strategies been?
Market Actors, and Collaborators	What are the experiences of different customers (such as individual market segments, business sizes, etc.) when participating in various EB program offerings and services? What do they see as working well and what could be improved?
	What are the current experiences of the various market actors interacting with the Program – trade allies, non-trade ally contractors, distributors, ATACs, community-based organizations, etc. – and how might they be improved?
	How is the Existing Buildings program working with utilities to promote offerings? What do they see as working well and what could be improved?
	How is Energy Trust working with the Oregon Department of Energy (ODOE) to support energy efficiency upgrades in K-12 public schools? Is the collaboration enabling more measures to be completed?

Торіс	Research Question
Future Opportunities	What are the largest forced on energy efficient projects in the commercial and multifamily market segments right now? What additional drivers are anticipated over the next few years? Where are the biggest opportunities – in terms of market segments, geographic areas, and measures – for the Program over the next five years?
	What energy saving measures or services is the Program developing? Does the Program have the right mix of measures or offerings to achieve its goals?

3 Methods

The ADM team used the following primary data sources to conduct the research discussed in this report:

- Review of program documentation.
- Analysis of program data.
- Interviews with program staff and implementers.
- Interviews with trade ally and non-trade ally contractors.
- Interviews with staff from utilities, ODOE, OHCS, and CBOs.
- Interviews with Allied Technical Assistance Contractors (ATACs).
- Surveys of program participants.

The team used these data sources to address the overall market and program related research themes Energy Trust identified for this project in Section 2.

The next sections describe how we conducted each of these research tasks.

3.1 Document Review

The first task of this research project was to identify, obtain, and review a variety of reports and other program-related documentation. These documents informed our development of the interview guides and provided the evaluation team with important background information throughout the course of the evaluation.

3.2 Program Staff Interviews

One of the early tasks in the evaluation was to conduct interviews with program and implementer staff. In total, the ADM team conducted 11 interviews with 25 staff in roles related to program operations, new initiatives, marketing, outreach, and coordination.

Energy Trust provided the ADM team with a list of 27 potential interviewees: 15 were Energy Trust program staff, one was a consultant to Energy Trust, and 11 were employees of the Program implementer, TRC. The 27 identified staff covered all functional areas related to Program management and delivery:

- Management and operations.
- Engineering and measure development.
- Marketing and outreach.
- Coordination with other Energy Trust programs.
- Coordination with other agencies and with CBOs.

Multiple individuals were identified for each of the above areas.

In consultation with the Energy Trust evaluation staff, we developed in-depth interview guides that covered all topics related to the pertinent research questions identified in Table 2-1, specifically:

The effect of the transition to a new PMC for Existing Buildings.

- The effect of the removal of lighting from the Program.
- The effect of the incorporation of Existing Multifamily into the Program.
- Recent and planned changes to the Program.
- Program successes and challenges.
- Communication between Energy Trust and the PMC.
- PMC management of its subcontractors.
- Support for referrals and customer participation in other Energy Trust programs.
- Ways to improve processes to increase efficiency and equity.
- Strategies to reach out to priority customers and trade allies, and their effectiveness.
- Coordination and collaboration with utilities, ODOE, OHCS, and CBOs.

The interview guide is included in the APPENDIX.

The ADM team completed interviews with 25 of the 27 identified staff, covering all the functional areas identified above. We conducted all interviews via MS Teams between late June and late August 2024.

In addition to addressing the above-identified topics, these interviews informed the development of interview guides and surveys used in primary data collection.

3.3 Interviews with Utilities and Collaborators

ADM conducted interviews with nine contacts of Energy Trust's utility partners, collaborating state agencies, and CBOs.

3.3.1 Instrument Development

In consultation with the Energy Trust evaluation staff, we developed interview guides that covered utilities' and collaborators' perspectives on:

- The nature of their collaboration with Energy Trust.
- The Program's ability to engage priority populations.
- The quality of and satisfaction with their relationship with Energy Trust.
- Suggestions for programmatic changes.

The guides included open-ended questions that allowed the interviewer to ask probing and follow up questions based on interviewees' responses. We created four interview guides: one for the utilities, one for ODOE, one for OHCS, and one for the CBOs. The interview guides are included in the APPENDIX.

3.3.2 Respondent Recruitment and Interview Completion

ADM's goal was to complete interviews with 10 to 11 interviews with the utility and collaborator staff. Energy Trust provided ADM with contact information of representatives from five utilities, three CBOs, and the two government agencies.

The ADM team fielded the interviews in September and October 2024. Energy Trust facilitated warm introductions for all the contacts via email, and then ADM reached out to each contact up to four

additional times via phone and email to request an interview. CBO contacts were provided a \$100 gift card as a thank you for their time. Utility and government agency representatives were not provided gift cards, as they typically are not allowed to accept them.

ADM completed nine interviews across the 10 contacts (Table 3-1). Interviews were conducted over Microsoft Teams.

Table 3-1: Recruitment Efforts

	CONTACTS PROVIDED	INTERVIEWS CONDUCTED
Utilities	5	5
Community based organizations	3	2
Government agencies	2	2
Total	10	9

3.3.1 Data Analyses

The ADM team content coded interview responses to identify themes. Analyses are largely descriptive and related to respondents' characterization of their organization's collaboration with Energy Trust, the Program's efficacy in engaging priority populations, and suggestions for improvement.

3.4 Interviews with ATACs

The ADM team identified, recruited, and interviewed 10 ATACs, from a list of 25 current active ATACs that were not also sampled for the separate trade ally interview project.

Interviews focused on their current and recent experiences with the Program and how those experiences could be improved. In particular, the interviews addressed the following topics:

- Respondents' roles with the Program and project development and their perspectives on program processes and communication with program staff.
- Respondents' perspectives on whether and how the addition of the multifamily sector to the Program has had any impact on the types of projects they have done.
- If pertinent, how respondents' experiences working with the current PMC compared to their experiences with the former PMC.
- How projects are assigned to ATACs, what factors affect whether or not they install the projects they do the studies for.
- Respondents' perspectives on market trends over the past several years.
- Respondents' perspectives on the Program's DEI goals and objectives and how their work might relate to those goals and objectives.
- Respondents' perspectives on their customers' experiences with the Program.

The interview guide is included in the APPENDIX.

In addition to the above, the interviews collected respondent firmographics, information on the types of customers the respondents serve, any changes that have occurred over the past several years in the types served, and whether any reported changes have been influenced by working with the Program.

The ADM team attempted to schedule interviews with ATACs that had represented a variety of customer types and geographies. The team contacted all potential respondents using mail, email, and phone. To encourage participation and thank respondents for their time, we offered a \$100 gift card to all who completed an interview with us. The ADM team interviewed 10 ATACs during September and October 2024.

3.5 Interviews with Contractors

ADM conducted interviews with 48 knowledgeable representatives from trade allies (TAs) and non-TA contractors that had completed Existing Buildings projects in 2022 or 2023.

3.5.1 Instrument Development

In consultation with the Energy Trust evaluation staff, we developed an interview guide that covered contractors' perspectives on:

- Program outreach.
- Experiences working with Program staff.
- Program processes.
- Implementers.
- Program changes.
- Future opportunities for the Program.

The guide consisted largely of open-ended questions, with some close-ended questions to assess awareness of Energy Trust communication types, attitudes about the Program's usefulness to their business, and to collect firmographics.

The majority of the questions were the same for TAs and non-TA contractors. Exceptions were:

- Non-TA contractors were asked whether they had considered becoming a registered TA with Energy Trust and, if not, why not.
- TAs were asked about information received from Energy Trust about changes to the Program and about upcoming program changes and events.

The interview guide is included in the APPENDIX.

3.5.2 Sampling

ADM's goal was to complete interviews with 30 TA contractors and 30 non-TA contractors, with the Custom and Standard program tracks and the Non-multifamily and Multifamily market sectors well represented in both groups.

Energy Trust provided ADM with files identifying contractors that had done Existing Buildings projects in 2022-2023, together with information on whether they were registered as Program trade allies during that time period. ADM removed contractors that had not done projects in either target track or sector as well as contractors that are also ATACs (who were interviewed as a separate group) or were sampled to be interviewed for a separate research project. ADM then deduplicated the remaining lists on company name so that no contractor company could be represented in interviews more than once. The above resulted in TA and non-TA contractor populations of 125 and 435, respectively. Table 3-2 shows how both contractor groups were distributed across program tracks and sectors and the completion targets that ADM set based on those distributions. As the table shows, the TA completion targets for the Custom track and Multifamily sector were hopeful. ADM planned to achieve the overall targets even if unable to obtain the specific track and sector targets.

Stratum	Popul	lation	Completion Target		% of N	
Stratum	TA	non-TA	TA	non-TA	TA	non-TA
Total	125	435	30	30	24%	6%
	By Program Track					
Custom	12	47	≥4	≥8	≥33%	≥17%
Standard	118	403	≥16	≥16	≥14%	≥4%
By Sector						
Non-MF	107	278	≥12	≥8	≥11%	≥3%
Multifamily	40	171	≥14	≥16	≥35%	≥9%

Table 3-2: TA and Non-TA Contractor Interview Sampling Plan

During the contractor interviews, 10 respondents whom we had classified as non-TA contractors, based on information received from Energy Trust, self-reported that they were TAs. We describe below how we handled those cases.

3.5.3 Respondent Recruitment

The ADM team fielded the interviews in September and October 2024. We began recruitment by sending an advance letter on August 30 to all 125 TAs and all 435 non-TA contractors to let them know about the upcoming research. The letter explained the purpose and the expected duration of the interview and identified Energy Trust as the research sponsor. It explained the importance of each recipient's response in providing representative information and stated that respondents would receive a \$50 gift card for completing the interview. It provided ADM contact information (name, phone, email) that recipients could use to get additional information or to schedule an interview. The letter also identified an Energy Trust contact to provide *bona fides* for the interview. Finally, the letter stated that the ADM team would follow up with an email and phone call if the recipient did not reach out to the ADM team.

ADM staff followed up the advance letter with emails on September 5 to all TAs and non-TA contractors for whom email addresses were available. The follow-up email provided the same information as the

¹ The completions across type (Custom or Standard) and across sector (Non-multifamily or Multifamily) do not sum to the total because some contractors do both types and/or work in both sectors.

letter. About three days later, ADM staff began phone calls to TAs and non-TA contractors for whom phone numbers were available. We made up to three phone calls to each contractor, prioritizing phone contact with contractors that completed multiple projects in the 2022-2023 timeframe.

During data collection, ADM obtained information that led to the reclassification of some of the contractors contacted for interviews. Ten individuals that had been identified as non-TA contractors in the Program data reported they were registered TAs. Contractors may register as trade allies for one or multiple Energy Trust programs and can complete projects with any program regardless of their status as a trade ally or not. This fact possibly could explain at least some of the misclassifications. ADM used an updated file of all registered TAs for all Energy Trust programs to confirm that those 10 respondents were registered Energy Trust TAs — for Existing Buildings in some cases and for other programs in other cases (most commonly, the Existing Homes Program). In discussion with Energy Trust, ADM decided to accept their self-reports and, further, to use the updated file of registered TAs to revise contractors' status, as needed, in our recruitment data.

Table 3-3 shows the disposition of contact efforts, by type of contractor. This shows that 120 of the contractors originally classified as non-TA contractors were reclassified – 22 as Existing Buildings TAs and 98 as TAs for other Energy Trust programs (mainly residential). In total, the ADM team completed or partially completed interviews with 48 contractors. Of those, 25 were Existing Buildings TAs, 5 were TAs for another Energy Trust program, and 18 were non-TA contractors.

In discussion with Energy Trust staff, the ADM team decided to retain the data from the five interview completions with TAs for an Energy Trust program other than Existing Buildings, as their responses to questions about their experiences with the Existing Buildings projects they completed would be as meaningful as responses from any other contractors. However, Energy Trust and the ADM team agreed to examine their responses to questions about their experience as TAs separately from the responses of Existing Buildings TAs, as those responses may partly reflect their interactions with the implementers of the Programs for which they were registered as TAs rather than with the Existing Buildings PMC. This is discussed in more detail in the Results section.

3.5.4 Data Analyses

The ADM team content coded interview responses to identify themes. Analyses are largely descriptive, with some cross-tabulation by contractor type. As noted above, the analyses relating to respondents' experiences as TAs (information received from Energy Trust) were done separately for the Existing Buildings TAs and the five TAs for other Energy Trust programs.

Table 3-3: Disposition Summary

	Existing Building TA	TA, Not Existing Building	Non-TA Contractor	Total
Classification of	Contractors and Co	ontact Information	Available	
Original Count	125	0	435	560
Reclassified	+22	+98	-120	n/a
Total, after reclassification	147	98	315	560
Email address available	124	83	135	342
Phone number available	130	83	220	433
	Recruitment I	Results		
Completion or partial ¹	25	5	18	48
Completion	24	5	18	47
Partial Complete	1	0	0	1
Contacted, no completion	11	0	32	43
Refusal	2	0	6	8
Did not pass screening ²	9	0	25	34
No show, could not reschedule	0	0	1	1
Not contacted	94	78	170	342
Attempted, unable to reach	84	2	113	199
Bad contact information	2	0	15	17
Duplicate information	0	0	2	2
Did not attempt ³	8	76	40	124

¹ Includes 10 completed with contractors who contacted the ADM team in response to the email recruitment.

3.6 Interviews with Participants

The ADM team interviewed 67 participants from a stratified random sample of recent Existing Buildings Custom, Standard, or Direct Install projects. This yields at least 10% precision at 90% confidence for overall results.

3.6.1 Instrument

In consultation with the Energy Trust evaluation staff, the ADM team developed an interview guide that covered participants' perspectives on:

- History of program participation.
- Program marketing and awareness.

² Typically indicated they could not recall doing any Energy Trust projects.

³ Those not attempted either had completed only one or two projects or had been determined to be TAs for Energy Trust residential programs during the reclassification process and therefore were not prioritized for contact.

- Project identification.
- Program processes, including assistance received with the application.
- Future program opportunities.
- Firmographics.

The guide consisted of a mix of close- and open-ended questions. Close-ended questions were used to assess objective experiences (e.g., How did you learn about the Energy Trust Incentive program? Did someone come to your workplace and identify ways to save energy?) Open-ended questions were used to assess subjective experiences (e.g., Please tell me why and how you decided to install equipment that would qualify for Energy Trust incentives.) or to obtain additional details about responses to close-ended questions. The interview guide is included in the APPENDIX.

Sampling 3.6.2

ADM drew a sample from all participants with any non-lighting Custom, Standard, or Direct Install projects from Q4 2022 through 2023. Participants with only Midstream/Buydown projects were excluded, as contact information was not available for such participants. In addition, 130 Custom and Standard projects selected for the Existing Buildings impact evaluation, which overlapped in time with the process evaluation, were removed from the process evaluation sampling frame before sample selection. This was done to allow the impact evaluation to select and recruit high-impact projects while avoiding contacting the same individuals for both research efforts. We discuss the implications of this, below.

The objective of the current research was to interview participants about their most recent project. The ADM team identified all unique program participant contacts, together with each contact's most recent project. We identified 3,094 unique contacts associated with Custom, Standard, or Direct Install projects. However, some projects had multiple contacts. Deduplicating on multiple contacts associated with a given project reduced the count to 2,910 unique associations between one participant and one Custom, Standard, or Direct Install project. Completing interviews with 67 respondents would yield 90/10 confidence/precision for that size population.

One of the research objectives was to provide meaningful information relating to different project types (Custom or Standard), sectors (Multifamily or Non-multifamily), and states (Oregon or Washington). However, the projects were not evenly distributed across type, sector, or state – specifically, Standard projects were much more common than Custom, Multifamily were more common than Non-multifamily, and Oregon were more common than Washington (Table 3-4).

Table 3-4: Distribution of Projects by State, Sector, and Track

		Track				
STATE	SECTOR	Standard	Сиѕтом	DIRECT INSTALL		
OR	Multifamily	2,267	6	0		
OR	Non-multifamily	494	82	30		
WA	Multifamily	1	0	0		
WA	Non-multifamily	28	8	0		

Based on the distribution of projects as well as the patterns of co-occurrence of project type, sector, and state, ADM identified the following strata for sampling and analysis:

- OR-Standard-Multifamily
- OR-Standard-Non-multifamily
- OR Custom
- WA-all tracks, sectors
- OR-Direct Install

Generally, each participant belonged to a single stratum. Twenty-five participants had projects in two of the above strata; we assigned each of those to the stratum with the smaller population.

Table 3-5 shows the total count of unique participants in the sample frame, together with the target number of completions (n) needed to achieve 90% confidence at 10% precision. The table also shows the target completion count we established for each stratum and the 80% confidence interval (precision) that achieving the target count would produce for each. As the confidence interval, or precision, for a given sample size is affected by the proportion (P) of any given response to any given question, we show a confidence interval range that assumes P ranges from 0.2 to 0.5. Thus, for example, if we obtain 16 responses in the OR-Standard-Multifamily stratum and somewhere from 20% to 50% of them provide a certain response to a question, the 80% confidence interval for that response will range from $\pm 6\%$ to $\pm 16\%$.

Strata	N	Target n	Target Confidence	Confidence Interval (P = 0.2 to 0.5)	% of N
Total	2,910	67	90%	4% to 10%	2%
OR-Standard-Multifamily	2,264	16	80%	6% to 16%	1%
OR-Standard-Non-multifamily	492	15	80%	6% to 16%	3%
OR Custom	88	15	80%	6% to 14%	12%
WA-all tracks, sectors	36	11	80%	5% to 14%	31%
OR-Direct Install	30	10	80%	5% to 14%	32%

Table 3-5: Participant Interview Sampling Plan

The table also shows the percentage of each stratum ("% of N") needed to interview to achieve the target completion counts under proportional sampling. As this shows, target number of completions for the first two strata represented a small share of the respective sample frames, which allowed for sampling from those strata. The other strata were much smaller and required that we include all available participants in the sample.

3.6.3 Respondent Recruitment

The ADM team began recruitment with an email to sampled contacts with available email addresses (88% of the sample). The email explained the purpose, duration, and importance of participation; offered a \$50

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⁶ The confidence and precision estimates incorporate the finite population correction coefficient.

gift card for completing the interview; requested available interview times; provided a phone number and ADM contact for information or to schedule or complete the interview; identified an Energy Trust contact to provide *bona fides*; and stated that we would follow up with a phone call.

About three days after the emails, we followed with phone calls to schedule and complete interviews. The phone calls followed a script similar to the recruitment email, including the promise of a \$50 gift card for completions.

As noted above, 130 projects that were reserved for the impact evaluation and removed from the process evaluation sample frame. Those projects were larger, on average, than those remaining for the process evaluation (169,211 vs 14,749 kWh; 7,462 vs. 572 therms). To attempt to offset this difference as much as possible, ADM prioritized recruitment of larger projects within each stratum during the phone survey. To accomplish this, each phone contact was assigned a random number weighted by the project size and the call lists were ordered by that weighted random number.

Table 3-6 shows the disposition of contact attempts.

Not contacted

Unable to reach²

Bad contact info.

OR-Standard Multi-**Not Multi-OR Direct** Disposition family family **OR Custom** WA Install Total Email address available Phone number available Email or phone available Completion¹ Refusal No show

Table 3-6: Disposition Summary: Participants

As seen in Table 3-7, prioritizing larger projects for interview recruitment did reduce the mean size difference between the impact and process evaluation samples; however, the projects in the impact evaluation sample did remain substantially larger, on average, than did those represented in the process evaluation interviews.

¹ Includes six completed with participants who contacted the ADM team in response to the email

² For about 80% of these participants, attempts were discontinued because the completion quota for the pertinent group was achieved.

Table 3-7: Mean kWh and Therms for Process Evaluation Sample Frame and Survey Completions,

Compared to Impact Evaluation Sample

	Process E			
Energy Savings Unit	Sample Frame	Survey Completions	Impact Evaluation	
kWh	14,749	40,540	169,211	
Therms	572	1,305	7,462	

Table 3-8 shows the sample frame and completion totals by stratum, together with the confidence intervals for each stratum. As with Table 3-5, above, this table shows the confidence interval range for items with P (the proportion of respondents providing a given response to a question) ranging from 0.2 to 0.5.⁷

Table 3-8: Confidence Intervals for Participant Interview Completions

Strata	N	Achieved n	Confidence	Confidence Interval (P = 0.2 to 0.5)
Total	2,910	67	90%	4% to 10%
OR-Standard-Multifamily	2,264	16	80%	6% to 16%
OR-Standard-Non-multifamily	492	18	80%	6% to 15%
OR Custom	88	17	80%	6% to 16%
WA-all tracks, sectors	36	6	80%	10% to 26%
OR-Direct Install	30	10	80%	8% to 20%

Our recruitment and completion targets did not consider business or industry type, aside from whether the project occurred in the Multifamily or Non-multifamily sector. However, we examined whether completion rates differed by business type, which was available in the project tracking data. One group that stood out from the rest was Grocery: we achieved zero interview completions from the 161 participants in that category we attempted to interview. Thus, participants classified as the Grocery are not represented in our results. Completion rates varied from 18% to 35% for all other groups. Thus, among those represented, those identified in the tracking data as Retail, Office, and K-12 School are somewhat overrepresented and those classified as other types are somewhat underrepresented.

3.6.4 Data Analyses

The ADM team content coded interview responses to identify themes. Descriptive (i.e., univariate) analyses are shown for each stratum as well as combined across strata. As can be seen above in Table 3-8, the number of responses in the various strata represent widely ranging fractions of their respective populations. Therefore, in the combined results, the data are weighted so that the results more accurately represent the combined population. The weight for each stratum is calculated as the ratio of that stratum's share of the population divided by stratum's share of the survey completions (Table 3-9).

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⁷ The confidence and precision estimates incorporate the finite population correction coefficient.

Table 3-9: Stratum Weights

Strata	N	Achieved n	% of Sample Frame	% of Achieved <i>n</i>	Weight
Strata	10	Acmeved II	Traine	Acilieved II	Weight
Total	2,910	67	100%	100%	n/a
OR-Standard-Multifamily	2,264	16	78%	24%	3.26
OR-Standard-Non-multifamily	492	18	17%	27%	0.63
OR Custom	88	17	3%	25%	0.12
WA-all tracks, sectors	36	6	1%	9%	0.14
OR-Direct Install	30	10	1%	15%	0.07

The team used *chi-square* analysis to examine some relationships within the data. Such analyses used weighted data except when examining relationships between survey responses and strata. Analyses comparing strata used unweighted data since all respondents in a given stratum have the same weight.

4 Program History

This section focuses on three research questions relating to the 2021 transition to a new PMC and other changes that may have affected the Program.

How has the transition to a new PMC for Existing Buildings and a separate program for Business Lighting affected the Program?

How has the incorporation of Existing Multifamily into Existing Buildings affected the Program? What recent changes have been made to the Program, and what changes are planned for the next year?

The responses to these questions are informed largely by the interviews with Energy Trust and TRC staff, along with feedback from market actors.

4.1 Transition to New PMC

Staff identified both positive and negative aspects to the transition to TRC as the new PMC. On the positive side, the staff contacts were largely complimentary about TRC's performance. Contacts were particularly complimentary about TRC's efforts to achieve DEI goals, their improvements in communication with Energy Trust over time, marketing efforts related to smart thermostats, their development of energy saving opportunities for SW Washington customers, and their adaptability to change over the tumultuous three years they have been implementing the program (see Section 5 for more details). However, some staff noted some challenges during the transition period and to the management of the Program established in the current contract. Staff reported inheriting a backlog of projects from the previous implementer and they reported a reduced transition timeline from the planned five months to two months due to contract issues between TRC and Energy Trust. This had an adverse impact on the incoming implementer's ability to serve customers as quickly as desired and cut into the time needed for a handoff from the old implementer to the new implementer. The eventual hiring of a transition manager helped to mitigate some of these challenges. In addition to the above, staff reported that TRC has struggled to manage the quantity and complexity of subcontracts associated with implementing the Program. As detailed in Section 5, the current PMC has 17 subcontractors (in response to a contract requirement for supplier diversity), which led to logistical challenges and delays in finalizing contracts, some confusion about the reporting structure, a cumbersome annual contract amendment process, and some performance issues. The overall impression from interviews was general satisfaction with the new PMC, though some aspects of the transition and new contracting structures presented challenges.

As detailed in Section 6.3.1, feedback from ATACs largely pointed to a straightforward transition. Eight of the 10 interviewed ATACs either reported a smooth process or said they were not aware of the change in PMC. The other two respondents discussed challenges with the current PMC and study review process, which are discussed further in Section 6.3.1.

Similarly, as discussed in Section 6.3.2, few contractors reported noticing the change in the PMC: only five of the 48 interview respondents expressed an awareness of the change in the PMC. Few responses

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suggested any changes since 2021 in the time it takes to process applications or the frequency of communication with the Program.

4.2 Transition to Separate Business Lighting Program

Staff reported that removing lighting from Existing Buildings and creating a stand-alone Business Lighting Program in 2021 was very disruptive to staff and customers and ultimately, Energy Trust chose to fold downstream lighting measures back into Existing Buildings in Q3 of 2023 with full implementation of the change happening in January 2024. Multiple Energy Trust and TRC staff persons reported that removing lighting from the Program made it harder to engage with customers as lighting was often a "gateway" to other energy-saving projects. Outreach staff, those that directly communicate and engage with businesses, no longer had lighting as a tool to convince customers to do energy saving projects. According to staff, prior to 2021, lighting served as an initial and accessible step for businesses to take before committing to other energy saving projects. Having lighting split into another program then required Existing Buildings field staff to coordinate with Business Lighting staff. According to staff, this resulted in missed opportunities for comprehensive energy-saving projects for customers and could confuse customers interested in doing a lighting and non-lighting project. To correct for this, Energy Trust chose to re-integrate downstream lighting into the Existing Buildings Program starting in 2024.

None of the interviewed ATACs reported any impact of the creation of a separate Business Lighting Program, as they were not directly involved with lighting projects (Section 6.3.1). Some ATACs mentioned being involved in referrals involving lighting projects, but there was no indication that this process was affected by the creation of the Business Lighting Program.

Similarly, interviewed contractors – none of whom deal with lighting measures or interact directly with lighting contractors – reported no effect of creating a separate Business Lighting Program on their business or their customers (Section 6.3.1).

4.3 Incorporation of Existing Multifamily into Existing Buildings

Staff reported that incorporating multifamily buildings measures into Existing Buildings resulted in Multifamily properties and measures not receiving enough program support, at least initially. According to staff, incorporating multifamily has been challenging. Staff indicated that TRC and Energy Trust did not fully appreciate the work required to integrate multifamily properties and measures in 2021. "Everyone thought Multifamily would just roll up into Existing Buildings, but [Multifamily] is uniquely different. The audiences are different, completely different than any of the Existing Building's audiences." According to staff, the Multifamily aspects of the Program needed dedicated support and over the course of the last year or so, staff have worked to address this issue. For example, in 2024, Energy Trust staff worked across commercial and residential programs to develop a marketing plan that both program implementers, TRC for commercial and CLEAResult for residential, can use to market to multifamily properties. This approach was taken because multifamily properties often do not neatly fall into the commercial or residential categorization.

Feedback from the interviewed ATACs generally suggested few impacts from the incorporation of multifamily projects into the Existing Buildings Program, although it may have increased multifamily work

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for some (Section 0). Six of the 10 interviewed ATACs reported doing little to no multifamily projects, so this program enhancement did not affect their projects. The other four were split between two who said the change led to more multifamily work and two who said it had no impact.

Most interviewed contractors reported no or little effect of incorporating multifamily properties into the Existing Buildings program on their business or their customers (Section 6.3.1). Most were not aware of the change. Six contractors reported awareness of the change, none of whom reported significant impacts.

4.4 Recent and Planned Changes

In the last few years, staff reported expanding the Program's range of services and measures to better meet the diverse needs of its customers.

Multifamily Strategic Energy Management (SEM) offering. Staff reported that the Multifamily SEM offering has made notable progress in supporting renters by coordinating and collaborating with the residential program to highlight no-cost offers for renters to help them save money on their energy bills. Additionally, this offering engages landlords and property managers to help them identify no- and low-cost ways they can save energy for both the tenants and the property owners.

No-cost Multifamily Ductless Heat Pumps Outside the Portland Metro area. One staff contact noted that funds had been allocated to a pilot that provides no-cost ductless heat pumps to multifamily properties in areas falling outside the Portland Metro area, including rural areas.

Diversification of offerings in Southwest Washington. One contact indicated that, prior to 2021, the measures offered in this area were limited to boilers and gas fryers, but currently the Program offers "a lot of" measures. This change has been tied to an improvement at TRC "on the engineering side of things for measure development."

Expansion of the Direct Install offering. One staff contact pointed to the Program's "really great success" with expanding the Direct Install offering with commercial businesses. According to this contact, that expansion was aided by "lots of coordination across the Programs, which has been really great."

Staff contacts also described several ways in which the Program has been able to expand the reach of existing offerings, through operational improvements. This is discussed in Section 5.

Staff reported the following plans for the Program in the next few years:

- Developing new measures like a no-cost pilot program for commercial heat pumps in rural areas. This initiative is starting with no-cost installations and then will gradually transition to co-funded opportunities that is, Energy Trust and other agencies will support the cost of installation with the customers allowing more small businesses to receive heat pumps with limited financial burden. This pilot began with the assistance of rural CBOs and is targeted at rural and non-Portland metro areas.
- Using utility usage data to identify energy saving opportunities and targeting customers with marketing to realize those opportunities. AMI data allows customers to be segmented based on

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their energy usage profiles, allowing for personalized communication and tailored energy-saving recommendations.

- Continuing support for the recently implemented Multifamily SEM effort. Staff indicated that the Multifamily SEM effort has initially been successful and they noted that there are many opportunities to conduct this offering at facilities throughout the service territory. In coming years, they are planning to continue to increase participation in this offering.
- Carrying out direct-install efforts in rural areas.

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5 Program Operations

This section focuses on six research questions relating to program operations:

Is communication between Energy Trust and the PMC effective and timely? Are the right people included in communications and program planning?

How is the PMC managing its subcontractors? Are roles and responsibilities clearly defined, and is communication flowing well? How has subcontracting affected current operational processes such as program design, marketing, measure development, and outreach?

How can Energy Trust and/or the PMC improve processes to increase efficiency for the organization and equity for customers?

How is the Program supporting Energy Trust's Diversity, Equity and Inclusion Operations Plan and ensuring equity in its program offerings?

How does the EB program support referrals and customer participation in other Energy Trust programs, such as the Residential program, Business Lighting and Renewable Energy?

What successes has the Program experienced? What challenges has the Program encountered? How did they, or do they, plan to address them?

The responses to some of these questions are informed exclusively by the interviews with Energy Trust and TRC staff, while feedback from market actors also inform some responses.

5.1 Program Management and Communication

As detailed in the following paragraphs, the Program has experienced challenges related to managing the quantity and complexity of subcontracts associated with implementing the Existing Buildings Program. Managing numerous subcontractors has increased the complexity of implementing the Program. The need for coordination among multiple subcontractors has led to logistical challenges and delays in finalizing contracts, which can affect the timely implementation of program elements. Further, staff reported that at times subcontractors were not sure if they should be reporting to the implementer or Energy Trust, resulting in miscommunication across the groups.

Energy Trust and TRC Staff experienced challenges in communication and coordination early in the transition, which have largely improved over time. Energy Trust and TRC Staff reported there are regular interactions between corresponding groups at each organization and that these regular meetings help in maintaining a steady flow of information. Staff from both organizations reported that there were some difficulties in communication in 2021. For example, some staff contacts reported some confusion among subcontractors about whether they should report to TRC or Energy Trust, which may have resulted from miscommunication between TRC and Energy Trust. One key Energy Trust staff person described the communication between the two groups as a "mix" of positive and negative and another key staff person noted that TRC seemed to develop new measure offerings without the input of the processing team, which resulted in miscommunication between the groups and "issues." (This is discussed immediately

below.) However, as the groups started to work together more, they developed processes and systems that facilitated communication better as the Program evolved.

Having 17 different firms as part of the implementer contract with Energy Trust became an administrative burden. Staff reported logistical difficulties in managing yearly contract amendments between TRC and Energy Trust, with TRC often not receiving their prime contract until the end of December or early January. TRC then must execute 17 subcontracts quickly so the subcontractors can get paid or the subcontractors wind up working for weeks or months without getting paid, operating on the hope they will get paid eventually. This creates a cash flow problem, especially for smaller firms, with an adverse impact on the ability to maintain consistent program operations. Staff indicated a need to simplify and move up the yearly amendment process for subcontracting to ensure timely execution of subcontracts and reduce administrative burdens.

The complexity of subcontractor management contributed to misunderstandings about correct lines of communication. Several staff reported that subcontractors were not always clear as to who they answered to, sometimes bypassing the PMC and going to Energy Trust. This resulted in miscommunication across the groups and in subcontractors' receiving different directions or guidance based on who they reported to or asked questions of, Energy Trust or TRC.

There were notable problems with two subcontractors in the key role of community engagement. According to a key staff person, those subcontractors struggled to coordinate with Energy Trust and other outreach subcontractors, resulting in their not adequately representing Energy Trust in front of customers and at community events. Furthermore, according to one staff person, one of these subcontractors struggled to hire outreach staff and, when they did, hired unqualified staff. As one contact noted:

"We need our field staff to go out and start meeting with these community based organizations and stakeholders and ... there was no training provided to these staff. ... So we were asking people who are not practitioners of community engagement to now start going out and interacting in communities."

This contact in particular noted the effect of this issue in work with tribal communities:

"They feel they haven't had the training to work in a tribal community, so they go there and they treat a Housing Authority like it's a community based organization, not like a government department."

Staff suggested these two subcontractors were not able to fulfill their roles; these staff did not provide an assessment as to why they were unable to fulfill their roles. However, during the draft review process of this report, staff reviewers suggested that additional training for each of these subcontractors may have been beneficial as they were each new to working with Energy Trust. Additionally, as noted below in Section 5.2, staff contacts reported improvements by the implementation team in community engagement over time.

Implementer and Energy Trust staff expressed frustration with developing new measures, especially for small businesses. Key implementer staff reported that the measure development process and the cost effectiveness tests applied to developing measures make it especially difficult to identify measures for inclusion in the program, especially measures for small business customers. The current process and cost effectiveness tests make it difficult to develop measure options for small business customers. Energy Trust

staff expressed frustration with the implementer for not identifying a strategy and thought process that could expand upon the list of useful measures for small businesses.

5.2 Diversity, Equity, and Inclusion

This research question is informed exclusively by the findings from interviews with program staff. However, note that Section 6.1, which addresses program outreach including outreach to priority populations, is informed also by findings from interviews with ATACs and contractors.

Staff interviews demonstrate that Energy Trust and TRC took several actions to make Existing Buildings a more equitable program. In general, Program staff were positive about TRC's efforts to achieve DEI goals:

"I have been impressed with [TRC's] efforts to meet our DEI goals."

"[Working with TRC has] been positive. During the last rebid – there were a lot of calls to be more inclusive and raise equity. People have taken to heart the idea of supporting DEI work."

In particular, staff respondents noted successes in community engagement, including through work with CBOs, to better serve low-income, rural, and non-English-speaking populations. However, the success of some efforts varied, and some respondents identified continuing challenges to achieving DEI goals. The following paragraphs summarize these comments, identifying actions the Program has taken to support Energy Trust's DEI efforts and the respondents' perspectives on how these actions fared through the course of implementation.

Establishing DEI goals and metrics is an ongoing effort. Several respondents spoke to the issue of goals and metrics, including how they can be applied to specific aspects of the Program. This is an ongoing effort, and some respondents identified challenges. One noted that Energy Trust was working to have metrics especially focused on tribal communities, which often get lumped into rural engagement despite having distinct needs and concerns. Another described efforts to track demographic information, noting that, at that time, there was no place to store that information digitally, which made it challenging to report. One respondent noted that Energy Trust was developing a memo to document the process for tracking participant demographics.

The Program has been generally effective in conducting outreach to priority populations. Program staff highlighted efforts to reach priority populations, including non-English-speakers as well as low-income and rural populations. Part of this comes from success in working with CBOs. Despite some initial challenges (see Section 5.1, above), one staff contact said:

"There seems to be some success in working with community based organizations to learn better about our customers and figure out better ways for program delivery to address the underserved populations that we have."

Staff reported that the Program has been working on a language access plan to improve outreach to more communities. To date, the Program has produced marketing collateral in seven languages, with plans to revisit their efforts and possibly produce materials in other languages. According to staff, campaigns specific to Spanish-speakers have visually and culturally connected with Spanish-speaking communities, something they had not done as successfully prior to 2021. One staff contact also noted that the Program offers childcare and food as encouragements to come to SEM training. Staff contacts also noted having

established relationships within the affordable housing community and regional staff serving southern and eastern Oregon.

Staff noted that TRC and their subcontractors hiring Spanish-speaking energy advisors was a real success of the Program to support Latino-owned businesses. These staff members can overcome previously existing communication barriers between small Latino-owned businesses and the Program.

The Program has had mixed success with efforts to target small businesses and multifamily properties.

The program targeted small businesses, a customer group that historically has been underrepresented in Energy Trust programs. Staff reported TRC struggled to develop a set of efficiency offerings that would be attractive to small businesses. Some Energy Trust staff noted that TRC was in a difficult position trying to create program offerings that would appeal to multiple audience types: small businesses, large businesses, and multifamily properties. Staff indicated that the Program has made some progress in reaching smaller businesses and multifamily properties in 2024, but they also noted they did not reach their savings goals for these groups in the first three years after TRC took over Program implementation.

Using diverse suppliers for program implementation addressed DEI objectives but created other challenges. Energy Trust's Supplier Diversity Requirement meant that the implementer had to use at least 20% of their contract to hire diverse subcontractors, and the implementer subcontracted with 17 firms to deliver the Program and meet this requirement. One staff respondent indicated this demonstrated TRC's efforts to meet DEI goals including increasing the number of diverse suppliers Energy Trust works with and expanding Energy Trust's ability to recruit new audiences to the Program. However, another staff respondent noted that, while bringing in diverse suppliers is good, it is not the long-term solution. That respondent noted that TRC needs more diverse staff within the Program. Another respondent noted that subcontractors did not all receive the same training and information about things like how to present themselves in the market. There were considerable challenges to getting consistent communication to all subcontractors and ensuring that all subcontractors had the information necessary to fulfill their obligations. Furthermore, some staff noted there appeared to be some confusion, especially during the first two years of TRC's implementation of the Program, about who should be leading the subcontractors, TRC or Energy Trust, which caused confusion among the subcontractors themselves.

Working with community-based liaisons (CBLs) to inform program development did not work as well as planned. The Program hired a group of CBLs organizations to help guide the Program to achieve its DEI goals. Based on staff interviews, there appeared to be a misalignment of what the CBLs saw as their role and what program staff saw as the role of the CBLs. For example, program staff reported CBLs were there to do things like review program marketing campaign material to make sure it was culturally appropriate. Instead, according to staff, the CBLs provide organizational-level critiques of how Energy Trust had failed to reach specific groups historically. Program staff were looking for actionable ways to drive targeted groups to the Program and the CBLs were offering guidance at an organizational or policy-level plane. Ultimately, the CBL network was paused in 2024 because the CBL process was not working as envisioned.

5.3 Cross-Program Collaboration and Referrals

Program staff were largely positive about cross-program collaboration and referrals, with some caveats. One contact noted that, "for the most part, Existing Buildings does a good job of handing off" projects to

other programs. In particular, "TRC does a good job when Energy Trust is the conduit." Some contacts observed in particular that referral to the Business Lighting Program "is handled well" and also pointed to program "crossover" relating to obtaining federal grants for renewables for tribal communities.

Staff noted two challenges. Some staff reported difficulties successfully coordinating with the Business Lighting Program to leverage one particular project at a customer site into other projects. Another contact noted that SEM coaches "could do more to identify opportunities beyond O&M and move to capital." According to that contact, "we refer people to go look at the website, which is essentially saying the customer won't do anything."

Feedback from market actors and program participants provides some evidence of successful cross-program referrals. Most ATACs reported positive experiences with the referral process (Section 6.3.1), and about one in seven interviewed participants reported speaking with a program representative about renewable energy or the lighting program (usually the latter; Section 6.2.8). Custom and multifamily participants, and those from large organizations, were more likely than others to report such conversations, suggesting that program representatives are making proactive efforts to identify referral opportunities, albeit mainly for lighting projects. Contractors provided no evidence of referring customers to other Energy Trust programs or other contractors that could help them save energy, but that appeared to reflect the nature of their work rather than to any impediments in the process itself (Section 6.3.2).

5.4 Program Successes and Challenges

As seen in the foregoing sections, staff reported both program successes and challenges. The following paragraphs summarize what the staff contacts themselves noted as the key successes and challenges.

One of the key successes was in the Program's DEI efforts, as detailed above. Several staff specified that the Program has made progress in supporting its DEI goals, including increased engagement with CBOs and tribal nations and providing culturally responsive communication. While there is still room to improve in this area, staff informants regarded these efforts as a key program success.

Other aspects of marketing and outreach were identified as successful. One contact noted that TRC did a "nice job" of marketing for commercial smart thermostats. The marketing team used unique methods to drive interest in smart thermostats by commercial customers, especially small businesses, which "has really driven interest in the Program." In addition, outreach staff noted that partnering with other implementers for outreach efforts has been a success. According to one: "The program used to be more siloed and now there is a more unified approach which is good. Customers are seeing they can be eligible for more than one program."

Several staff contacts indicated that contractor development has been a success. One characterized the management of trade allies as a "good focus on workforce development," and another pointed to an increased number of contractors in each cohort. One reason cited for this is the use of trade ally coordinators in various areas of the state, such as Eastern and Southern Oregon.

Another success was in the diversification of offerings in Southwest Washington and improvement in TRC's measure development staff in that area. According to one contact: "Their measure development team does fantastic job on that now."

Finally, an overall success was the staff's flexibility in adapting to change. A key staff leader reported that, since 2021, the Program has undergone changing requirements and dealt with conflicting guidance. Specifically, the economic impacts of the COVID pandemic resulted in a change in program priorities after new opportunity areas for the Program had already been established and budgeted for. Among the changes that occurred were the institution of incentive bonuses to keep the Program going. Those incentive bonuses had greater than anticipated results, which then shifted the emphasis to managing the budget. That staff contact identified the Program staff's flexibility and adaptability in the face of these changes as a "big success."

An overarching challenge relates to the transition to the new PMC. As noted in Section 4, outreach staff reported notable challenges related to inheriting the previous implementer's backlog of projects and a transition timeline that was three months shorter than planned. As a result of the backlog of projects, the implementer did not serve customers as quickly as desired. The eventual hiring of a transition manager helped to mitigate some of these challenges.

Managing subcontractors has been challenging. The implementer hired 17 subcontractors to manage and the quantity and complexity of these subcontracts has been challenging for the implementer to oversee and Energy Trust to understand.

Merging Multifamily into Existing Buildings also produced challenges. The acquisition of the Multifamily Program into Existing Buildings required extensive process revisions and database updates which took longer than anticipated.

Recent changes to incentive check processing have led to some customer confusion. Energy Trust changed how it processed incentive checks, and these changes included checks' being sent to customers without memo lines, meaning sometimes customers did not know they received the incentive check because it had been sent to a different department. This results in confusion for the customer and those customers sometimes report that confusion to the implementer.

Some challenges are of a "chronic" or ongoing nature and are often identified in process evaluations of efficiency programs in general, not just Energy Trust programs. Staff identified four such challenges: 1) a difficult measure development process because of standards imposed by the utility commission including complying with cost effectiveness standards; 2) reaching customers in rural locations; 3) lack of full contact info for some eligible customers in some areas; and 4) continued impact of Covid and supply chain disruption.

6 Experience of Customers, Market Actors, and Collaborators

This section addresses the research questions identified in the third section of Table 2-1, "Experience of Customers, Market Actors, and Collaborators." It is subdivided into five sections, each addressing a single research question or related set of questions.

6.1 Program Outreach

This section addresses the following research question:

What strategies is the Program using to reach out to priority customers and trade allies, and how effective have those strategies been?

As detailed in Section 5.2, the Program has carried out increased outreach to priority populations through engagement with CBOs and tribal nations and providing culturally responsive communication, including collateral translated into multiple languages. Interviewed CBO contacts indicated that the CBOs act as intermediaries for the Program with their constituencies, conducting the outreach directly on behalf of the Program (see Section 6.3.3). Those contacts supported this approach as they are already heavily involved in customer engagement and "know what's best."

The ADM team included some questions in ATAC and contractor interviews to shed light on the Program's efforts to reach priority populations. As detailed in 6.3.1, ATACs were evenly split regarding awareness of the Program's DEI goals and recollection of any Program guidance on reaching priority populations. Two of the 10 interviewed ATACs said that studies targeting priority communities received a higher priority from the Program than did some other studies. However, the other eight were unaware of any specific Program outreach strategies for those populations.

Trade ally and non-trade ally contractors offered some observations about how the experience of program participants differed based on the participants' size, business type, or location. Only two offered comments that specifically addressed an identified priority population – in this case, customers in more rural locations. Neither comment suggested any particular challenges for those customers. However, one respondent did suggest the need to improve outreach to commercial customers in rural areas.

The program participant interviews included questions about the size and ownership or leadership of the respondents' organization as well as languages spoken with that organization's customers. The ADM team examined whether any of those factors were associated with whether the respondent was a repeat participant, how the respondent (if not a repeat participant) learned about the Program, and whether anyone had visited the respondent's location to identify savings opportunities.

As detailed in Section 6.2, results suggested that both business size and leadership demographics were related to some of these items. Neither business size nor leadership demographics was related to repeat participation or to having learned about the Program from a program representative. However, some evidence suggests that smaller businesses and organizations may be at a disadvantage because they do not receive the same level of direct outreach efforts as larger ones. Specifically, they were less likely than larger ones to say that someone came to their workplace to help identify savings opportunities or to say

they learned about the Program from a market actor and more likely to say they learned about it through their own efforts, by visiting the Energy Trust website. Respondents that represented organizations owned or led by women or persons of color did not differ from others in terms of how they learned about the Program. They were, however, *more* likely than others to report that someone came to their workplace to help identify savings opportunities. Respondents who reported they conducted business in Spanish with some customers did not differ from other respondents on any of the above items.

6.2 Customer Experience

This section addresses the following research questions, identified in Table 2-1:

What are the experiences of different customers (such as individual market segments, business sizes, etc.) when participating in various EB program offerings and services? What do they see as working well and what could be improved?

As discussed in Section 0, descriptive (i.e., univariate) analyses are shown for each stratum as well as combined across strata. The stratum-level results use unweighted data, while the results combining the strata use weighted data. Since the combined results use weighted data, some respondents count more than others. Therefore, the following discussion generally refers to what *the responses indicate about the percentage of participants* with a given experience rather than the percentage of *respondents* with that experience, since the two may not be the same.

Chi-square analyses of the relationship between two items use weighted data. Readers should recall that stratum-level results have lower precision than the combined result and should exercise caution in interpreting stratum differences unless the report states that the difference was statistically significant.

6.2.1 Participation History

The Direct Install and Standard Tracks draw many first-time participants, while the Custom Track is more dominated by repeat participants. Results indicate that nearly two-thirds of participants were first-time participants. Direct Install participants were the most likely to be first-time participants, followed by Oregon Standard Multifamily and Non-multifamily, Washington, and Custom participants (Table 6-1). The difference between Direct Install participants and the other strata combined was statistically significant (chi-square = 4.02, p = 0.04) as was the difference between Custom participants and the other strata combined (chi-square = 6.75, p = 0.009).

	Valid <i>n</i>	%	%, Compared to Other Groups
OR Direct Install	10	80%	Higher than all others combined
OR Standard Multifamily	16	63%	
OR Standard Non-multifamily	18	56%	
WA-AII	6	33%	
OR Custom	17	24%	Lower than all others combined
Combined (Weighted)	67	60%	

Table 6-1: First Time Participant

Repeat participants varied considerably in the number of previous projects, when they occurred, and what they involved. As Table 6-2 shows, repeat participants reported anywhere from one time prior to hundreds of times. Their first year of participation spanned most of the Program's existence. The most common prior measures installed were insulation and windows, followed by heat pumps and lighting. The table shows counts rather than percentages for the individual strata because of the small numbers of respondents in each stratum who reported prior participation; however, the table shows weighted percentages for the combined results. The small counts for this subset of respondents argues against drawing conclusions about stratum differences.

Table 6-2: Prior Participation

	OR	OR								
	Standard	Standard			OR Direct	Combined				
Response	Multifamily	Non-MF	OR Custom	WA-All	Install	(Weighted)				
Valid n	5	7	13	4	2	23				
	Repeat Participants' Number of Prior Projects									
1 to 2	2	4	3	1	0	42%				
3 to 5	1	1	0	2	1	18%				
6 to 10	0	0	1	0	0	1%				
11 to 20	2	0	2	1	1	30%				
21 to 50	0	0	4	0	0	2%				
More than 50	0	0	2	0	0	1%				
Not specified	0	2	1	0	0	6%				
	Υ	ear of First Pro	ject (Repeat Pa	rticipants)						
2020 to Present	2	0	1	1	1	30%				
2015 to 2019	0	4	6	3	1	16%				
2010 to 2014	2	0	3	0	0	30%				
Before 2010	1	2	2	0	0	21%				
Don't know	0	1	1	0	0	3%				
	Meas	ures Installed (Multiple Respo	nses Allowed)						
Insulation	2	3	0	0	0	37%				
Windows	2	1	1	0	0	32%				
Heat pump	1	0	1	0	0	15%				
Lighting/controls	0	3	7	2	1	13%				
HVAC and controls	0	1	9	0	1	8%				
Fryer	0	2	0	1	1	6%				
Appliances	0	1	1	0	1	4%				
Boilers	0	1	2	1	0	4%				
Mech. systems ¹	0	0	3	1	0	2%				
RCx	0	0	2	0	0	1%				
Solar	0	0	1	1	0	1%				
Other ²	0	0	3	0	0	2%				

¹Not otherwise specified. ²Programmable thermostat, steamers, steam traps (one mention each)

6.2.2 Awareness

First-time participants learned about the Program from a wide range of sources, with the relative prevalence of reported sources varying for large and small organizations. First-time participants were asked how they learned about the Program. Nearly two-thirds learned about it from a market actor, such as a contractor or vendor (Table 6-3). Other frequent sources were program representatives, word of mouth, and the Energy Trust website.

Source	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	11	11	4	2	8	44
Market Actor	64%	45%	50%	50%	13%	60%
Contractor	45%	9%	50%	0%	13%	39%
Vendor	18%	27%	0%	0%	0%	19%
Other	0%	9%	0%	50%	0%	2%
Energy Trust Website	27%	9%	25%	0%	13%	24%
Word of Mouth ¹	9%	9%	25%	50%	25%	10%
Program Representative	9%	0%	25%	0%	38%	8%
Advertisement	0%	0%	0%	0%	13%	<1%
Professional affiliation ²	9%	18%	0%	0%	0%	10%
Don't recall	0%	18%	0%	0%	0%	3%

Table 6-3: Sources of Awareness (Multiple Responses Allowed)

Larger organizations (more than 10 employees) more commonly reported market actors as a source of program awareness than did smaller organizations (72% vs. 23%; *chi-square* = 11.04, p = 0.001). By contrast, smaller organizations more commonly reported learning about the Program from the Energy Trust website (23% vs. 0%; *chi-square* = 3.63, p = 0.06).8

A substantive share of participants suggested increasing awareness of the Program through more advertising or direct outreach, making more effective use of contractors, or improving the website. When asked how to make it easier for organizations to learn about Energy Trust assistance, one-quarter of respondents said nothing is needed, and it is easy to find information about the Program, but other respondents offered a range of suggestions (Table 6-4). The most common of these suggestions was to provide more advertising, followed closely by relying on contractors and vendors. Other common suggestions were to conduct more direct outreach to customers (e.g., by calls, visits, and emails) and to improve website accessibility. A less common suggestion was to conduct some form of community outreach.

¹For the Standard strata, all word of mouth reports were from a coworker. For the other strata, they either were from a property manager or landlord or information learned at an event.

¹One was an Energy Trust trade ally, one reported having "worked with Energy Trust for 20 years," and one worked the California Public Utilities Commission.

⁸ Since this set of results clearly indicate that organization size was related to source of program awareness (relating to market actors), we relaxed the standard criterion of $p \le .05$ for the second finding (relating to website).

Table 6-4: How to Make It Easier to Learn about Energy Trust Assistance (Multiple Responses Allowed)

Suggestion	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	16	18	17	6	10	67
Nothing needed	19%	50%	35%	17%	30%	25%
More advertising	25%	11%	12%	17%	40%	22%
Use contractors more	19%	28%	6%	17%	10%	20%
More direct outreach	13%	22%	53%	17%	60%	16%
Improve website	19%	0%	6%	0%	0%	15%
Community outreach ¹	0%	11%	0%	50%	10%	3%

¹Six responses. Two respondents suggested working with county permit offices to inform permittees about the program. One each suggested working with "hospitality groups" (e.g., the Oregon Restaurant & Lodging Association) and the Community Associations Institute, a homeowners association advocacy group. One suggested doing outreach at farm fairs. One simply referenced doing community outreach, without identifying any specific organizations or event.

The suggestion to conduct more advertising was much more common among respondents who reported learning about the Program from the Energy Trust website than from those who reported another source of awareness (62% vs. 15%; chi-square = 11.53, p = 0.001). This may suggest that respondents who learned about the Program by visiting the website were unaware of the advertising that Energy Trust conducts.

6.2.3 Motives for Doing Energy Efficient Upgrades

Participants carry out upgrades to save on energy bills and otherwise be more energy efficient. The most common reasons for doing energy efficient upgrades were to save on energy bills and to be more energy efficient generally (Table 6-5).

Table 6-5: Reason for Energy Efficient Upgrades (Multiple Responses Allowed)

	OR Standard	OR Standard			OR Direct	Combined
Reason for Upgrade	Multifamily	Non-MF	OR Custom	WA-All	Install	(Weighted)
Valid n	16	18	17	6	10	67
Save on energy bills	50%	50%	41%	67%	90%	50%
More energy efficient ¹	44%	56%	65%	83%	40%	47%
Building comfort	19%	17%	12%	0%	0%	18%
Environment	19%	11%	12%	0%	20%	17%
Better equipment ²	13%	6%	12%	17%	10%	11%
Other requirements ³	13%	6%	18%	0%	0%	11%
Recommendations	0%	6%	12%	0%	0%	1%

¹Not specified whether to save money or for other reasons.

²For example, less noisy or better performing.

³The equipment was required because of other identified or unidentified requirements or needs.

The interview did not explicitly ask whether the equipment upgrade represented an early replacement or was at end/near-end of life, but somewhat less than half (43%) of respondents volunteered that they needed to replace their old or broken equipment. All such respondents also identified a reason for upgrading the efficiency of the replaced equipment.

6.2.4 Upgrade Identification

The interviews explored the types of assistance that respondents received, including whether a program representative or some type of market actor visited their site to help identify energy saving opportunities and who, if anyone, they consulted with about equipment selection once opportunities were identified.

Frequency and Sources of Assistance

Most participants had assistance from a program representative or market actor in identifying savings opportunities, and the assistance was nearly equally likely to be initiated by the participant proactivity as by the program representative or market actor. Responses indicate that just over one-quarter of participants received some type of site visit to identify savings opportunities, most commonly a program representative; somewhat less than two-thirds of participants did not receive a site visit but consulted with a contractor or vendor in identifying the equipment to be installed; about one in eight identified the equipment with no assistance (Table 6-6). All Direct Install participants indicated a visit by a program representative – this makes sense in light of how the Direct Install offering works.

How Identified	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	16	18	17	6	10	67
Someone visited site	25%	17%	88%	67%	100%	27%
Program rep. ²	25%	6%	65%	17%	100%	24%
Market actor	0%	6%	24%	50%	0%	2%
Someone else ³	0%	11%	41%	50%	0%	4%
Consulted market actor	63%	67%	0%	17%	0%	60%
No assistance ⁴	13%	17%	6%	17%	0%	13%

Table 6-6: How Participants Identified Energy Saving Opportunities 1

In just over half of the cases involving site visits, it was the person who visited the site who contacted the participant to offer that service, but customers were nearly as likely to seek out the visit proactively. ADM examined whether the origin of the site visit idea was related to the type of actor who performed it. For example, is it possible that site visits by program representatives were more likely the result of the

¹This table represents responses to two questions. The first question asked, "Did someone come to your workplace and identify ways to save energy? If so, who?" Multiple responses were allowed, but most respondents gave only one response. The second question, displayed to those who said that nobody came to the workplace, was "How did you identify the equipment you decided to install?" That allowed two responses: 1) Consulted with contractor or vendor; and 2) Other (open-ended). All "other" responses indicated no external assistance was received.

²Three respondents reported a utility representative, but the context made it clear it was a representative of the Energy Trust program.

³Two referenced their SEM participation. Two each identified a utility representative or said they were not sure who it was.

⁴Respondent or internal company source identified the equipment.

program's outreach efforts while those done by market actors were more likely in response to customer requests – or *vice versa*? As Table 6-7 shows, we found no relationship between the type of site visitor and who arranged for it.

		Program Representative Visited Site			
Who Contacted Whom	All Respondents (n = 36)	Yes (n = 27)	No (n = 9)		
Respondent contacted other	48%	47%	60%		
Other contacted/don't recall	52%	53%	40%		
Significance		Chis-sauare	e = 0.12, ns.		

Table 6-7: Who Made Contact for Site Visit

Participants most commonly found assistance by conducting online searches or contacting someone they had worked with previously. Respondents that said they contacted the person who visited their site were asked how they identified that person, as were those who said they consulted with a contractor or vendor to select their equipment. Responses indicate that it was usually someone they found online or that they had worked with in the past (Table 6-8).

How Identified	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid <i>n</i>	12	13	6	5	5	49
Online	58%	0%	0%	0%	0%	47%
Prior experience	17%	69%	17%	60%	20%	26%
Word of mouth	17%	23%	0%	40%	0%	18%
Energy Trust	0%	8%	50%	0%	20%	7%
Unsure	8%	0%	33%	0%	0%	7%

Table 6-8: How Participants Identified Site Visitor or Consultant

Types of Assistance Received

Respondents who reported anyone visited their site or provided consultation (whether they contacted that person or that person contacted them) identified the type of assistance received. Descriptions of the type and level of assistance varied by stratum, primarily reflecting differences by program track. This makes sense, given differences in how the program tracks operate. Custom projects often require a technical study; Direct Install projects require an advance visit to qualify the customer and identify needs; Standard projects require neither of the above.

Custom participants most commonly described Program-provided facility audits and/or technical studies but some mentioned consultation from market actors. Sixteen Custom participants (including one in Washington) described whether and what kind of assistance was received in developing their project, 11 of whom indicated a program representative had visited their site. Most comments by those 11 respondents described a detailed facility audit and/or technical study to identify savings opportunities.

These generally indicated the program representative conducted a thorough needs review, assessed the savings potential, and identified available incentives. For example:

"Uh, they do like a full technical analysis.... They collect data from the building ... and they installed data collectors and or they pull data from the HVAC control system you know and then they come up with the technical analysis report, which projects savings and [capital expense] requirements."

"[TRC] did an audit of the building identified, potential energy savings and programs that actions that we could take, and produced a bid guide, about a 20-page report that had a list of energy efficiency measures ... with a summary table of the estimated [energy and dollar] savings ... the estimated incentive that might be available from Energy Trust of Oregon and the payback period."

"They'll bring engineering type folks and they'll do a study on your buildings ... based [on] the equipment you have, the insulation values, all that. Lot of factors go into it and then they give us the options of different avenues of things that we could do to conserve energy and save money. So that basically they just give us the factual information based out of studies on how to make a good decision and spend our money wisely."

One of these respondents expressed particular satisfaction with the assistance and what it identified:

"We didn't have a decent control system and ... so the one suggestion was that we do a computer based control system by a third party [that would allow us to] track [savings and] work on our efficiencies through data. ... [They] brought us to the 21st century by suggesting a computerized based control system ... that went into two buildings, which has been a godsend."

Another noted the proactivity of a particular program representative in keeping tabs on the respondent's needs:

"[The program representative] will cold call me once in a while and say, hey, you have any projects and he's looking out ahead as to what I'm thinking we're going to do. And ... because a lot of times I have projects I don't even know I have coming until the next day, somebody gives me a call and we're in business and I call [the program representative] up and say, hey, I need to do this."

This respondent reported using the results of an Energy Trust study to inform further project decision making, which was primarily done with input from third-party engineers.

Five Custom respondents reported a visit by a program representative but did not describe how that representative helped identify savings opportunities. One of those did note that the site visitor identified program incentives: "I told him what I was going to do and he said here's what your incentive will be."

Five Custom respondents said a market actor or consultant, but not a program representative, visited their site to help identify needs. Of those five, one described anything that sounded like a formal technical study:

"...they looked at our boilers and furnace ... they did different air quality control [tests and] after they did those tests they went over the best plan and ... a lot of the nuances. ...they came and did testing first before the system was put in place. ...I think [the contractor] gave us information about, you know what Energy Trust is and all that."

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Two described assistance in identifying opportunities and equipment needs that sounded less formal than that provided by the Program:

"They listened to what we needed – what our requests were for, how to control the buildings, how much of a tolerance we needed, the trouble spots that we had in our building – and then they came back with an equipment list of what we should use...."

"Oh, I think we looked at they able to look at what would be the optimum savings. You know, how do we get the optimum savings as relates to cost?"

The other two Custom respondents indicated that the market actor's visit did not influence project decisions.

Direct Install participants reported assistance focusing on equipment options, energy savings, and incentives. Ten Direct Install participants said someone – in each case, a program representative – had visited their site or that they had consulted someone when developing their project. All 10 respondents noted that the site visitor described equipment options, discussed energy savings, discussed incentives, or some combination.

In three cases, all smart thermostat installations, the respondent simply noted that the visitor presented a single option for installation. The three responses, however, presented subtly different shadings in terms of their reactions to the visitor's presentation. One response was fairly matter of fact:

"[The program representative] told them what would be the best thermostat for the space."

A second response reflected a positive reaction:

"He suggested to change the thermostat to save energy and that helped a lot. It is more practical and easier to use. It is more up to date."

The third response, however, suggested a more negative response to the way the option was presented:

"When they were talking about upgrades it sounded like there was one option, a smart thermostat. There was no pressure, but it was like 'here is the opportunity take it or leave it. how many do you want to do?""

Four respondents said that the program representative talked to them about thermostats as well as lighting, although the context of the conversations varied. Two respondents explicitly indicated that the initial program representative provided thermostats during the visit but also gave them contacts for lighting. Another respondent also indicated that the program representative made lighting suggestions, but that respondent indicated they already were "using least lumens possible [and so it] didn't make sense to switch over." The fourth respondent reported that, when they signed up for power, the utility "mentioned Energy Trust and their incentives and sent [a program representative] around" who "talked about different programs." In this case, the respondent wanted lights and the program representative mentioned the smart thermostat.

Two respondents described more thorough visits, with equipment discussions that touched on equipment options for the current project and for future consideration. One described both lighting and thermostat installation, but noted that they "also talked about HVAC for the future." The other discussed a detailed walk-through:

"They ... walked through the building. ...[The program representative] was given differing opinions about stuff. Reiterated options on water heater. Talked about furnaces and heat pumps – smart thermostat was quick and easy way to start, other things were more expensive. They did offer guidance on cycling fans that was helpful."

One respondent reported that the site visitor provided information about other available Energy Trust incentives but did not identify the equipment types discussed.

Most of the reported discussions that addressed equipment beyond the direct install project included a discussion of the available incentives.

For three respondents, a salient part of the discussion about smart thermostats was about control features. These three respondents specifically mentioned "the temperature schedule," "ultimately having control remotely," and "being able to control it from the phone."

Standard track participants described varying degrees of assistance, most frequently from a market actor, with about one in five describing a visit from a program representative. Thirty-three Standard participants (15 multifamily and 18 non-multifamily) said someone had visited their site or that they had consulted someone when developing their project. In contrast to the Custom and Direct Install respondents, a minority of Standard respondents (7 of the 33) said a program representative had visited their site.

Of the seven Standard respondents who reported a visit from a program representative, four said the program representative had no input into project decisions. As one put it, "They didn't help to decide because it was already decided."

The other three provided fairly simple descriptions that focused on identifying available equipment:

"They provided a list of qualifying equipment that matched with their needs and when the programs were no longer incentivizing some of the equipment."

"Suggested upgrades, fairly helpful, but gave a pretty wide range of options."

"The [program representative] helped inform my conversations with the contractors."

The 26 Standard respondents who reported a visit from or consultation with a market actor described varying degrees of assistance. Three were more detailed than the others, indicating that the market actor discussed various equipment options and their advantages:

"The contractor selected gave me better information about why they were sizing the equipment the way they did. The one I selected gave me more and better information in which to decide. They gave me one option that they thought would be the best fit for my situation."

"[The contractor] gave me a couple of options for fryers but they showed me the one with incentives and that was the one that made the most financial sense. The fact that the upfront cost was lower and the long term energy savings were both attractive to me."

"They gave a rundown of opportunities of where they could qualify for incentives. They did the 'pick and choose' of what would be the best from the list and determined what upgrades would be achievable. The consultant gave them a list of what to do, and specifications to make sure the equipment qualifies."

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Another 12 respondents also indicated the market actor presented equipment options or otherwise helped with equipment selection – for example:

"The contractor I selected gave me better information about why they were sizing the equipment the way they did. The one I selected gave me more and better information in which to decide. They gave me one option that they thought would be the best fit for my situation."

"They gave me a couple of options and in discussions the bat would be a better job and less expensive than spray foam and that ETO would cover more if we did the bat insulation (pink fiberglass)."

"They offered three [HVAC] options [including heat pumps]. ... They showed us what we needed and offered what they thought was the best one was."

A subset of these 12 explicitly mentioned that the market actor also mentioned the Energy Trust incentives.

Nine indicated the market actor specified the appropriate equipment for the job – for example:

"The contractor recommended the insulation and we chose it. I vaguely recall having a conversation about a couple of items but don't recall specifics. We talked about things like fire suppression and the type of insulation that would be required to accommodate fire suppression."

"[The contractor] selected the fryer and pointed out the lower upfront cost and low operating costs compared to other items."

"[The competing contractors] each recommended a 95% efficient unit and were able to tie into existing ductwork."

"They decided for her which types of windows to use."

The remaining two Standard respondents indicated the visitor or consultant provided no substantive input into the project decisions.

6.2.5 Assistance with Application

Most respondents received help on their incentive application, which most commonly consisted of completing the application for the participant or providing completion instructions. Almost half received help from a contractor, and a little over one-third got help from a program representative (Table 6-9). In about one in seven cases, the participant was able to complete it without any assistance. In those cases, the participant either found the application online or was sent the application.

Table 6-9: Who Helped Participants with their Incentive Application

Source of Help	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	16	18	17	6	10	67
Contractor	50%	28%	24%	17%	20%	45%
Program rep.	38%	28%	65%	50%	40%	37%
Utility representative	0%	6%	12%	33%	10%	2%
No help	13%	33%	0%	0%	10%	15%
Don't Recall	0%	6%	0%	0%	20%	1%

Respondents reported the types of assistance provided. Someone completed the application on behalf of about half of participants. Other common forms of assistance were providing instructions on how to complete the application, and providing general Program information, such as available incentives and requirements. Table 6-10 summarizes the frequency with which various types of assistance were provided. More detailed and qualitative information follows.

Table 6-10: Types of Assistance Provided

Source of Help	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	13	5	14	5	3	48
Completed application	46%	80%	43%	100%	67%	49%
Completion instructions	38%	60%	36%	20%	33%	39%
Program information	8%	20%	14%	0%	33%	9%
Provided app./forms	15%	0%	29%	40%	0%	15%
Submitted application	8%	0%	7%	20%	0%	7%
Checked for accuracy	0%	0%	36%	0%	0%	1%

Respondents generally found the application assistance valuable. In nearly all cases, the respondents who reported that someone completed the application for them commented on how valuable that assistance was. Some comments focused on technical understanding of the equipment or the program (or both) that was provided:

"Their assistance was super helpful. We don't have expertise and they do. They know the construction nuances and the program awareness and needs."

"I couldn't have done it without them. I mean the documentation was not overly complex but terminology is key and specifics are important ... and I have not been through this often enough to have a full grasp of all those items. So yeah, the assistance that was given was necessary."

"Very valuable. They knew how to phrase everything, so equipment-wise ... it's always nice to have somebody who knows what exactly did change and how it improved everything for efficiency and usability."

"The specific person was quite invaluable and instrumental in getting rebates. Felt like there was a lot of work and the process was difficult to figure out which program they qualified for, some buildings qualified under some programs but not the others. And the ETO rep helped make this process much easier for them."

Others still noted that the assistance greatly facilitated the process, even if the focus was not on providing technical knowledge:

"This was a big benefit. I am old and not computer savvy. It was very nice to have this done for me."

"I think it is real valuable. Just them taking care of the paperwork end of it for us. All we [have to] do is they send us a DocuSign, we sign off on the DocuSign, and then it gets submitted, and it's all taken care of for me except for a signature."

"Extremely valuable. We wouldn't have gotten the incentives and ensure the incentives were capitalized. [The contractor] was invaluable to that process."

"[Valued] a lot because they are doing this professionally and they know how to do it."

Two respondents commented that the market actor who completed the application charged a fee, but that the assistance was "very valuable and worth the percentage that was taken" and that it "made the process so easy it was a no-brainer. Well worth the small fee."

Even most of those who did not provide the same level of detail commented that the assistance was "greatly valuable," "invaluable," "highly valued," "extremely valuable because it was seamless." The two least enthusiastic responses were that the assistance was "helpful" and "useful."

Other common forms of assistance were providing instructions on how to complete the application, and providing general Program information, such as available incentives and requirements:

"...All sorts of assistance. You know, setting up and evaluating projects, ... explaining the how the process works, helping with forms, and introducing us to trade allies."

"Energy trust put us in contact with professional help, would answer the problem and the dollar savings to the with the incentive."

All those who described this level of assistance, even if they completed the application themselves, indicated the assistance was very valuable – for example:

"Was valuable. I usually have to take care of the paperwork, so you know, just knowing what needs to be done and just them shepherding us through the process."

"Great, the process was difficult and without him it wouldn't have been completed properly."

"Very valuable. These programs are complicated, so it's helpful to have someone to explain how everything works."

Even those who did not go into detail described the assistance as "extremely valuable, 10 out of 10," "very valuable," or "very helpful."

The perceived value of the assistance was related to the type of individual who provided the assistance as well as to the respondent's sector. We coded each comment based on the degree of value they indicated the assistance provided, to allow a more quantitative comparison of responses across respondent groups. Comments that indicated the application could not have been completed without the assistance were coded as "essential." Those that did not say that but nevertheless described it as "extremely," "greatly" or "very" valuable were coded as "very valuable." Those that indicated the assistance generally made the process easier or indicated it was helpful without qualifying how helpful (e.g., "...it was nice not to have to worry about it," "That assistance made the process easy for me to participate") were coded as "helpful." Finally, two comments that indicated the respondent could have completed the application without assistance were coded as "not needed." Codes were not necessarily mutually exclusive. For example, comment could have indicated the assistance was helpful but not needed. Similarly, a comment that indicated the assistance was very valuable because it was helpful would have been assigned both codes.

The assistance was at least somewhat helpful for a large majority of participants (Table 6-11). For almost three-quarters, the assistance was very valuable or even essential – that is, the participant would not have been able to complete the application without the assistance. About one in seven would have been able to complete the application independently.

Value of Assistance	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	13	5	14	5	3	48
Essential	8%	0%	21%	0%	0%	8%
Very valuable	62%	60%	86%	60%	100%	62%
Helpful ¹	31%	80%	29%	40%	33%	34%
Not needed	15%	0%	0%	0%	0%	14%

Table 6-11: How Valuable the Assistance Was

A higher percentage of participants found the assistance very valuable or essential when it was received from a contractor than from other sources (60% vs. 32%; *chi-square* = 5.4, p = 0.02).

¹Responses either indicated that the assistance generally made the process easier or indicated it was helpful without qualifying how helpful.

Similarly, a higher percentage of multifamily than other participants found the assistance very valuable or essential (50% vs. 26%; *chi-square* = 2.5, p = 0.11).

The source of program awareness and the source of application assistance were strongly related. As Table 6-12 shows, respondents who said a market actor was a source of program awareness were more likely to say a contractor helped with the application (94% vs. 13%) but much *less* likely to say a program representative helped with the application (3% vs 59%), compared to respondents who *did not* identify a market actor as a source of awareness. By contrast, having the Energy Trust website as a source of Program awareness is associated with a much lower percentage of applications assisted by a contractor (1% vs. 53%) and a much higher percentage of applications assisted by a program representative (69% vs. 31%) compared to respondents who *did not* identify the website as a source of awareness.

	Haraca common	MARKET ACTOR A SOURCE OF PROGRAM AWARENESS		ENERGY TRUST WEBSITE A SOURCE OF PROGRAM AWARENESS	
Type of Actor	HELPED WITH APPLICATION	YES NO		YES	No
	Yes	94%	13%	1%	53%
Contractor	No	6%	87%	99%	47%
	Chi-square, p	Chi-square = 4	12.0, <i>p</i> < 0.001	Chi-square = 9.9, p < 0.001	
	Yes	3%	59%	69%	31%
Program Representative	No	97%	41%	31%	69%
representative	Chi-square, p	Chi-square = 2	21.1, <i>p</i> < 0.001	Chi-square =	5.4, p = 0.02

Table 6-12: Relationship Between Source of Awareness and Source of Assistance

In addition to the above, results show that assistance with the application was related to whether someone visited the site to identify savings opportunities. A higher percentage of participants who reported a site visit said they got contractor help on the application, compared to those who did not report a site visit (64% vs. 35%; chi-square = 5.0, p = .02). The reason for this relationship is not immediately clear, given that the large majority of respondents who reported a site visit identified a program representative rather than a market actor as the one who visited the site (see Table 6-6). Perhaps this relationship suggests that projects initiated by program representative visits may be more complex than other projects and, thus, more likely to involve contractors and to require assistance with the application.

6.2.6 Pre- and Post-Installation Site Visits

We asked respondents whether anyone from the program carried out any "inspections" of their workplace either before the incentives were approved or after the equipment was installed and, if so, what their impressions were of those visits. This was separate from the question about whether someone visited their workplace to help identify savings opportunities (Section 6.2.4). That question addressed assistance with identifying potential projects, while this question focused on activities related to program qualification or preliminary estimation of savings.

Nevertheless, a site visit may mean different things to different respondents, depending on their project type – in particular, whether the project was Custom, Standard, or Direct Install. For example, for Custom

projects, the pre-installation site visit may entail assessment of the pre-existing equipment and conditions to develop a savings estimate, whereas for Direct Install projects, the purpose would be to identify needs and assess eligibility. Similarly, post-installation visits for Custom projects would be more detailed than for other project types, which would be done primarily to verify installation. For this reason, we examined this set of responses separately by program track, disregarding state and sector.

Responses generally met expectations based on program processes (Table 6-13). A large majority of Custom respondents reported site visits both before and after installation. Many fewer Standard participants reported visits, most of which occurred post-installation. Finally, most Direct Install participants reported pre-installation visits, and reports of post-installation visits were on a par with those by Standard participants.

Comment	Custom	Standard	Direct Install
Valid n	18	39	10
Reported pre- or post-installation visit	83%	23%	60%
Pre-installation visit	67%	8%	60%
Post-installation visit	72%	18%	20%
No visit or could not recall	17%	77%	40%

Table 6-13: Pre- and Post Installation Inspections¹

Most respondents, regardless of track, offered positive comments about the site visits. A relatively large share of comments were generally positive but nonspecific – e.g.:

"It was great. This is not our first time working with ETO and it's always good."

"It was good, they confirmed that they were doing what they said they were doing."

More specific themes were the visit's thoroughness, the good technical understanding displayed, and the feedback and insights provided. The relative frequency of these themes, and the types of detail offered, varied across the respondent types, as detailed below.

Custom participants. Custom participants' specific responses most commonly underscored the thoroughness of and technical understanding shown in the site visits. Eight of the 18 Custom participants commented on the visit thoroughness. Some of these comments provided details to illustrate how thorough the visit was:

"The initial audit was thorough and professional. The evaluation inspection, he spent six hours in our building with a range of engineering equipment and personal tools. He did a thorough job. ... I think we visited eight units to measure air pressure and airflow and spent time on the roof of the building measuring air pressure and air flow. So I thought that the post installation inspection was very thorough."

"...there's an Energy Trust guy that comes out and says, 'Let me let me take pictures of nameplates that you did it.' ...The guys come out, they know what they're looking for. And then they take evidence."

¹The combined results are not pertinent to this topic and so they are not shown in this table.

"After the equipment was installed we did a controls review to look at all the sequence of operations and ensure that the set points were all per the report of the engineering study that showed the viability of the project. And that was [program representative] that reviewed it with myself. It was thorough and good."

"I have photographs of [program representative] ... going through the equipment, going through the facility...."

Some were more general:

"It was very thorough. It was very flexible. We were just finishing up part of it. The last little piece and we were going to be up against the 12-month deadline. ... It was very thorough, very quick."

"It was thorough and there's a lot of potential."

"Very thorough."

About half of those who commented on the visit thoroughness also said something about the technical understanding displayed by the person doing the visit:

"I think they knew what they were talking about. They looked at and they understood the equipment."

They provide "the technical math for the incentive. ... They are spot on."

"I thought they went really well. The people that we've had do those are very professional. ...and they just come in and look at what they need to look at and take down all the information and notes and stuff and we've never had a bad experience with it."

One Custom participant commented not so much on the site visit itself but on the information provided afterwards:

"So an energy study happened ... and my experience with the contractors that did that work was positive. They connected me with utility information. And then we developed a relationship with several vendors. They were flexible and ... they would communicate that we need to do this, will be on site for X amount of time of time. ... And then they did the work and they provided a professional report."

Direct Install participants. Direct Install participants' comments most commonly focused on the ease of the process:

"They came and ... checked how many lights I have and it was easy because my business is small."

"Good, they knew what they were doing and did it quick."

"Great, no complaints."

"It was fine."

Two comments, however, focused on the visit's thoroughness and the insights received:

"Great, fantastic. Gave us insights. Found out we lacked insulation in a wall that was needed. Very helpful, helped us troubleshoot. Came back and fixed stuff."

"They were very thorough they explained a lot, how things worked and what to expected. They explained the thermostat how it worked and energy saving benefits. Setting schedule from your phone was highlighted as a benefit. A remote way to control it was highlighted."

Standard participants. The Standard participants' comments also were generally undetailed and focused mainly on the ease of the process:

"The inspections were straightforward and speedy - no issues."

"It was very easy and went well."

"Positive, it went well and they were pretty quick."

"It was good, they confirmed that they were doing what they said they were doing."

"No specific impression. They were brief inspections. "

"It was very smooth and efficient."

One respondent further reported that the person doing the visit was "very knowledgeable and knew what to look for."

The above information is summarized in Table 6-14.

Table 6-14: Comments About Inspections

Comment	Custom	Standard	Direct Install
Valid <i>n</i>	15	9	6
Any positive comments	11	6	6
Good technical understanding	4	1	2
Visit was thorough	8	0	1
Provided feedback and insights	1	0	2
Easy, quick	1	3	2
Positive, nonspecific comment	5	2	0
Can't recall/Wasn't there	3	3	0

6.2.7 Overall Process

A large majority of respondents offered positive feedback about the overall process for applying for and receiving Program incentives. The most common feedback was that the process was seamless or easy, or at least reasonable, particularly given the incentive amount (Table 6-15):

"I was thrilled. The whole process was positive."

Several respondents provided both "easy" and "reasonable" comments, for example, saying that the application process itself was easy and the time taken to receive the incentive was "reasonable":

"Everything went smoothly. I waited a few weeks for the incentive which seemed reasonable. All pretty smooth."

"Pretty easy to do the application. The incentive came within 30 days so that seemed reasonable.

A few identified "one off" positives that were not strictly related to the process *per se*: one noted that Energy Trust assisted with a challenge the respondent experienced with one of the companies involved with the project:

"They had trouble with funding, an independent engineer who was not an employee of one of those companies. Well, it was a challenge and Energy Trust of Oregon was helpful in that regard."

Table 6-15: Feedback on the Program Overall

OR OR

	OR	OR				Combined
Feedback	Standard	Standard	OB Custom	WA-All	OR Direct	Combined
reedback	Multifamily	Non-MF	OR Custom	WA-AII	Install	(Weighted)
Valid n	16	18	17	6	10	67
Any positive	81%	83%	76%	50%	70%	81%
Easy process	63%	61%	35%	17%	60%	61%
Reasonable process	38%	72%	41%	50%	20%	43%
Any negative	19%	6%	41%	50%	10%	17%
Incentive	6%	6%	24%	0%	0%	7%
Communication	6%	0%	12%	17%	10%	6%
Burdensome	0%	0%	6%	33%	0%	1%
Neutral	6%	0%	0%	0%	20%	5%
Don't recall	0%	11%	0%	0%	10%	2%
Unclear	0%	6%	1%	0%	0%	1%

¹TABLE NOTE, IF NEEDED

About one in six participants had some negative experiences, primarily associated with communication or incentive issues. Most of the comments seemed to suggest fairly mild criticisms.

Six respondents offered incentive-related comments: two commented on changes over time in incentive amounts and one each on the amount received, lack of incentives for certain parts of Custom projects, inability to capitalize on available incentives, and on the mode of incentive delivery.

Of the two who commented on changes over time in incentive amounts, one noted that the project paper work was not completed until after the year end because of delays in getting the new equipment working properly. Because of incentive changes that took place in the new year, the incentive amount declined. This respondent indicated the decreased incentive was not a major issue as the contractor took care of the difference. A second respondent simply commented that incentives are decreasing over time.

The third incentive-related comment was by someone who had been under the impression that a bigger incentive amount was forthcoming, based on the project that was done, but that respondent nevertheless said, "I can say that we were happy."

A fourth respondent – a Custom participant – commented that some things "are not being appropriately incentivized." That respondent's comment was somewhat difficult to interpret, however. The respondent said that "there is no incentive being offered for the metering or being able to grab that data and bringing it into a spot which you could then kind of like proactively do something about it." This respondent seemed

to be suggesting that incentives were not available to cover equipment that would allow monitoring of energy use in the installed equipment. Incentives are available for building automation systems.

One respondent's comment was not so much an issue with Energy Trust incentives *per se*, but spoke to the fact that it was not always possible to capitalize on this. The reason is that "[internal] funding can become available unexpectedly" but that the funding has a lifespan that may not accommodate the Program processes. As a result, "there have been a few projects I would have liked to have run through Energy Trust, but the timing just didn't work out correctly."

The only other incentive-related comment was not a criticism of incentive amounts, just an observation that it would be better would be to have the incentive taken at the point of purchase.

Five respondents commented on communication issues. One Custom participant's comment suggested the participant was not aware of having received a report documenting the results of the technical study:

"It would be nice to know if there's a study ... in terms of like, are we saving on the long run and that would be something that would be beneficial to see, maybe to submit to our committee saying, other than we received a small rebate, this is what we're saving. So that would be really helpful to get a report."

It should be noted that the Program does distribute technical studies to all Custom participants and provides those studies to their main site contact at the time of the project. The above comment might suggest a need to ensure that study reports are distributed to all interested individuals.

Another Custom participant spoke about "an issue getting ahold of [program representative] at times." That respondent noted: "we have had other representatives in the past that have been very responsive. So the more responsive the representative is to our status request, or if the additional information is needed, the better for us."

One respondent reported frustration over a "lack of communication," not about the project that was the subject of the interview (a Direct Install smart thermostat project) but about a prior insulation project. That respondent had relied on the contractor to complete the application, as it required details that "are harder for people not in the energy efficiency business to navigate." The respondent was not sure whether the contractor did the application and contacted Energy Trust to get guidance. A person at Energy Trust gave the respondent a phone number to get help with application and told the respondent that Energy Trust would reach out to the contractor. The respondent indicated, however, the case "slipped through the cracks" and the respondent may have missed the deadline for submitting the application.

The two other communication issues – both from participants with Standard projects – related to receiving ongoing communication about Program incentives. Both comments suggested that the respondents would like to receive periodic information about available incentives. One – a Multifamily participant – reported having received some periodic communication in the past and wanted "someone to reach out explain why" such information has not been coming lately.

Three respondents offered comments relating to the burden level of the application process. One Custom participant referred to the number of forms required. That respondent indicated the process was "reasonable" and "doesn't take a super large amount of time," but indicated some type of guidance would be useful (and may already exist):

"Maybe we need some kind of road map and maybe there was one that exists. I haven't looked, but it'd be nice to know based on what program or incentive you're going for, whether it's Custom or Standard. If there's like a simple matrix or chart that just says, here's the forms you're gonna be filling out or the steps."

On a related note, a second Custom participant simply suggested "any means by which ETO can expedite the process" would make that respondent want to do even more upgrades.

The third comment about process burden was from a Standard Multifamily participant, who said that the process "was pretty onerous for \$500." That respondent reported having "many properties" in Oregon and that there are "a lot of nuances between Washington and Oregon that made it confusing." That respondent suggested that the process should be specific to the market area rather than the state level, "since Clark County is often folded into the Portland Metro umbrella."

Finally, one respondent voiced a negative perception, but it did not appear to be directed at the Program per se. Instead it appeared to be directed toward the equipment provider:

"...the follow through and the issues that we're having now with trying to operate the system and not knowing how to operate it on-site... we have to call and coordinate with someone who's out of state to adjust our own system, which is extremely, extremely, extremely frustrating."

6.2.8 Referrals to Renewable Energy or Lighting Program

Most respondents reported no referrals to other programs for renewable energy or lighting equipment. Respondents reported on whether they discussed incentives for renewable energy or lighting equipment with a program representative. Responses indicate that about one in seven participants had such conversations (Table 6-16). The vast majority (95%) of such conversations were about the lighting program, and very few (9%, or three respondents) were about renewable energy.

Table 6-16: Discussion	with Program	Representative ah	out Renewable	or Lighting Incentives
I UDIE U-IU. DISCUSSIUII	WILLIFICULUII	Nebresellulive ub	out hellewable	OI LIUIILIIIU IIICEIILIVES

Response	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct	Combined (Weighted)
Valid n	16	18	17	6	10	(Weighted)
Valid II	10	10	17	U	10	07
Yes	6%	28%	71%	83%	90%	14%
No	88%	61%	18%	17%	10%	79%
Don't recall	6%	11%	12%	0%	0%	7%

The referrals that were reported were more common for Custom participants, Multifamily participants, and large organizations than for other participant types. We also examined whether the frequency of such conversations was related to project or participant type. To do this, we re-split the respondents three ways: 1) based on program track (Custom, Standard, or Direct Install), disregarding state; 2) based on sector (Multifamily or Non-multifamily), disregarding track or state; and 3) based on the size of the participant's organization. These analyses showed that such conversations were more common for Custom participants than those in other tracks (66% vs. 14%, *chi-square* = 5.2, p = 0.02). They also were

more common for Multifamily than Non-multifamily participants (40% vs. 6%, *chi-square* = 10.6, p = 0.001). Finally, they were more common for participants from larger organizations (those with more than 10 employees) than from smaller companies (44% vs. 4%, (*chi-square* = 14.4, p < 0.001).

6.2.9 Equipment Types Unable to Obtain with Incentives

About one-third of respondents identified at least one type of equipment they wanted but were unable to receive incentives for, most commonly HVAC or lighting equipment. The percentage was relatively consistent across strata (Table 6-17).

	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
Valid n	16	18	17	6	10	67
Percent of Participants	31%	28%	35%	33%	30%	31%

Table 6-17: Incentives Unavailable for Some Equipment

Respondents most commonly identified HVAC-related equipment types. Three specifically mentioned large HVAC systems:

"We need a totally, totally new HVAC system. ...I guess the grant or the assistance doesn't cover things like replacing existing equipment like your HVAC system. Like we have furnaces that are like 30 or 40 years old that needs to be replaced. We have a boiler system that is antiquated. We have a huge building. We have no A/C, so I know it might be outside the scope, but we're kind of hoping you know, it could include things like that."

"A chiller or air handling unit. A big piece of HVAC at the end of its useful life, which kind of disqualifies it, even though replacing it with a new piece of equipment will save a lot of money."

"I wish we could have gotten incentives for my HVAC upgrade. I worked with my HVAC contractor and we could not find the equipment on the market at the time."

One respondent each said that their ductless heat pumps did not qualify for incentives or that the incentive was not sufficient to offset the high upfront cost. In addition, one respondent each identified electric furnaces (as a "maybe") and "gas furnace water heater."

Four respondents referenced lighting: one referred to the Program's "running out of funds"; one said that the incentives were insufficient to cover the cost of replacing existing lighting; one said that they had already installed lighting and it was too much work to "backtrack" and try to get the incentive after the fact; and one referenced an expectation that all lighting incentives would discontinue soon.

No more than one respondent identified any other equipment type. The types identified by one respondent each were windows, refrigeration, HVAC controls, fryers, and stoves/ovens and three did not identify the equipment they were unable to get incentives for.

6.2.10 Planned Future Upgrades

A substantial minority of participants plan future equipment upgrades, most commonly HVAC, and collaborate with Energy Trust on them. Respondents reported on whether they had plans for more energy-related improvements or facility upgrades in the near future and, if so, whether they planned to work with Energy Trust again on those projects. Responses indicate that just over one-quarter of participants have such plans, a large majority of whom plan to collaborate with Energy Trust on them (Table 6-18). Of the three respondents who did not state they planned to work with Energy Trust, two said they had not yet explored whether incentives were available, while the third explained that the upgrade site was outside Energy Trust's service territory.

OR OR **Combined** Standard **Standard OR Direct** (Weighted) Response Multifamily Non-MF **OR Custom** WA-All Install Plan More Improvements or Upgrades in the Near Future 66¹ 16 17 17 6 10 Valid n 25% 29% 88% 67% 40% 28% Yes 69% 65% 12% 17% 50% 66% No 0% 17% 10% 6% 6% 6% Not sure/not answered Will Work with Energy Trust² 15 19 Valid n 3 13 4 4 81% Yes 0 0 0 0 1% No Not sure/not answered 1 0 18%

Table 6-18: Future Improvement/Upgrade Plans

The most commonly reported planned equipment types were HVAC (primarily heat pumps and controls), solar panels, and lighting (Table 6-19).

Table 6-19: Planned Types of Equipment Improvement/Upgrade

Response	Count
HVAC, incl. controls	15
Solar	10
Lighting	9
Windows	4
Systems/automation	3
EV charging	3
Refrigeration	3
Insulation	3
Other ¹	6

 $^{^{1}}$ Battery storage, outdoor heaters, air quality, kitchen ventilation, thermal (not specified).

¹One respondent discontinued the interview at this point.

²Counts are shown rather than percentages because of the small total number of respondents in each stratum.

HVAC and solar equipment were consistently the most and second-most commonly identified equipment type across program tracks and sectors. However, the frequency with which some other items were reported appeared to vary somewhat by program track and sector. For example, only Standard track participants identified EV charging and refrigeration, and they did so more commonly than systems/automation or battery storage (Table 6-20).

Table 6-20: Planned Types of Equipment Improvement/Upgrade – by Track

Response	Count					
Custom Track						
HVAC, incl. controls	5					
Solar	2					
Systems/automation	2					
Battery storage	1					
Standard Track						
HVAC, incl. controls	8					
Solar	7					
EV charging	3					
Refrigeration	2					
Systems/automation	1					
Battery storage	1					
Direct Install Track						
HVAC, incl. controls	2					
Solar	1					
Refrigeration	1					

When viewed by sector (Table 6-21), the most striking differences were that Non-multifamily participants identified HVAC equipment relatively more frequently (i.e., as a share of all those who planned future improvements/upgrades) than Multifamily participants and were the only ones who identified refrigeration or battery storage.

Table 6-21: Planned Types of Equipment Improvement/Upgrade – by Sector

	Count			
Response	Multifamily Non-multifar			
HVAC, incl. controls	5	10		
Solar	5	5		
Systems/automation	2	1		
EV charging	2	1		
Refrigeration	0	3		
Battery Storage	0	2		

6.2.11 Demographics

Responses indicate participants were diverse with respect to organization type and size as well as sex and race/ethnicity of ownership or leadership. Participants represented a wide range of organization types and sizes, but a large majority were privately owned organizations and smaller organizations (Table 6-22). Of participants in the nongovernmental sector, almost one-third are owned or led by a woman or person of color. Almost all participants use English in customer interactions.

Table 6-22: General Firmographics

Course	OR Standard	OR Standard Non-MF	OB Custom	WA-All	OR Direct	Combined
Source	Multifamily		OR Custom	WA-AII	install	(Weighted)
Valid n	16	17	17	6	10	66
Publicly traded	0%	0%	12%	0%	0%	<1%
Privately owned ¹	88%	76%	18%	67%	90%	83%
Non-/not-for-profit	0%	12%	35%	17%	10%	3%
Government	0%	12%	35%	17%	0%	3%
Not a business	13%	0%	0%	0%	0%	10%
1	Number of Build	dings Participa	nt Owns in Ene	ergy Trust Terri	tory	
Valid n	16	17	16	6	10	66
None	0%	6%	0%	0%	0%	1%
1 to 5	69%	65%	31%	67%	90%	67%
6 to 10	6%	12%	6%	0%	0%	7%
11 to 20	0%	6%	13%	17%	10%	2%
21 to 100	13%	12%	13%	17%	0%	12%
101+	13%	0%	31%	0%	0%	11%
Don't know	0%	0%	6%	0%	0%	<1%
		Number o	of Employees			
Valid n	16	17	17	6	10	66
One to 10	75%	53%	6%	33%	80%	69%
11 to 25	13%	12%	12%	33%	10%	13%
26 to 50	0%	24%	6%	0%	0%	4%
51 to 100	0%	0%	6%	0%	0%	<1%
101 to 500	0%	6%	18%	0%	10%	2%
More than 500	0%	0%	41%	0%	0%	1%
Did not answer	13%	0%	0%	17%	0%	10%

Source	OR Standard Multifamily	OR Standard Non-MF	OR Custom	WA-All	OR Direct Install	Combined (Weighted)
		Languages Use	d with Custom	ers		
Valid n	16	12	12	6	10	66
English	94%	100%	100%	100%	100%	95%
Spanish	13%	35%	65%	33%	50%	18%
Chinese ²	0%	0%	6%	0%	0%	<1%
Vietnamese	0%	0%	6%	0%	0%	<1%
Russian	0%	0%	24%	17%	0%	1%
Indian	0%	0%	6%	0%	0%	<1%
Korean	0%	0%	6%	0%	0%	<1%
Other ³	0%	12%	12%	0%	0%	2%
Don't know	0%	0%	6%	0%	0%	<1%
Not a business	0%	0%	6%	0%	0%	<1%
Busines	ss Owned, or N	on/Not-for-Pro	ofit Led, by a W	oman or Perso	on of Color	
Valid n	13	15	9	5	10	54
Woman	23%	40%	44%	20%	40%	27%
Person of color ⁴	8%	13%	33%	20%	30%	10%
Neither	69%	60%	56%	60%	50%	67%

¹Includes individual proprietorships.

Of the 10 respondents who represented non-profit or not-for-profit organizations, five reported that their organization was established to provide services specifically to women (five), persons of color (five), or people in rural areas (three).

A large majority of participants own the facility where the project occurred, just over half of whom are absent owners while the rest occupy some or all of the facility (Table 6-23). About two-thirds of absent owners are responsible for no energy bills, while the rest are responsible for all or some. By contrast, just over half of tenants are responsible for all such bills, while the rest share responsibility with the facility owner.

²Mandarin or Cantonese.

³Three reported they would work any customer language, using interpreters if needed; one, representing a school district, simply indicated "we will work with parents speaking other languages too."

⁴Three Asian or Asian American, two Black or African American, three Hispanic, Latino, or Spanish, and one Native American or Alaska Native.

Table 6-23: Ownership and Control of Participating Facility/ies

	OR	OR				
	Standard	Standard			OR Direct	Combined
Source	Multifamily	Non-MF	OR Custom	WA-All	Install	(Weighted)
		Own	or Lease			
Valid n	16	18	17	6	10	66
Own	94%	71%	82%	100%	20%	89%
Lease	0%	29%	6%	0%	80%	6%
Other	6%	0%	12%	0%	0%	5%
	Facility (Owners: Occup	y or Lease Out	Facility/ies		
Valid <i>n</i>	16	12	16	6	2	63
Lease all	63%	17%	6%	50%	0%	55%
Occupy all	19%	75%	50%	50%	0%	27%
Occupy part/lease part	19%	8%	44%	0%	100%	18%
	Absent Ow	ner: Responsil	bility for Gas ar	nd Electric Bills		
Valid <i>n</i>	12	3	7	3	2	42
None	67%	33%	0%	0%	0%	63%
All	17%	67%	86%	67%	100%	21%
Mixed	17%	0%	14%	33%	0%	16%
	Tenant:	Responsibility	y for Gas and E	lectric Bills		
Valid n	1	5	3	0	8	7
All	0%	100%	67%	0%	100%	54%
None	0%	0%	0%	0%	0%	0%
Mixed	100%	0%	33%	0%	0%	46%

6.3 Market Actor Experience

This section addresses the following research question:

What are the current experiences of the various market actors interacting with the Program – trade allies, non-trade ally contractors, distributors, ATACs, community-based organizations, etc. – and how might they be improved?

In addition, some of the information also addresses several research questions that pertain to Program History and Program Operations. Such information is included in summary form in Sections 4 and 5.

This section is subdivided into three subsections, each detailing pertinent feedback from ATACs, contractors, and CBOs.

6.3.1 ATAC Experience

Energy Trust relies on ATACs to support and guide customers in the commercial building segment. Specifically, ATACs provide engineering analysis through technical studies to assess the costs, benefits,

and payback for energy efficiency investments in existing commercial buildings. These studies focus on assessing the cost-effectiveness of various energy efficiency technologies, including rooftop fans or upgrading a HVAC system. To support these analyses, ATACs may conduct site visits or install and analyze data loggers to assess energy performance during a specific time period.

To shed light on the ATACs' experiences interacting with the Existing Buildings Program, the ADM team interviewed them on a variety of topics, as identified in Section 3.4. These comprised their roles in project development, effect of recent Program changes, referrals to other Energy Trust programs, how their work relates to Energy Trust DEI goals and objectives, their customers' experience, areas for program improvement, and market trends. Through our discussions on these topics, the 10 interviewed ATACs provided valuable insights into the current operations of the Existing Buildings PMC and emerging energy trends within the Existing Buildings market in Oregon and Washington.

Respondents' Background

All of the ATAC respondents were either trained engineers or had a strong engineering and technical background. Two specialized primarily in the multifamily sector, specifically condominiums, while the eight others served a broader range of building types, including healthcare, schools, existing office buildings and municipal buildings. Eight respondents worked in Oregon while two worked in Washington. Two ATACs have reported working with the Program since it began in 2002, while the others have worked with this program for five years or more.

The ATAC respondents all had supported the Existing Buildings Program for at least three years, with most having worked with the Program for the past five years.

Respondents' Role in Project Development

An ATAC may identify a project and bring it to Energy Trust for review, or Energy Trust may assign a project to the ATAC. While some ATACs indicated that Energy Trust selected them to complete a specific project, most reported that they generated their projects on behalf of their clients. Those respondents described their role as a "project developer," finding projects that could benefit their clients and bringing those projects to Energy Trust staff for consideration. One ATAC described his role this way:

"I'm almost exclusively looking at the existing built environment. ...[I] work alongside our direct or service sales account managers, helping them think about and develop projects... [A] customer might ... have a piece of equipment that's at end of life. And we can go in there and look at that. And then maybe there's opportunities to kind of broaden the scope. And oftentimes, when you're talking about that looking at that kind of work, usually there's an incentive from Energy Trust" to complete the technical study.

ATACs varied in their reported workload regarding the number of technical studies completed for Energy Trust. Two reported completing 40 to 70 projects during the past two years. One noted:

"In the last three months, I've done two commercial projects. One was with a church, and one was with a county-owned office building... and I've probably done somewhere in the range of a dozen commercial buildings, not including higher education or K through 12."

Other ATACs completed an average of 10 to 20 projects annually.

Most respondents reported little or no changes in workload since the change of PMC, while three provided varied reports on this subject. One ATAC reported that "it does feel like more projects have come to us from Energy Trust." By contrast, two said their workload had decreased under the new PMC. One indicated that the change in their workload was the result of a change in their own focus. That respondent "used to kind of do analysis studies for its own sake [but is] now focused more on developing projects, implementing energy efficient retrofit projects...." That ATAC will go through Energy Trust "when the client wants to" but is "less tapped into" Energy Trust and getting more work from building owners.

Program Transition and Performance of the New PMC

The ATACs reported generally favorable reactions to the change in PMC from ICF to TRC.

Most respondents had no specific comments about the overall transition process – that is, the hand-off from ICF to TRC. One reported not having been aware that a change had occurred and six others had no specific comment about the transition process. Three respondents commented on the transition process. Of those, two indicated a good transition. One described it as "smooth" and the other reported that "it's been pretty seamless as far as the transition between the two companies." A third reported being aware of the change to TRC, but indicated the change had had little impact on daily operations, as the Energy Advisors they had worked with under the previous PMC continued that role under TRC. Most others either provided no comments on the changeover to TRC or said they had not been aware there was a change. One respondent, however, described the transition as "messy," saying "I don't know if ICF gave TRC all the information" that was needed. Thus, for this respondent, the transition "messiness" was caused by the outgoing PMC, not TRC.

All respondents provided positive comments about TRC, touching on their performance in general or on program operations under TRC. For eight of the 10 respondents, the comments were generally positive or neutral. Two respondents identified specific improvements to program operations under TRC. One of the two noted that working with Energy Trust had been "very difficult" under the previous PMC. There were no good guidelines for doing studies, but the transition to TRC has "actually made that work a little bit better, there are ... templates available that we can use [so you don't] just ... do something and then later on find out it's not what" you should have done. These comments were echoed by a second respondent, who noted the "additional resources for ATACs, such as templates, guidelines" that provide more "strategic guidance." The context of these respondents' comments suggests that the primary value of these improvements has been to give these ATACs a better understanding of what is expected in a technical study.

Other respondents also noted some changes in templates and forms, but their comments suggested changes were fairly minimal. For example, one noted that "there's a little bit of process change. It's always going to be, you know, [when changing from] one company to another" but that "it stays pretty consistent." Nevertheless, this respondent noted that "TRC has been, on average, better than most of them in the past. They've been great. Things have been super timely in their review and email communications and response."

Although most comments about TRC were favorable, five respondents identified concerns, some of which were more substantive than others.

Three respondents identified concerns about changes in the technical study processes.

One respondent indicated being constrained at times from using "the sound equations that we use to do the analysis" because TRC staff "have their own thoughts about what certain factors should be used." As a result, "it's become onerous to me to be able to meet all of their requirements for the very technical stuff." For this respondent, the concern seemed to be largely one of whether the focus is on serving the client versus being "able to crank out these studies very quickly" to get "low hanging fruit," which has led to "adversarial" conversations about how to go about a project.

The second respondent suggested that, in some cases:

"you may get a very vague scope of work and maybe it goes nowhere because it ... hasn't been vetted. ...It didn't pass the sniff test enough to send it on down the line. ...I think that's probably my biggest critique though for Existing Buildings."

A third respondent noted that, since the new PMC took over, "Energy Trust never brought a project to me, and this has been frustrating." That respondent further reported that there had been "quite a few times" when the respondent's firm had identified a project but TRC "took the project" to do the technical studies in house. As this respondent described it,

"I've been on sites where I wrote proposals and [TRC] ended up getting the work. ... I just wanted to connect [the customer] with an energy advisor, because the energy advisor is so crucial in this process. ... And then when I finally circle back with the energy advisor ... they already are working with TRC on a custom study ... or they negotiate the contract lower and either I have to accept it at that lower price that sometimes is a loss or they get the work."

The respondent described the resulting environment as "very stressful." By contrast, the former PMC "never did their own in-house work."

All three of the above respondents also voiced concerns about TRC's staff. In all cases, the concerns about TRC staff were either explicitly or implicitly related to the concerns about the technical study processes.

In two cases, the concerns were about the experience or skill level of TRC's staff. According to the one who mentioned being constrained from using "sound equations," TRC "brought on quite a few younger people," some of whom are not professional engineers. While this respondent did not indicate that the change in staff was the reason for the changes in procedures, the comments suggested that the lower experience levels of the new staff necessitated more work on the ATAC's part. Specifically, according to this respondent, the "younger people" that TRC had brought on...

"are very technically intelligent and capable ... in terms of doing equations and analytics and all that, but they're pretty out of touch with design concepts and the big picture and so I'm more and more pressed to do very, very technical minutia."

The respondent who commented on vague scopes of work similarly commented that some of the Energy Advisors are more skilled than others:

"Some of them are highly technical. They may even be degreed engineers. Some of them are very experienced and can sniff out a viable project. Others, it's the opposite...."

In this case, the respondent explicitly suggested that the staff who are less skilled staff are responsible for the vague scopes of work that go "nowhere." This respondent suggested a need for training: "Other programs only hire experienced engineers for this role. TRC does not do that."

The third respondent, reported there had been a turnover in TRC staff in the past year. Although this respondent did not comment specifically on the skill level of the new TRC, the turnover had objectionable implications (according to the respondent), as discussed below.

Similarly, the respondent who commented on how TRC had taken technical studies in house linked that change to the turnover in TRC staff. The respondent who commented on vague scopes of work that go nowhere did not explicitly link that to a change in staff but did relate it to varied staff skill levels.

Comments from other respondents were less substantive although worth noting.

Three respondents commented on long project review times, which can get in the way of getting projects completed. One reported the existence of "a backlog of projects to review," which "can delay incentive offers. And as you know, building owners and contractors have to make purchase orders and contract receipt to order equipment if they're going to meet … due dates." Another expressed a similar view, saying "it takes them a significant amount of time to get us approvals on the proposals and then do the reviews." A third said that it takes time to do a custom study, and the lead time adds to that, and "sometimes we lose projects that way." By contrast, one respondent said that TRC has been "super timely" in its review process.

Notwithstanding the above, nearly all respondents were generally satisfied with TRC. Some emphasized how much they liked working with Energy Trust and the Energy Advisors:

"We love working with Energy Trust....and (we) hope to continue working with them."

"We like working with Energy Advisors at TRC – [it's] a great experience."

Further, most of the ATACs indicated that the change in program management did not directly affect their clients. This is because the clients interact primarily with the Energy Advisors, who did not change after TRC took over. One exception was a respondent who indicated that some clients are not clear on how to contact their Energy Advisor, especially if the Energy Advisor has changed. According to this respondent, "the biggest feedback I get is who is their Energy Advisor? How to get a hold of them and the hardest part is the communication with them."

Effect of Adding Multifamily Projects to the Program

The ATACs reported mixed results regarding the inclusion of multifamily projects into the Existing Buildings Program. Six of the ATACs reported doing little to no multifamily projects, so this program enhancement did not affect their projects.

Of the four ATACs who work in the multifamily sector, two reported that this program enhancement led to more multifamily work. One respondent indicated that some changes had been made relating to multifamily projects to make it easier on ATACs, which resulted in more projects. Another simply indicated that having the multifamily sector included in the Existing Buildings Program provided "more opportunity for work."

The other two ATACs who work in the multifamily sector reported that the Program change has not affected the number of multifamily studies. One said:

"We are hoping [the change] would bring in multifamily under that same commercial existing building program and we would get opportunities to be doing more business, and we've tried. We've reached out.... That's a tough sector to really engage ... it's hard to find the people who are willing to invest (in projects)."

Two respondents indicated that there are fewer opportunities for custom measures in the multifamily sector. Interestingly, one of those was the one who said that incorporating the multifamily sector into the Program created more opportunities for work, while the other did not indicate it had affected workload in that sector.

Effect of Business Lighting Program Change

None of the ATACS reported concerns about creating a separate program for Building Lighting, as they were not directly involved with lighting projects.

Furthermore, these ATACs historically have not been involved with lighting projects, as other technical experts, such as lighting designers, complete those projects. Therefore, transitioning lighting away from the Existing Buildings Program did not affect the ATAC's projects, customers, or overall workload. As one put it:

"There's a lot of customers who figured [that out], and they've got internal staff that can handle it. And so they just they take their incentive dollars, and they just kind of self-direct or do the work themselves."

Project Referrals

Most interviewed ATACs could not describe any specific instances when Program staff referred the customer to another Energy Trust program to do additional work. Four, however, did provide some discussion about such referrals.

One ATAC brought in a new project and Program staff "helped move the project to New Buildings."

Two respondents talked about bringing clients to Energy Trust as they look for incentives for their customers in other Energy Trust Programs. As one respondent noted:

"We'll do renewable projects. We'll do lighting projects, and if there's serious interest [from the client], we'll stay involved" in the project.

Another provided a similar description, albeit more generally:

"We find clients, and then Energy Trust staff may take them over for other projects ... based on project specifics. ... The client comes to me and then I make the introduction to Energy Trust."

A fourth respondent described how a customer was referred to that respondent's firm for a small business project.

All four of these ATACs reported that the referral process was smooth. Three in particular reported the process "works well," with a "clear handoff" or "no issues." One reported not being aware of any specific

coordination between Existing Buildings and other program staff, but another reported that the interaction between the client and the different projects was "seamless":

"The Energy Advisors do a good job in navigating that [referral process] and making sure that the customer understands [the process]."

Four ATACS said they had "no role" in the referral process.

When asked whether they had received any training or guidance from Energy Trust or the PMC about project referrals, all 10 respondents recalled attending workshops every year sponsored by Energy Trust but that those workshops focused on specific topics like retro-commissioning or changes in program offerings and measures. None recalled receiving specific training related to project referrals.

DEI Goals/Objectives

Although Energy Trust has increased its efforts to reach priority populations, five of the 10 ATACs were unaware of any specific program goals. These five respondents did not recall receiving specific guidance about identifying minority-owned businesses, and indicated it was their understanding that was handled primarily by the Energy Advisors.

Four ATACs recalled specific conversations with Energy Trust staff about expanding the Program's reach but they varied in terms of the nature and content of the conversations. Two of them recalled having specific program training from Energy Trust as to how best to serve these customer groups. Another recalled several meetings in which Energy Trust staff discussed "their desire to serve underserved communities." The fourth ATAC provided no details about the conversations.

Two ATACs also noted that studies targeting priority communities received a higher priority from the Program than did some other studies. One of these ATACs spoke of priority communities in general, while the other specifically mentioned more rural communities.

Eight ATAC respondents were unaware of any specific outreach strategies Energy Trust has used to increase program participation among priority populations. With respect to rural areas in particular, most ATACs do not work in such areas and so could not provide any insights regarding efforts there.

Two ATACs working outside of the major population centers in Oregon have connected with Energy Trust staff to identify projects. One of those spoke specifically about rural areas. The other reported having an account manager assigned to Southern Oregon, which has led to some project studies but those occurred in some of the larger communities in the area rather than specifically in rural areas. This latter respondent observed that the goal of this program is to save energy, so this organization focuses on where energy is being consumed—and that is largely in the urban areas. The respondent noted that a few industries, such as timber and agriculture, are located in rural areas, but that is not a primary focus for this ATAC. This respondent reported having made efforts to reach priority groups but that they have not been successful:

"We honestly have tried to make concerted, focused efforts. I don't think we've been very successful, but we are trying to make efforts to try and serve ... underserved communities or more rural communities."

Several ATACs provided suggestions on ways that Energy Trust could increase or enhance its outreach to these priority populations including:

For non-rural areas:

- Reach out to organizations in the Portland area that serve priority communities to offer classes and workshops about the Program.
- Link with affordable housing programs and provide support for those projects using ATACs.
- Reach out to condominium associations and present at their monthly luncheons about potential savings opportunities.

For rural areas:

- Reach out directly to engineering firms in more rural areas to identify beneficial projects.
- Target the local schools, hospitals, and municipal buildings in rural communities, as these will be the largest energy users.

Customer Experience

All interviewed ATACs reported client satisfaction with the Program in general or technical studies in particular. Several comments indicated general satisfaction with the Program:

"[Customers] do tend to enjoy the process."

"Generally very positive. ...haven't seen anyone upset, disappointed."

"Overall I'd say it's been positive ... clients have been grateful."

"Most of the time, I'd say we have heard a high level of satisfaction about the projects and how they've gone. "

"I think people are pretty happy, pretty stoked."

Four respondents in particular commented on their clients' satisfaction with the incentives that result from the studies:

"Customers are always super happy when they get the incentive money."

"[Customers] like the incentive money and they like studies that we do that quantifies the savings and costs."

"[Customers] seem to like it especially with the bigger incentives."

"I think people are pretty happy...especially in in recent years...There's been some really big dollars available."

One respondent noted that the energy incentives "actually led to projects being completed that were 'on the cusp' but the owner went ahead because of the incentives."

Customers also are satisfied with the energy savings. According to one respondent, "we just did a walk-through of another project that was completed and they were gushing" that they could tell their energy bills had gone down.

Five interviewed ATACS reported issues that may create challenges for customers.

As noted in Program Transition and Performance of the New PMC

, above, three respondents commented on long project review times, which can get in the way of getting projects completed. In particular, a backlog of projects to review can delay incentive offers, which can be a concern for building owners and contractors who have to make purchase orders to meet due dates. The long lead times can cause ATACs to lose projects.

Two comments pointed to communication issues. As also noted above, one respondent noted that some clients are not sure how to contact their Energy Advisor, especially if the Energy Advisor has changed.

Other challenges relate to factors outside the PMC's control:

- Customer budgets: "Budget is almost always the first problem."
- Technical challenges in requesting incentives for electrification projects: "...We haven't come up with an EZ button [for electrification projects]."
- Delays in the supply chain, which makes it difficult to get the equipment: "... in the Post-COVID environment, there are not enough contractors, and everybody needs work done...sometimes there is a long lead time in the supply chain."

Areas for Program Improvement

The ATACs also identified several ways in which the Existing Buildings Program could improve:

- Continue to offer the higher incentives, as that directly led to more project studies.
- Complete project reviews more quickly as "it takes significant time to get approvals" from Energy
 Trust" which leads to customer frustration.
- Proactively reach out to vendors to secure price quotes on highly efficient equipment, which would also help to alleviate the supply chain issues.

6.3.2 Trade Ally and Non-Trade Ally Contractor Experience

The ADM team interviewed contractors on a variety of topics relating to their program experience. These covered their program background and their experiences and perspectives relating to program changes, cross-program referrals, program processes, contractor satisfaction and benefits of program involvement, participant satisfaction, and future trends and program opportunities.

Contractor Descriptions

Contractor respondents varied by business type, services provided, and areas served (Table 6-24). More than half reported more than one million dollars in annual revenue per year. They reported offering a range of services, most commonly HVAC or building shell services, and covering the range of Energy Trust service areas.

Table 6-24: Contractor Respondent Characteristics

	EB Trade Ally (<i>n</i> = 25)	Non-EB Trade Ally $(n = 5)^1$	Non-Trade Ally (n = 18)	Total (n = 48)	
Annual Revenue					
Up to \$500,000	1	2	4	7	
\$500,001 to \$1M	4	0	2	6	
More than \$1M	19	3	12	34	
	Fir	m Services			
HVAC	19	2	7	28	
Building Shell	6	3	8	17	
Plumbing	4	0	2	6	
Refrigeration	3	0	3	6	
Motors & Drives	1	0	2	3	
Controls	1	0	2	3	
Other ²	2	0	7	9	
	Locat	ions by State			
Oregon	24	4	18	46	
Washington	2	1	3	6	
	Service Areas				
Portland Metro	18	3	14	35	
SW Washington	10	2	9	21	
Mid-Willamette	7	1	8	16	
North Coast	3	1	9	13	
Eastern Oregon	3	0	8	11	
Southern Oregon	1	0	9	10	
Central Oregon	2	0	8	10	

¹ As noted in Section 3.5.3, five contractor interviewees initially identified as non-TAs were actually TAs for Energy Trust programs other than Existing Buildings, mainly the Existing Homes Program.

Respondents varied in terms of their Program background (Table 6-25). Existing Buildings TAs tended to report more projects with the Program than did the other respondent types, who largely reported 10 or fewer Existing Buildings projects in 2022 and 2023. More than three-quarters said they had worked with the Program since before 2021. Most respondents described their role in working with Energy Trust projects as largely administrative and in a somewhat transactional role – that is they completed incentive applications on behalf of customers or they gathered information that the customer could then use to submit their application. Many of these administrative respondents were familiar with the equipment that qualified for incentives but were not installers working at customer sites. Somewhat fewer than half indicated they were their customers' key liaison with Energy Trust, while somewhat fewer than one-third said they installed equipment or performed some other technical role.

² Lighting, steam traps, water/wastewater, solar, appliances (one or two respondents each).

Table 6-25: Contractor Respondent History with Existing Buildings Program

	EB Trade Ally (<i>n</i> = 25)	Non-EB Trade Ally (n = 5)	Non-Trade Ally (n = 18)	Total (<i>n</i> = 48)
E	nergy Trust Projects	Completed in 2022	and 2023	
1 to 5	6	4	14	24
6 to 10	5	1	3	9
11 to 15	7	0	0	7
16 to 20	3	0	0	3
More than 20	4	0	1	5
	Time Workin	ng with Energy Trust		
Before 2021	18	5	15	38
2021 or later	3	0	2	5
Not sure	4	0	1	5
Role of Respondent (Multiple Responses Permitted)				
Administrative/paperwork	22	3	14	39
Technical/Installer	7	2	6	15
Key liaison with Energy Trust	18	1	2	21

Contractors' Perspectives on Program Changes

Few contractors reported even noticing the 2021 change in program implementers. Trade allies and non-trade allies had very little to report about the change in program implementers and the change in program design instituted in 2021. Of the 48 respondents, only five (three non-trade allies, one non-EB trade ally and one EB trade ally) expressed an awareness of the change in program implementers. Two trade allies had only begun work with the Program after the implementer change. Four trade allies reported a change in communication frequency with Energy Trust since the change: two mentioned an increase in frequency, and the other two mentioned a decrease. Three trade allies reported that it takes less time to complete the application process and to receive payment from Energy Trust now than it did prior to 2021. A non-trade ally reported a "drastic reduction in contact with Energy Trust" to the extent that they have not received any information at all since the change. While this contractor was listed in Energy Trust's database as being a current ally, they believed that they had been "kicked out" of the Program and not informed of the need to reapply. This respondent preferred to have more contact and interactions with Energy Trust representatives.

Contractors reported no effect on their business or their customers when Energy Trust split the lighting component of the Program into a stand-alone lighting program in 2021. No contractor respondent could report about how the creation of a separate Business Lighting Program affected their business or their customers. This is likely because these allies do not do lighting nor do most interact with lighting contractors directly. We heard comments such as "We just do HVAC and stick to that" when we asked contractors to report about any changes that may have occurred when Energy Trust split lighting into its own program.

Most contractors reported no or little effect on their business or their customers when Energy Trust added multifamily properties to the Existing Buildings program in 2021. Six of the 48 contractor respondents (three non-trade allies, two non-EB trade allies, and one EB trade ally) reported noticing this program change. One respondent generally said the change benefited his business and his customers but did not specify how the change benefited him. Another respondent reported that the forms for multifamily properties changed and the new ones were confusing. However, this respondent reported their program representative helped them to complete the forms. A third respondent recalled having to reapply to be a multifamily trade ally "but that [it] was not a big deal." A non-EB TA respondent mentioned having some difficulty distinguishing between residential and commercial properties reporting that they "came across situations where say a family lives in a townhome considered a residential building but the fine print would qualify it as a commercial building." A non-trade ally respondent commented that now "multifamily projects are a much slower process."

Cross-Program Referrals

Contractors provided almost no evidence of referring customers to other Energy Trust programs or contractors that could help them save energy. Contractors reported little awareness that Energy Trust split lighting measures into a separate program in 2021 – only five of the 48 interview respondents expressed an awareness of the change in the PMC – an indication that the interviewed contractors have little insight into measures and programs outside of their trade. Additionally, during discussions about interactions with other Energy Trust programs, contractors did not indicate that they received many (or any) referrals from other contractors for Energy Trust projects. Instead, most contractors reported sticking to their trade and not being involved in referrals. The one exception to this was a trade ally that specialized in controls, energy management, and refrigeration. This contractor reported getting involved in lighting projects as part of their controls work which could sometimes lead to them referring a customer to a lighting contractor.

Program Processes

On average, trade allies report they typically complete incentive paperwork on behalf of their customers whereas non-trade allies typically have the participant complete the application for the incentive. Figure 6-1 shows that of the contractors that reported who completes program incentive paperwork, 19 of 22 EB trade allies and 2 of 3 trade allies for other Energy Trust programs prepare program applications on behalf of the customer whereas five of 15 non-trade allies prepare the incentive applications. Non-trade allies typically reported directing customers to the Energy Trust website or providing a program application to the customer, but it was up to the customer to submit program paperwork and receive the incentive. In contrast, trade allies typically submitted the Program paperwork for the customer and used the incentive money to lower the upfront cost of the project for the customer.

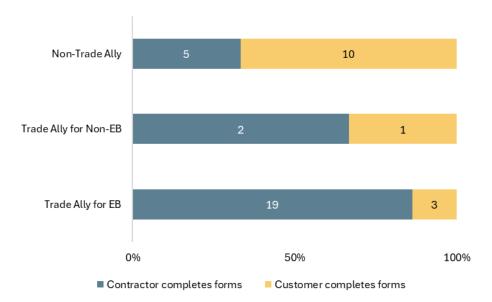


Figure 6-1: Who Completes Program Forms, by Trade Ally Status (n = 40)

Most HVAC contractors complete the Energy Trust application for their customers whereas about two-fifths of other contractors do so. Figure 6-2 shows that 83% (19 of 23) of HVAC respondents reported they, as the contractor, completed program forms for their customers. Non-HVAC contractors varied more in their responses to who completes the Program forms with 41% (7 of 20) completing the forms.

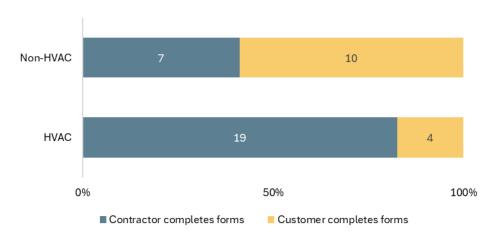


Figure 6-2: Who Completes Program Forms, by Contractor Type (n = 48)

Contractor Satisfaction and Benefits of Program Involvement

Trade allies reported that working with Energy Trust had helped their business opportunities whereas non-trade allies and trade allies not associated with EB were more mixed in their response. When asked on a scale of 1 to 5, where 1 means "not at all" and 5 means "to a great degree," how much has working with Energy Trust helped your business opportunities, 71% (17 of 24) of trade allies reported a score of four or five compared with 60% (3 of 5) of non-EB trade allies and 40% (6 of 15) of non-trade allies (Figure 6-3).

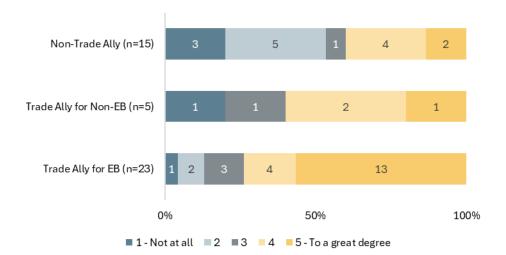


Figure 6-3: Degree to Which Working with Energy Trust Helped Contractor's Business Opportunities

Just over one-third of contractors (20 of 48) specified some aspects of the Energy Trust program that are working well for them and most of these highlighted their interactions with program staff. Of these contractors, most (14) specified they appreciated their interactions with Energy Trust, with one respondent describing the Program representatives as "helpful kind contacts" and others reporting that staff address their questions in a timely fashion. Other aspects of the Program that are working well according to contractor respondents included:

- Five HVAC respondents appreciated incentives that are high enough to entice customers to choose the more efficient option.
- One building shell contractor reported liking the process that allows them to submit applications online.

Over half of all contractors (27 of 48) highlighted some areas of the Energy Trust program as not working well. Eight respondents reported incentives as being insufficient. Seven of these eight respondents were building shell contractors, of whom four specifically identified window incentives as too low – one characterized the incentives for windows as "insignificant." Another one of these seven shell contractors respondents did not specify a measure type but said that "lump sum (per unit) incentives provide far less of a return than proportionate (%) ones did before."

Another seven respondents found applications too difficult and/or lengthy, most of whom expressed a dislike for the lack of an online portal to file applications and check up on their status.

Other areas of the Program identified by contractors as not working well included:

- Six respondents, three of whom were HVAC contractors, reported an insufficient amount of productive correspondence with Energy Trust, one citing significant "delays in communication" with another "not being provided information directly" and one other claiming that "trying to find the right person at [Energy Trust] can sometimes be difficult."
- Three respondents mentioned issues with the accuracy and clarity of incentive qualification criteria and availability. One respondent highlighted that "TRC and ICF [are] guilty of mis-

categorizing customers" and should, for example, "be more discerning as to what is an HVAC study or an industrial study." Another reported a "need to know what the Energy Trust money is meant for and to be educated about what it can be used for."

- Three respondents, including two HVAC contractors, mentioned a need for improved approval time. Two mentioned that it can take over six weeks to receive the incentive resulting in cash flow problems for their business. "Floating the money before we get the incentive can be hard."
- Two non-HVAC contractors expressed frustration with the frequency of Energy Trust staff turnover, one observing a "lack of stability and consistency in terms of Energy Trust contacts" and the other stating that "it seems we're always talking to a new rep who replaced the old one"
- One building shell contractor stated that Energy Trust does too much "micromanaging of our work, demanding extra work beyond scope" which results in "wasting our time having to revisit sites"⁹
- A refrigeration contractor mentioned a need for an improved measure list.

Perspectives on Participant Satisfaction

Just under half of all contractors could not report about participants satisfaction with the Energy Trust program. Twenty-one contractors (12 trade allies, one non-EB trade ally, and eight non-trade allies) had no insights into participant satisfaction. Some of this inability to discuss participant satisfaction was because the contractors made the Program almost invisible to their customers. One trade ally stated, "we take care of everything for the customer so [the Program] is largely invisible to them." In these instances, customers' knowledge of participating in the Energy Trust program and level of engagement with the Program may be limited to a line item on their contractor invoice showing the incentive to lower the cost of the project.

Of those that could report about participants' satisfaction with the Energy Trust program, most (25) reported receiving comments from participants that viewed the Program positively. These contractors reported that most participants were satisfied because the Program lowered the overall cost of projects. Some contractors shared both positive and negative feedback they had received from customers. Below are some notable comments from respondents that reported participant dissatisfaction:

- Six respondents (three exclusively building shell, and one exclusively appliance contractor) reported participants were dissatisfied with the lower incentive amounts provided by the Program in recent years and indicated that the lower incentives made it less likely that a customer would participate in the Program.
- One controls and refrigeration contractor reported participants were frustrated with the time it took to get approval from Energy Trust to start a project.
- One building shell contractor that often works with multifamily properties reported that the Program
 is very beneficial to property owners but not tenants. This contractor reported that the Program

⁹ This respondent indicated that Energy Trust wanted this firm to install attic and roof vents, work this respondent thought was beyond the necessary scope of work for the project.

supports installation of new windows which in turn gives the landlord a reason to increase rent for the tenants. Therefore, the energy bill savings the tenant should see from an improved building shell are offset by the increase in rent.

More than half (28 of 48) of the contractors mentioned opportunities to improve program participants' satisfaction with the Program.

- Increase incentives (10 mentions). Six of the ten represented building shell contractors and several of these respondents specified they would like to see better incentives for windows. According to these contractors, the incentives for windows are not sufficient to encourage a customer to bother participating in the Program. The other four were HVAC contractors who suggested higher incentives for boilers and better incentives for items that have "good" efficiency, not just those that have the best efficiency.
- Developing an online system that would enable submitting and tracking applications would make it easier for contractors to keep participants aware of their incentive status (5 mentions).
- Increasing communication and interactions between contractors and Energy Trust (5 mentions). These respondents reported that more frequent communication and information sharing between contractors and Energy Trust would result in contractors being better informed and able to help participants to receive their checks sooner and, in some cases, start their projects sooner.
- Developing a more customized approach to incentives (2 mentions). Two trade ally HVAC respondents reported that they would like to see more ways to qualify some participant projects. One of these respondents would like to move away from incentives based on SEER and HSPF and more towards a custom approach that looks at the overall HVAC system instead of just the unit. The other respondent wanted more Wi-Fi enabled thermostat options covered by the Program, specifically citing the Cielo Breeze thermostat for inclusion in the Program.
- Improving outreach to commercial customers (6 mentions) especially in those in rural areas (1 mention).

Differences in Participant Experience by Size, Business Type, or Location (Urban/Rural)

Five contractors provided feedback on how the experience of program participants differed based on the participants' size, business type, or location, none of which provided much insight into DEI goals and achievements.

- Four provided feedback on customer size. Three indicated that larger customers were more likely to apply for incentives than smaller customers. However, one indicated that smaller customers get more satisfaction from participation because they see a larger relative return and that incentives are *not* as much of a selling point for larger customers.
- Two provided feedback on rural versus urban location. One noted that customers in urban locations face more red tape to get permits for work, which deters installation of energy efficient upgrades. The other commented on receiving more feedback from urban customers after projects particularly, feedback on water and electricity consumption reductions after switching from water- to air-cooled systems. No respondents suggested greater challenges or different satisfaction for rural customers.

• One contractor respondent offered feedback on business type. That respondent reported that apartment complexes realize greater savings than traditional large commercial customers.

6.3.3 Community-Based Organization (CBO) Experience

Two representatives from CBOs participated in interviews about their organizations' relationship and collaboration with Energy Trust of Oregon for the Existing Building programs. Respondents interviewed serve as energy efficiency program coordinators for CBOs that predominantly serve the Portland Metro and mid-Willamette Valley areas, with clientele that is typically of Hispanic descent.

The interviews covered the nature of the collaboration between the CBOs and Energy Trust, their experience with and perspectives on engaging with priority populations, and the quality of their collaboration with Energy Trust.

It should be noted that during the interviews with the CBO representatives there was some confusion regarding which Energy Trust program was the focus of the interview. One of the respondents seemed to conflate their organizations' partnership with Energy Trust for residential programs with the mostly commercial focused Existing Buildings program. When this occurred, the interviewer reminded the respondent that the interview focused on the Programs serving commercial customers, which included multifamily housing, and attempted to redirect the conversation accordingly.

Nature of Collaboration

Both respondents indicated Energy Trust's partnership with their organization for the Existing Buildings program was about one to two years old, and therefore still new. Both explained that the partnership for Existing Buildings involves hands-on engagement and day-to-day program delivery and direct communication with program participants. CBO respondents meet with Energy Trust staff one to two times per month to discuss program updates and the status of various projects. These meetings include CBO staff as well as staff from Energy Trust, TRC, and CLEAResult (the PMC for residential programs). Respondents also reported communication via email or phone when needed.

Engaging Priority Populations

Due to the nature of the CBOs and the role they play in the community, much of the Program outreach and customer engagement for the Existing Buildings program comes directly from the CBOs, rather than from Energy Trust or TRC representatives; both respondents agreed this is the preferred outreach approach. The CBO respondents explained that they have strong relationships with community members and that they are trusted source of information and services, and therefore community members are more likely to engage in offerings provided by them than directly from Energy Trust or utilities:

"Good that they let us handle it. We're in touch and know what's best. They give us resources we need. They invite me to table events, provide funding for food."

The two CBO representatives explained that they and their colleagues are heavily involved in customer engagement and will often walk their clients through the entire program process.

The above observations are apt in view of reports by program staff of field staff's challenges in conducting outreach with some priority populations that may be served by CBOs (Section 5).

Quality of Collaboration

In general, both respondents characterized their organization's partnership with Energy Trust and the Existing Building's program positively. Although respondents identified some issues and provided recommendations for improvement, respondents overall indicated the partnership was strong and had good communication. They also applauded Energy Trust for partnering with CBOs to help build trust and relationships with residents.

Both respondents provided suggestions for partnership and program improvement. Two respondents suggested that Energy Trust provide application materials in multiple languages. Reflecting common suggestions among market actors, two suggested that incentives be increased for priority groups. Finally, one suggested that Energy Trust should share more promotional materials with CBOs.

Additionally, both respondents cited Energy Trust staff turnover as a pain point with the Program and partnership. According to one:

"Our main contact has changed two, maybe three times, which has really fractured the process. Every time there's a new person, they have to get up to speed and it just creates some delays."

6.4 Coordination with Utilities

This section addresses the following research questions, identified in Table 2-1:

How is the Existing Buildings program working with utilities to promote offerings? What do they see as working well and what could be improved?

Seven representatives from five investor-owned utilities participated in interviews about their utilities' relationship and collaboration with Energy Trust of Oregon for the Existing Buildings program (Table 6-26). Individuals interviewed served as their utilities' communications specialist (n = 5) or energy efficiency program managers (n = 2). Respondents had worked at their utility for two to eight years (n = 3) to over twenty years (n = 2), and all respondents indicated that Energy Trust had been partnering with their utility for the Existing Buildings Program for four or more years.

U TILITY	STATES SERVED	FUEL TYPE PROVIDED	CUSTOMERS (APPROX.)
Utility 1	OR	Electricity	900,000
Utility 2	OR, WA, CA (northern)	Electricity	800,000
Utility 3	OR, WA (southwestern)	Natural Gas	800,000
1 14:1:4 4	ID MA OB	Electricity	418,000
Utility 4	ID, WA, OR	Natural Gas	382,000
Utility 5	WA, OR	Natural Gas	314,500

Table 6-26: Represented Utilities

6.4.1 Nature of Collaboration

Across all five utilities, respondents indicated that the collaboration with Energy Trust of Oregon for the Existing Buildings program is focused on marketing and communication. They explained that Energy Trust

of Oregon implements and delivers the Program to customers and thus the utilities themselves are fairly hands-off and uninvolved in the day-to-day program coordination. Relatedly, none of the respondents identified any issues or challenges with the transition between program implementers, as they primarily interact with Energy Trust staff, not TRC staff.

Utility respondents formally meet with Energy Trust staff monthly (two respondents) or quarterly (three respondents) to discuss marketing and outreach initiatives and to coordinate these efforts for maximal impact, with additional communication occurring more regularly via email. They noted that Energy Trust staff often provide specific outreach language and marketing materials for the utilities to use that explain the Program and direct customers to Energy Trust contacts for more assistance.

Respondents did not experience any major challenges or pain points when Energy Trust transitioned its Existing Building lighting offerings to the Business Lighting Program nor when multifamily services were incorporated into Existing Buildings. Respondents again noted that their collaboration with Energy Trust is mostly marketing and communications related in nature and they are not involved in daily implementation of the Programs. During the regular check-in meetings, both utility and Energy Trust representatives plan their marketing schedules and campaigns, ensuring their communications to existing buildings eligible customers are coordinated, and customers are not being inundated with too much information at once.

One utility representative explained that their customers likely do not understand the nuance between Energy Trust's various offerings and the transition between programs, but that this nuance is not important to a customers' experience of and engagement in the Program. Another respondent echoed this sentiment but also indicated that the delineation between Energy Trust and the utility itself is confusing for some customers and they (the utility representative) worry that that their partnership with Energy Trust might dilute their connection with customers:

"We were removed from customer process. Energy efficiency is a positive thing for customers, so it is nice to be associated with positive offerings."

Some of the respondents representing utilities that work in both Oregon and other States indicated it can sometimes be difficult to run the non-Oregon energy efficiency programs in house, while those in Oregon are run by Energy Trust (n = 2). Despite these difficulties, these respondents noted the partnership is beneficial, as Energy Trust has a large infrastructure and strong support system.

6.4.2 Priority Populations

Utility representatives had varying opinions regarding Energy Trust's efforts to engage low-income, small business, and rural customers. Representatives from three utilities said that Energy Trust is doing a good job targeting these priority communities, citing community-based campaigns and partnerships with other local organizations. Representatives from the remaining two utilities said that Energy Trust could increase promotion and outreach in low-income communities. One respondent explained that the Program seems more targeted towards moderate income businesses, since the Program requires some degree of customer contribution, which can minimize engagement for some customers. Additionally, another respondent noted that engaging small businesses and low-income customers is challenging, and although

opportunities for growth for exist, Energy Trust seems to prioritize these activities and is trying to engage all types of customers.

6.4.3 Quality of Collaboration

Representatives from all five responding utilities characterized their relationship with Energy Trust of Oregon and the Existing Buildings program positively. They noted that their Energy Trust contacts are professional and communicative and clearly care about the work. One utility representative reflected on the changes they have observed with Energy Trust over time, explaining that the current team is far more engaged and proactive than previous teams. As this representative put it:

"Our editorial calendar ... was kind of on the back burner. It was kind of like, 'Oh yeah, we have an article that could apply to [your] customers. Maybe you're interested in that.' ... It felt like it wasn't very prioritized and planned so solidly."

6.4.4 Suggestions for Improvement

Despite an overwhelming sense of program and partnership satisfaction, utility representatives provided some suggestions for program and partnership improvement:

- Changes to the nature of communication (two mentions).
- Continued focus on innovations for electric and gas fueled businesses (two mentions).
- Provide more non-lighting options and opportunities for businesses (one mention).

The respondents who suggested changes to the nature of communication indicated that they do not always know when programmatic changes are happening and/or why these changes occur. One of those attributed this, at least in part, to a decreased frequency of formal check-ins (from monthly to quarterly). While indicating general satisfaction with the frequency of communication, this respondent noted that less frequent communication...

"means we're not always aware of the status of goals. We're getting notification about policy changes as FYI rather than 'how do we collaborate, how does this apply to us.' We need more discussion and leeway so we can respond. Policy changes can impact the way the programs run and we don't always feel like we have a say in how things are going."

The other contact who commented on the nature of communication suggested the meetings with utility and Energy Trust staff should also include program staff, in case utility staff have any specific program-related questions or concerns. According to this contact:

"Sometime ... I could have a question that may be best answered by someone in the program, but my contacts in our regular meetings are with marketing folks, and they don't necessarily always have the answers."

For example, this second contact noted having had some questions when the small business offering was evolving over time. This respondent indicated it is not a "huge problem" and has the contact information for program staff to address any "burning issue" but that it would be valuable to have more regular

contact with program staff to get "some visibility into development into programs and details about what future might hold."

Additionally, two of the contacts for utilities that provide natural gas to Oregon customers underscored the importance of focusing on innovative technologies for both electric and gas. These respondents acknowledged that Energy Trust is fuel neutral, however they said they felt as though the energy efficiency industry as a whole is electricity focused, which can be frustrating for natural gas providers.

6.5 Collaboration with Oregon Department of Energy (ODOE) and Oregon Multifamily Energy Program (OR-MEP)

This section addresses the following research questions, identified in Table 2-1:

How is Energy Trust working with the Oregon Department of Energy (ODOE) to support energy efficiency upgrades in K-12 public schools? Is the collaboration enabling more measures to be completed?

How is Energy Trust working with Oregon Housing and Community Services' (OHCS) Oregon Multifamily Energy Program (OR-MEP) to support and promote energy efficiency upgrades for income qualified electric multifamily customers? Is the collaboration enabling more measures to be completed?

Four representatives from two Oregon government agencies participated in interviews about their agency's relationship and collaboration with Energy Trust of Oregon for the Existing Building programs. One respondent worked for the Oregon Department of Energy while the other three respondents worked for the Oregon Housing and Community Services – Multifamily Energy Program.

The Oregon Department of Energy respondent explained that Energy Trust's collaboration with their agency began in the early 2000s, however the partnership strengthened and intensified around 2016. Housing and Community Services representatives noted that the co-funding opportunities between Energy Trust and Housing and Community Services began in 2018.

6.5.1 Nature of Collaboration

The contacts for government agencies characterized the relationship between Energy Trust and Department of Energy and Housing and Community Services as a financial partnership, indicating that Energy Trust and the two agencies co-fund energy efficiency programs for schools (Department of Energy) and multifamily housing (Housing and Community Services). Agency representatives noted that they meet with Energy Trust staff once a month, with regular email communication in between.

Respondents explained that prior to the formal partnership with Energy Trust, their agencies and Energy Trust offered similar but separate incentive programs to customers. This similar but separate incentive program structure caused a lot of confusion amongst program applicants, which was the impetus for the formal partnerships. For example, in the past, school districts interested in receiving energy efficiency incentives had to apply for Energy Trust Existing Buildings and Department of Energy funding separately; frequently, schools did not understand the differences between the two programs and rarely maximized their incentive potential because they did not realize they might be eligible for both funding sources. Now,

because of the partnership, school districts submit one application which is reviewed by both Energy Trust and the Department of Energy, and program staff work together to maximize school districts' incentive offerings, rather than putting the onus on the schools.

6.5.2 Quality of Collaboration

Representatives from both agencies underscored how much simpler and easier programs have become because of their formal partnerships with Energy Trust. Not only is there more clarity for the customers (school districts and housing managers), but the collaboration has also streamlined the application process as well as maximized benefits to the communities served. Agency representatives explained that their agencies and Energy Trust have the same goals and working together toward those goals has allowed them to not only serve more customers, but also provide more comprehensive and robust offerings.

6.5.3 Suggestions for Improvement

Despite an overall positive opinion of their relationship with Energy Trust and the Existing Buildings program, agency representatives identified partnership challenges and provided suggestions for improvement. Representatives from both agencies noted that their agencies' and Energy Trust's funding cycles vary, which can cause confusion and difficulties regarding project timelines. Additionally, Energy Trust sometime changes incentive amounts mid-project, due to funding cycle schedules, which can result in changes in the amount of money a project gets; agency representatives suggested Energy Trust lock in incentive amounts for each project rather change incentive amounts mid-project, to avoid confusion and unexpected costs for customers.

7 Future Opportunities

This section addresses the research questions identified in the fourth section of Table 2-1, "Future Opportunities." The responses to these research questions are informed by feedback from staff, ATACs, contractors, funding utilities, collaborating agencies, and CBOs

7.1 Primary Drivers of Energy Efficiency

The following research question is informed by ATAC and contractor feedback:

What are the largest forces on energy efficiency projects in the commercial and multifamily market segments right now? What additional drivers are anticipated over the next few years?

The interviewed ATACs identified the following key drivers of efficiency:

- Energy Savings. Customers will continue to want to save money on their energy bills and reduce their overall energy costs. Clients are also interested in reducing overall building expenses: "Customers want to see a simple payback on their energy-efficient investments."
- Stronger Building Codes. Several ATACs indicated that the stringent building codes in Oregon and Washington will require significant building upgrades: "The Oregon energy code continues to push forward, too. So, as that code pushes forward, customers are going to be driven to ... make investments. They're being forced.... I think those are probably some of the biggest drivers."
- Climate change and social impacts of having high-energy buildings. One ATAC suggested the
 healthcare institutions and major state universities will be looking for ways to make meaningful
 impacts in reducing energy use, which will result in more energy-efficient buildings within these
 sectors.

Interviewed contractors reported that cost continues to be the primary consideration driving customers' decisions. Almost all respondents (44/48) provided insight into what considerations currently have the greatest weight in driving their customers' decisions about energy efficiency in the commercial and multifamily market segments (Table 7-1). Most frequently, trade allies reported both upfront cost and energy cost, non-EB trade allies reported general economic motivations, and non-trade allies reported both energy cost and general economic factors as the main considerations motivating their customers' choices about energy efficiency. Four responses, from two trade allies, and two non-trade allies, reported carbon reduction and environmental concerns as key considerations; another two responses mentioned improved comfort.

Table 7-1: Considerations Driving Customers' Energy Efficiency Decisions (Multiple Responses Allowed)

	Trade Ally (<i>n</i> = 22)	Non-EB Trade Ally (n = 5)	Non-Trade Ally (n = 17)	Total (n = 44)
Energy cost	14	0	8	22
Upfront cost	13	0	2	15
General economic	1	4	8	13
Carbon reduction/environmental	2	0	2	4
Improved comfort	1	1	0	2

7.2 Greatest Opportunities for Energy Efficiency in the Near Future

The following research question is informed by ATAC and contractor feedback:

Where are the biggest opportunities – in terms of market segments, geographic, areas, and measures – for the Program over the next five years?

ATACs identified some specific areas of opportunity as well as general trends that may affect programs. The ATACs identified the following more specific areas that could lead to significant opportunities for Energy Trust and their customers:

- Retro-commissioning, which one observed could be a "gold mine" for current clients.
- Targeting K-12 schools as their existing facilities need to be upgraded, especially to meet new building performance standards.
- Reaching high energy users, such as data centers and server farms.
- Serving the multifamily segment, which will continue to grow as more people move to the urban areas.

Four ATAC respondents offered some more general observations.

One discussed the potential impacts of ongoing trend toward greater building electrification. According to this ATAC, there is a growing move to switch to all-electric buildings. Achieving this, however, will require some improvements in the efficiency of electric HVAC equipment, as "right now gas is just so much cheaper that customers [cannot afford to switch] even though they want to."

Two ATACs suggested that the Energy Trust should continue to fund studies that analyze the effects that the new Oregon Building Energy Performance Standards will have on existing buildings.¹⁰

Finally, one ATAC anticipated that there will be "significant dollars" available from the Inflation Reduction Act for companies to invest in building upgrades.

A fraction of all contractor respondents reported that customers' interest in savings, efficiency, or specific measures would increase in coming years. Twenty-three percent of contractors (11 of 48) expressed at least one prediction about how their customers' energy efficiency considerations may change in the coming years. Eight respondents mentioned that customers would show an increased

¹⁰ See: https://www.oregon.gov/energy/save-energy/Pages/BPS.aspx

interest in some aspect of efficiency with four saying customers would be more motivated to save money on energy bills, two expressing a general interest in efficiency, one predicting a specific customer interest in heat pumps, and one indicating customers would show a greater interest in sustainability generally.

In contrast to those forecasting a greater interest in some aspect of efficiency, three reported customers would exhibit general concerns about energy mandates (one mention), increased interest in natural gas measures due to the lower cost of gas compared to electricity (one mention), and less interest in energy efficiency generally (one mention) because incentives for efficiency are getting too low.

7.3 Energy Saving Measures or Services

The following research question is informed by feedback from staff, ATACs, contractors, and participants:

What energy saving measures or services is the Program developing? Does the Program have the right mix of measures or offerings to achieve its goals?

Program staff identified several energy savings measures or services that are in development or being considered, some of which are discussed in greater detail elsewhere (such as Section 4.4):

- Continuing support for the recently implemented Multifamily SEM effort.
- Developing a no-cost pilot program for commercial heat pumps in rural areas.
- Using utility usage data to identify energy saving opportunities and targeting customers with marketing to realize those opportunities.
- Carrying out lighting and smart thermostat direct-install efforts in rural areas.
- Working with schools and other institutions that are pursuing electrification projects.
- Working to understand how the Program can be leveraged to support Energy Trust's work on Solar For All.

A few ATACS also identified some new technologies that Energy Trust should consider:

- Improving overall indoor air quality with better ventilation equipment such as air handlers
- Installing Solar PV chargers with a canopy.
- More sophisticated building management systems:

"I think there's a lot of existing buildings out there that have antiquated control systems...the ease of use for their operators will start driving more controlled upgrades in buildings, heat pumps/electrification, and adhering to building code requirements."

- Advances and improvements in refrigerants used for building cooling, including variable refrigerant flow systems.
- Continued emphasis on heat pumps as owners shift to all-electric buildings.
- Reducing noise in buildings.

Contractor respondents reported heat pumps as the best measure-specific opportunity for energy savings going forward and several identified opportunities to address different audiences with information about

efficiency. Almost three quarters of all respondents (34 of 48) reported opportunities for energy savings in the coming years. Of those 34, 28 reported a specific measure as a key opportunity, and ten mentioned opportunities to improve awareness or outreach among owners of certain building types or certain market actors:

- Measure opportunities (28 mentions).
 - Increase adoption of heat pumps and associated technologies like smart thermostats (20 mentions).
 - O Increase adoption of build shell measures such as spray foam insulation, efficient windows, and insulation generally (6 mentions). Respondents specified that existing windows incentives are not sufficient to drive adoption and that working to lower the cost of spray foam insulation and increase its adoption can make things like solar installation more palatable to some customers.
 - Increase use of solar technologies such as installing more solar panels and using solar for water heating (4 mentions)
 - Replace rooftop HVAC units (RTU) with more efficient options, especially those on small buildings that currently do not qualify for incentives (1 mention).
 - o Continue to replace old inefficient lighting in buildings (1 mention).
 - o Increase adoption of measures that track and monitor energy usage that can help identify savings opportunities (1 mention).
- Awareness opportunities (10 mentions).
 - Work with contractors to increase their awareness of Energy Trust offerings (3 mentions).
 - o Increase Energy Trust staff awareness of the latest efficient technologies (2 mentions).
 - Work with multifamily property owners and tenants to improve the efficiency of laundry facilities by having centralized instead of in-unit facilities (1 mention) and by offering more tenant focused-incentives (1 mention).
 - Work with owners of large old buildings to get them closer to current energy code (2 mentions).
 - Work with multifamily properties to install modern ductless heat pumps instead of older technology found in package heat pump (PHP) units (1 mention).
 - Work with warehouses more to identify energy savings opportunities (1 mention).
 - o Increase awareness of program offerings in rural areas.

Some interviewed participants indicated they were unable to receive incentives for some equipment that was near end of useful life or that the available incentives did not sufficiently offset the cost. The few comments that suggested lack of available incentives referenced electric furnace, gas furnace water heater, fryers, stoves and ovens, windows, and refrigeration.

8 Conclusions and Recommendations

The information collected from our research points to a generally successful program despite some challenges with the transition to a new PMC and with some of the program changes that occurred in 2021. In particular, we identified the following high-level findings relating to the key research questions:

- Some challenges occurred with the transition to the new PMC, including bottlenecks in serving customers and challenges with managing the multiple implementation subcontracts, but such issues were largely invisible to the Program's collaborators, ATACs, contractors, and participants.
- Although staff found the removal of lighting measures from, and the incorporation of multifamily buildings measures into, the Program to be challenging, feedback from the interviewed ATACs and contractors identified few or no downsides to that change.
- Feedback from program and implementer staff, CBOs, collaborating agencies, and customers all point to success with efforts to reach priority populations.
- CBOs and collaborating agencies characterized their relationship with Energy Trust and the Existing Buildings program positively.
- Market-side informants (ATACs, contractors, and participants) generally were satisfied with the Program, despite some ATACs' concerns with the new PMC and some contractors' identification of slowness in incentive processing.
- The Program supports referrals to other Energy Trust programs reasonably well, although opportunities for improvement exist.

The above, and other findings detailed in the body of this report, produced the following conclusions and recommendations.

Conclusion 1: The Program has made achievements towards addressing Energy Trust's DEI goals. Energy Trust and the implementer have supported DEI work by doing things like hiring bilingual energy advisors, expanding their work with CBOs, providing marketing collateral in multiple languages, offering food and childcare services along with the multifamily SEM offering, and establishing relationships with affordable housing agencies. Furthermore, the PMC sought to work with a range of diverse suppliers to implement the program and worked with CBLs to inform program development. These efforts began a process that can be built on in the future. However, some of the many efforts taken did not go as smoothly as hoped, in particular: 1) the use of CBLs to help develop culturally appropriate outreach material; and 2) field staff's interactions with tribal communities. The decision to pause the CBL network in 2024 allows Energy Trust and TRC to assess whether and how CBLs can be used more effectively or whether a different approach may be appropriate. While several staff contacts suggested the Program has had success in developing culturally appropriate collateral (which the CBLs were meant to assist with), it may still be possible to use outside assistance to improve on them as well as to help with training field staff to work with tribal groups.

Recommendation 1a: Energy Trust and TRC should assess whether it may still be valuable to use the CBL network for the purpose of helping develop cultural appropriate outreach material or should examine alternative approaches to doing so; if it is concluded that the CBL network is still

valuable, Energy Trust and TRC should ensure that the scope of work and expected deliverables are clearly understood.

Recommendation 1b: Energy Trust and TRC also should assess the training needs of field staff in how to work with tribal communities and identify the most appropriate training sources, including whether the CBLs may be among those sources.

Conclusion 2: The addition of multifamily measures and exclusion of lighting measures – which started in 2021 at the same time as the transition to the new PMC – resulted in many challenges for program staff. Although the changes in the program implementation did not appear to affect how trade allies and non-trade ally contractors worked with Energy Trust, the challenges that program staff experienced could have been exacerbated by the simultaneous change in implementers. Recent staff efforts, including working with the residential program on outreach efforts, appear to have decreased the challenges relating to the multifamily component of the Program in the latter half of 2023 and early 2024 compared to the 2021-22 timeframe. Further, feedback from the interviewed ATACs and contractors identified few or no downsides to the incorporation of multifamily projects into the Existing Buildings Program.¹¹

Recommendation 2: Energy Trust should consider limiting the number of program changes that are implemented at any given time, to allow program staff to absorb and adapt to the changes. Program staff should prioritize planned changes and roll them out over a period of time – perhaps a minimum of 6 months and as much as a year for each change. If feasible, it may be advisable to engage a change management consultant to ensure that proposed program changes are thoroughly discussed internally, with all potentially involved program staff, to identify and plan to mitigate potential internal challenges.

Conclusion 3: Incorporating multifamily measures and properties into Existing Buildings has mostly worked well. There were some initial challenges to incorporating multifamily work into Existing Buildings, such as a lack of marketing resources directed at multifamily, but the Program is addressing those challenges. Additionally, the Program is working on identifying measures and services that work for multifamily, including the SEM for multifamily services, and continuing to work with state agencies to find co-funding opportunities for measures that do not meet cost-effectiveness tests when funded solely by one organization.

Recommendation 3: Continue to look for co-funding opportunities and processes that will support adoption of efficiency measures in multifamily properties. Energy Trust and state agencies have started the process to work together towards this end, however, the state agencies funding cycles differ from Energy Trust's funding cycle which has resulted in changes in incentives mid-project which can cause confusion and frustration among participants. Continue to look for ways to overcome these funding cycle challenges such as locking in an incentive amount early in the process and not changing that incentive amount mid-project.

¹¹ We also note that the COVID pandemic also could have exacerbated the situation, as it affected how work was done (more remote working and meeting). This possibly contributed to the shortened transition timeframe or the turnover in PMC staff. However, we are not certain how this would affect our recommendations, other than to avoid significant program changes when major external events are occurring.

Conclusion 4: Contractors and ATACs are generally satisfied with their participation with Energy Trust, but Energy Trust may be able to improve contractors' program experience. Most trade allies noted that their involvement with Energy Trust has helped their business opportunities, and many contractors appreciated the helpful interactions they had with Energy Trust representatives. However, a subset of contractors (both trade allies and non-trade allies) offered some suggestions for improvement, the most common of which were to increase incentives (especially for windows), improve communication with Energy Trust, and improve the application process in various ways (e.g., offering online applications and improving explanations of what qualifies).

Recommendation 4a: With the understanding that Energy Trust and TRC attempt to establish incentive levels that are high enough to induce the adoption of energy efficient technologies in a cost-effective manner, we encourage Energy Trust and TRC to review incentives for windows and possibly other shell measures.

Recommendation 4b: Energy Trust and TRC should review outreach to non-trade allies to identify opportunities for improvement. In particular, the program may consider sending periodic e-blasts to *all* known non-trade ally contractors — or, at least, all those that have done any Energy Trust projects — with current program information. The e-blasts should include an option to unsubscribe from further contact.

Recommendation 4c: Energy Trust and TRC should review the information included on outreach materials (e.g., *The Insider* e-newsletter) sent to trade allies to ensure that they identify all key program contacts for various project types, if they do not already do so.

Recommendation 4d: Energy Trust and TRC should continue to review the application forms and processes to ensure they are clear and as easy to complete as possible. This may particularly help with obtaining more applications through non-trade ally contractors, as they were more likely to comment on this concern. This may also argue for more proactive communication with this group (see Recommendation 4b) to provide clear information on the application process.

Recommendation 4e: Energy Trust and TRC should consider the feasibility and benefits of creating an online portal to allow contractors to check the status of submitted applications.

Conclusion 5: Non-HVAC contractors, especially building shell contractors, are not as likely to complete incentive applications for customers, something almost all HVAC contractors do. In some cases, this may reflect important differences in the contractor-client relationship between HVAC and other contractors. HVAC contractors may be willing to invest the time to assist with application because doing so represents a small proportion of the project cost and may help ensure continued work with the client (e.g., to maintain the equipment). By contrast, the commodity-like nature of some other measure types may mean that additional time and effort beyond installation may cut into a contractor's margin.

Recommendation 5: Energy Trust may want to investigate reasons why non-HVAC contractors are less likely to help complete incentive applications. What is it about building shell projects or contractors that make them resistant to completing incentive paperwork, or why do HVAC contractors see it as important to complete the incentive paperwork? Learning this may help Energy Trust and the PMC devise approaches to incent such contractors to assist with

applications, increasing customer satisfaction and possibly increasing the number of projects completed.

Conclusion 6: Energy Trust decided to apply the SDP to the EB contract in 2021, requiring the implementer to use at least 20% of its contract award with diverse suppliers. To satisfy that requirement, the new implementer engaged 17 different firms, many which had not worked with Energy Trust before and may not have had a full understanding of Energy Trust and their programs. The implementer showed commitment to complying with the SDP by finding so many suppliers. However, in that process, they may have selected more supplier subcontractors than they could reasonably manage. Furthermore, some of these subcontractors may have needed more guidance or support, especially in the early phases of the implementer's overseeing of the Program. Progress has been made in improving some of the challenges with subcontractors for the current contract, but the potential remains for similar challenges to arise in future contracts.

Recommendation 6: Energy Trust should require that proposals to provide implementation services include plans to provide adequate orientation, training, and support to subcontractors that may be unfamiliar with Energy Trust programs and requirements. The proposal should further demonstrate that the primary contractor and any proposed subcontractors have the capacity to provide the required orientation, training, and support.

APPENDIX

This appendix includes the following:

- Staff Interview Guide
- Utility Interview Guide
- Community Based Organization (CBO) Interview Guide
- ODOE/OHCS Interview Guide
- ATAC Interview Guide
- Trade Ally/Non-Trade Ally Contractor Interview Guide
- Program Participant Interview Guide

Energy Trust Existing Buildings Staff Guide

Recruitment Scripts

Email

Hello,

My name is [ADM STAFF NAME] and I work for ADM and am working on the Energy Trust Existing Buildings process evaluation. We would like to speak with you and your colleagues (cc'd on this email) involved with [STAFF GROUP NAME]. We want to conduct this interview to help us understand the varying elements that go into the program, recent program achievements, and any challenges the program may face working with the program.

Can one of you suggest a time when we could all speak via a Microsoft Teams call in the next week or so? I anticipate this interview will last about 60 minutes.

The interview will start with some background questions and then get into questions about the recent history of the program, operations, customer experience, and future opportunities for the program.

I look forward to hearing from you and learning more about the program when we talk.

Sincerely,

[ADM TEAM CONTACT]

Phone

Hello,

My name is [ADM STAFF NAME] and I work for ADM and am working on the Energy Trust Existing Buildings process evaluation. We would like to speak with you and your colleagues involved with [STAFF GROUP NAME]. We want to conduct this interview to help us understand the varying elements that go into the program, recent program achievements, and any challenges the program may face working with the program.

Can one of you suggest a time when we could speak with you and [STAFF GROUP COLLEAGUE NAMES] via a Microsoft Teams call in the next week or so? I anticipate this interview will last about 60 minutes.

[SCHEDULE INTERVIEW TIME]

Interview Script

Introduction

Hello,

My name is [ADM STAFF NAME] and I work for ADM and am working on the Energy Trust Existing Buildings process evaluation. We are conducting this interview today to help us understand the recent achievements of the program and any challenges the program may face with implementing the program.

I anticipate this interview will last about 60 minutes. I'll start with some background questions and then get into questions about the recent history of the program, operations, customer experience, and future opportunities for the program.

As we go through the questions, please let me know if there are questions or topics you are not able to address. This is a conversation so please don't hesitate to ask questions or clarify things as we go through the questions.

I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording

[IF NO] Take notes as best as possible

Background

Who Gets Question	QUESTIONS
	 To start, please describe your role working with the Energy Trust Existing Buildings (EB) Program? [PROBE: What are your key tasks and objectives?]
All	Who do you typically work with regarding the EB Program and what are their roles?
	3. How long have you been in your role? And how long have you worked with the EB Program?

Program History

ETO Staff	4. [ASK IF 3 indicates program familiarity is > 2 years] I understand the new implementer (TRC) started working with the EB Program in early 2021. So far, how has working with TRC been for you and your team?
TRC Staff	5. [ASK IF 3 indicates program familiarity is > 2 years] How did the transition from the old implementer (ICF) work? What challenges, if any, did you experience during that transition?
All but ETO New Initiatives	6. [ASK IF 3 indicates program familiarity is > 2 years] I understand that in 2021, the lighting component of the EB program became the independent Business Lighting program. What effect has the removal of lighting had on the EB program? [PROBES: Has it been difficult to use lighting as a gateway to get participants to do other projects like HVAC? How if at all, did it affect trade allies? Something else?]
ETO Ops, EB Coordination, CCS/Outreach, Customer Acquisition, Coordination, and New Initiatives	7. [ASK IF 3 indicates program familiarity is > 2 years] I understand that in 2021, the EB program incorporated Multifamily measures. What effect has incorporating that had on the EB program? [PROBES: Has it positively or negatively impacted multifamily participation? Has it made it more or less difficult for multifamily properties to install efficient measures? How, if at all, did it affect trade allies? Something else?]
ETO Ops & New Initiatives, TRC Prgm Mgmt	8. What changes have been made to the program in the last year or so? [PROBES: These changes could be changes in measures, incentive caps, marketing or outreach efforts, or anything else?]
	9. What changes would you like the program to make in the next year or so? [PROBES: These changes could be changes in measures, incentive caps, marketing or outreach efforts, or anything else?]

10. Why do you want to make these changes? [PROBES: Is it to increase or expand participation, make rules clearer to participants, something else?]
11. How likely is it that these changes will happen? Why?

Program Operations

All	12. [ASK IF NOT ADDRESSED ABOVE] Since TRC has been implementing the program (2021), what do you see as the biggest successes of the EB Program?
	13. [ASK IF NOT ADDRESSED ABOVE] Since TRC has been implementing the program (2021), what have been the biggest challenges the program has faced?
	14. [ASK IF CHALLENGES NOTED IN Q12] How have you and the team addressed those challenges?
	15. How does your team/group communicate with your counterparts at TRC/Energy Trust?
	16. What aspects of communication between Energy Trust and TRC are working well?
	17. How, if at all, could communication between Energy Trust and TRC be improved?
TRC Program Managers	18. Who does TRC subcontract with and what are each subcontractors primary roles?
ETO Ops	19. How has the TRC's use of subcontractors differed from how the previous implementer used subcontractors?
ETO Ops	20. [ASK IF 19 DENOTES DIFFERENCES] Which use of subcontractors has served the program better and why?
ETO PMs and New Initiatives	21. What has worked well with the community-based liaisons (CBLs) and what, if anything, could be improved? [PROBE: If CBL work is stopping, ask why?]
All TRC	22. Which subcontractors, if any, does your team work with regularly, and in what capacity?
	23. How has working with these subcontractors helped your team or the program as a whole achieve your goals?
	24. What challenges, if any, have you encountered in working with these subcontractors to achieve your goals or program goals?

ETO Ops, New Initiatives, TRC Prgm Mgmt	25. The next few questions are about how the EB program supports Energy Trust's DEI Operations Plan. The most recent plan (2021) and the updates issued in August 2023 indicate that Energy Trust would address four key areas:
	supporting CBOs?offering culturally responsive communication and outreach?addressing needs in rural communities?using data to effectively reach communities?How is the EB program addressing these areas?
	26. What metrics are you using to know when you or the program have achieved these goals?
	27. What activities, if any are you doing to address DEI goals in addition to what is in the operations plan? What, if anything, has been a barrier to the program engaging priority customers and what could be done to overcome those barriers?
	28. What activities, if any are you doing to address DEI goals in addition to what is in the operations plan?
	29. What else, if anything, could the program do to better engage priority customers and advance Energy Trust's DEI objectives
	30. What has been working well in terms of the EB program addressing Energy Trusts DEI goals?
All but New Initiatives, Marketing and Initiatives + Operations	31. How, if at all, does the EB program coordinate with other Energy Trust programs to refer customers or receive referrals? [PROBES] How, if at all, does the program identify participants that may be candidates for other Energy Trust programs? How, if at all, does the program refer (or hand off) an EB participant to participate in another program?
	32. How is any coordination with other Energy Trust programs going as it pertains to launching and conducting pilots?
	33. What training, if any, do trade allies receive in identifying other possible projects a participant may want to pursue? For example, will HVAC trade allies notice that a customer could benefit from upgraded lighting and refer that customer to Energy Trust?
Ask All	34. What opportunities, if any, do you see to improve program processes?
	35. What opportunities, if any, do you see to increase participation among priority customers? [IF NEEDED: We understand that Energy Trust now uses "priority customers" to mean groups that historically have been underserved, such as rural, POC, etc.]

ETO PMs and TRC Prog. Mgt.	36. How, if at all, has and is the EB program working with community-based organizations (CBO)?
New Initiatives	01Bu1112410110 (020).

Experience of Customers, Market Actors, and Collaborators

Operations, CCS/Outreach, Customer Acquisition,	37. How is the EB program marketing and conducting outreach to customers generally and priority customers specifically? [IF NEEDED: We understand that Energy Trust now uses "priority customers" to mean groups that historically have been underserved, such as rural, POC, etc.]
Program mgt. Marketing +	38. How effective have those strategies been?
Market Actors, Outreach Staff	39. How, if at all, could marketing and outreach to customers generally and priority customers specifically be improved?
	40. How is the EB program marketing and conducting outreach to trade allies?
	41. How effective have those strategies been?
	42. How, if at all, could marketing and outreach to trade allies be improved?
	43. What do you hear from participants about their satisfaction with the program? What do they like and dislike about participation?
	44. How, if at all, has the experiences and satisfaction of program participants differed when you think about participants by Size Business type Location (rural/urban)
	45. What do you hear from trade allies, contractors, and ATACs about their satisfaction with the program? What do they like and dislike about being a trade ally?
	46. What, if anything, do you hear from contractors (non-trade allies) about why they are not trade allies?
Operations, Program Mgt.	47. How does EB program coordinate with utilities to promote efficiency offerings?
	48. How, if at all, could coordination with utilities be improved?
Operations, Program Mgt,	49. How does EB program work with ODOE to support efficiency in k-12 public schools?
New Initiatives.	50. How, if at all, could this work be improved

51. How does EB program work with OHCS to support efficiency for multifamily customers?
52. How, if at all, could this work be improved?
53. How, if at all, have the collaborations with ODOE and/or OHCS assisted the program in better serving priority customers?

Future Opportunities

Operations, Program Mgt.,	54. What pilot efforts has the program undertaken in the last year or so and why is the program conducting these pilots?
Initiatives + operations, New Initiatives	55. What non-lighting direct install opportunities, if any, is the program considering implementing and why?
	56. How, if at all, does your team coordinate with other teams at Energy Trust or TRC to plan and implement measure changes?
	57. How, if at all, does your team coordinate with other teams at Energy Trust or TRC to plan and implement pilot programs?
	58. What trends in energy efficiency - technologies, market adoption, changes in price, electrification, something else - do you see impacting the EB program in a notable way in the next three to five years?
	59. How, if at all, does the EB program plan to address these trends?
	60. What do you see as the largest opportunity for the EB program to drive energy efficiency in the Oregon market? Is it pushing a specific technology, improving outreach to a region or business type, something else?
	61. If not already mentioned above, what energy efficiency measures do you see as being the primary contribution to savings for the EB program over the next three to five years?
	62. What measures, if any, does the program need to consider adding to the program to help it achieve its long-term savings goals?
	63. What measures, if any, does the program need to consider removing from the program because it is no longer enough above baseline to bother with incentives or it is not cost effective?
ALL	64. Finally, what would you like to learn from this evaluation of the EB program? [PROBES: Is there anything that would especially help you with your job?]

Utility Interview Guide

Recruitment Scripts

The team will contact all potential respondents using both email and phone. The interviewers will attempt contact up to five times. We anticipate that the utility and state agency staff will not allow them to accept a gift for completing the interview.

Email

Dear [NAME],

As part of its commitment to continuous improvement, Energy Trust of Oregon regularly evaluates its energy efficiency programs for business customers.

Energy Trust has hired ADM Associates to contact individuals like yourself for a brief discussion about your utility's experiences collaborating with Energy Trust programs to reach your business customers. The conversation should take about 20 minutes. Your responses are confidential. We will report only the overall findings to Energy Trust, not any individual responses.

If you have questions about how we treat collected data, please see ADM's privacy policy at https://www.admenergy.com/privacy

Please let us know a few times over the next few weeks when you can chat about your experiences. If we don't hear from you, we'll follow up with a call.

Of course, if you would rather not hear from us again, just let me know by return email. But I hope you can spare a few minutes to give me your feedback.

If you have any questions about this research, please feel free to contact me by return email or at [ADM CONTACT INFORMATION] or [ENERGY TRUST CONTACT INFORMATION].

Sincerely,

[ADM TEAM CONTACT]

ADM conducts research to support research and evaluation in the energy sector. Survey data are not shared with third parties for marketing purposes. Our full privacy statement is linked here: www.admenergy.com/privacy

Phone (If No Response to Email)

Hello,	
This is	with ADM Associates. I am trying to reach [NAME].
IF NEEDED:	

We emailed [NAME] about a week ago on behalf of Energy Trust of Oregon to try to set up a time to get feedback on your utility's experience collaborating with the Energy Trust programs for business customers. I'm just following up on that email.

IF NOT AVAILABLE: Try to get callback time.

IF REACHED RIGHT CONTACT:

Hello,

This is _____ with ADM Associates. We emailed you about a week or so ago about your utility's collaboration with the Energy Trust programs for business customers. Do you remember that email?

IF DOES NOT REMEMBER EMAIL:

The purpose was to try to set up a time to chat about your experience working with the Energy Trust programs for business customers. This is part of Energy Trust's commitment to continuous improvement. Your feedback will help Energy Trust improve its services to your business customers.

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves your business customers.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

IF REMEMBERS EMAIL:

I'm just following up on that email.

As you'll recall, the purpose was to try to set up a time to chat about your experiences with the program.

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

- 1. [IF YES] Start recording
- 2. [IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves your business customers.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

Phone (If Scheduled Interview Via Email)

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Hello,
This is with ADM Associates, calling as scheduled to talk about your utility's work with the Energy Trust programs for business customers. Is this still a good time to talk?
IF NO TIME TO TALK:
Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your utility's services, your experience working with the Energy Trust programs for business customers, the effectiveness of the partnership, and your observations, if any, about market trends that could affect how the program serves your business customers.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

Interview Script

Introduction

This interview is really designed to be a conversation so please don't hesitate to ask questions or clarify things as we go through the questions.

I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording [IF NO] Take notes

Background

The next few questions ask some basic questions about your involvement in the Energy Trust programs.

- 1. To start, please describe your role working with Energy Trust programs.
- 2. What are your key tasks and objectives?
- 3. Who do you work with, both within your company/organization and at Energy Trust, regarding the Energy Trust programs? What are their roles?
- 4. How long have you been in this role? Was there someone else in this role before you?

Program Engagement & Participation

The next few questions are to help us understand how your organization has worked with the Energy Trust programs and its reasons for doing so.

- 5. Do you also work with anyone at the program implementers TRC for Existing Buildings and Energy 350 for Production Efficiency? If so, who?
- 6. Do you mostly work with staff at Energy Trust or the implementers?
- 7. How do you work with Energy Trust and/or the implementers to support the Energy Trust energy efficiency programs?
- 8. [IF NEEDED] How do you work with Energy Trust to promote its energy efficiency programs to your customers?
- 9. How do you work with the Energy Trust programs to engage lower-income customers and small or rural businesses?
- 10. What additional actions might be taken to further promote the program across the communities you serve?

Program Changes

Energy Trust recently has made some changes to its energy efficiency programs for business customers, which you may be aware of. I'd like to ask about whether those changes have affected the collaboration between [UTILITY] and Energy Trust relating to these programs.

- 11. First, lighting measures were removed from the Existing Buildings Program and put into a separate program, called Business Lighting. How, if at all, has that affected the collaboration between [UTILITY] and the Energy Trust programs?
- 12. Second, Multifamily services were incorporated into the Existing Buildings Program. How, if at all, has that affected the collaboration between [UTILITY] and the Energy Trust programs?
- 13. In addition, in 2021, Energy Trust changed implementers for the Existing Buildings Program, from ICF to TRC. How, if at all, has that affected the collaboration between [UTILITY] and the Energy Trust programs?

Effectiveness of Partnership

The next set of questions are about your experience working with Energy Trust energy efficiency programs.

- 14. How often, and how, do you communicate with Energy Trust staff regarding these programs?
- 15. How would you characterize the effectiveness of the collaboration between your organization and Energy Trust relating to its programs for business customers?
- 16. What might be done, if anything, to improve that collaboration?
- 17. What have been some of the biggest successes of your partnership with the Energy Trust programs?
- 18. What have been some of the largest challenges for this partnership?
- 19. What changes, if any, do you think Energy Trust can make to improve this program?

Trends

Your responses to this next set of questions will help us provide input to Energy Trust on how its programs for business customers should evolve in the coming years.

- 20. What trends in energy efficiency—technologies, market adoption, changes in price, electrification, something else—do you see affecting the Energy Trust programs in a notable way in the next three to five years?
- 21. Do you have any thoughts on what the Energy Trust business programs might do to better drive energy efficiency in Oregon? Why do you say that?
- 22. [PROBE ABOUT: specific technology, targeted outreach by region or business type, etc.]
- 23. What changes do you think Energy Trust should make to its programs for business customers to reflect market changes and trends? (adding measures? removing measures?)

Those are all the questions I have. Thanks for your time.

Community-Based Organization (CBO) Interview Guide

Phone Recruitment Script

Hello,
This is with ADM Associates. I am trying to reach [NAME].
IF NEEDED:
We emailed [NAME] about a week ago on behalf of Energy Trust of Oregon to try to set up a time to get feedback on your organization's experience with the Energy Trust Existing Buildings program. I'm just following up on that email.
IF NOT AVAILABLE: Try to get callback time.
IF REACHED RIGHT CONTACT:
Hello,
This is with ADM Associates. We emailed you about a week or so ago about your organization's work with the Energy Trust Existing Buildings Program. Do you remember that email?
IF DOES NOT REMEMBER EMAIL:

The purpose was to try to set up a time to chat about your experience working with the Existing Buildings Program. This is part of Energy Trust's commitment to continuous improvement. Your feedback will help Energy Trust improve its services to businesses and organizations like the ones [CBO_NAME] serves.

Do you have some time to talk now?

As a thank you, ADM is providing a \$100 electronic gift card to all those that complete interviews with us.

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

- 1. [IF YES] Start recording
- 2. [IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves the businesses and organizations that [CBO_NAME] serves.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

IF REMEMBERS EMAIL:

I'm just following up on that email.

As you'll recall, the purpose was to try to set up a time to chat about your experiences with the program.

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording [IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves the businesses and organizations that [CBO_NAME] serves.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses. As a thank you, we are providing a \$100 electronic gift card to all those who complete interviews with us.

Interview Script

Introduction

This interview is really designed to be a conversation so please don't hesitate to ask questions or clarify things as we go through the questions.

I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

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[IF YES] Start recording [IF NO] Take notes
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Background

The next few questions ask some basic questions about your involvement in the Energy Trust programs.

- 1. To start, please describe your role working with Energy Trust programs. IF NEEDED: What are your key tasks and objectives?
- 2. Who do you work with, both within your company/organization and at Energy Trust, regarding the Energy Trust programs? What are their roles?
- 3. How long have you been in this role? Was there someone else in this role before you?

Program Engagement & Participation

The next few questions are to help us understand how your organization has worked with the Energy Trust programs and its reasons for doing so.

- 4. First, what types of services do you provide?
- 5. Please describe the communities you serve. What geographic region of the state do you serve? Do your services focus on specific demographic groups?
- 6. Who do you work with at Energy Trust?
- 7. Do you also work with anyone at the company that Energy Trust hired to implement the program that company is called TRC? If so, who?
- 8. Do you mostly work with staff at Energy Trust or TRC?
- 9. How would you describe your organization's collaboration with the Energy Trust programs?
- 10. [PROBE] How do you see your role in the programs?
- 11. [PROBE] How do your activities help the people you serve get Energy Trust incentives?
- 12. How does your organization carry out this collaboration?
- 13. [IF NEEDED] How do you work with the Energy Trust programs to engage lower-income customers?

- 14. What additional actions should be taken to further support access to the program across the communities you serve?
- 15. How can Energy Trust better engage the communities you serve?

Effectiveness of Collaboration

The next set of questions are about your experience working with Energy Trust energy efficiency programs.

- 16. How often, and how, do you communicate with Energy Trust staff regarding its energy efficiency programs?
- 17. How would you characterize the effectiveness of the collaboration between your organization and Energy Trust?
- 18. What might be done, if anything, to improve that collaboration?
- 19. What have been some of the biggest successes of your collaboration with the Energy Trust programs?
- 20. What have been some of the largest challenges for this collaboration?
- 21. What changes, if any, do you think Energy Trust can make to make this program more accessible to the people you serve?

Trends

This final question will help us provide input to Energy Trust on how its energy efficiency program should evolve in the coming years.

22. Have you heard about any changes that might occur in the next few years that might affect how the Energy Trust programs is able to serve the groups you serve?

Those are all the questions I have. Thanks for your time.

ODOE/OHCS Interview Guide

Recruitment Scripts

The team will contact all potential respondents using both email and phone. The interviewers will attempt contact up to five times. We anticipate that the utility and state agency staff will not allow them to accept a gift for completing the interview.

Email

Dear [NAME],

As part of its commitment to continuous improvement, Energy Trust of Oregon is evaluating its Existing Buildings Program, which has been working with [ORG_NAME] to support energy efficiency upgrades to [ORG_AUDIENCE].

Energy Trust has hired ADM Associates to contact individuals like yourself for a brief discussion about your experiences collaborating with the Existing Buildings Program. Our goal is to understand how you and your organization work with the Energy Trust program as well as program related program achievements and challenges. The conversation should take about 30 minutes. Your responses are confidential. We will report only the overall findings to Energy Trust, not any individual responses.

If you have questions about how we treat collected data, please see ADM's privacy policy at https://www.admenergy.com/privacy

Please let us know a few times over the next few weeks when you can chat about your experiences. If we don't hear from you, we'll follow up with a call.

Of course, if you would rather not hear from us again, just let me know by return email. But I hope you can spare a few minutes to give me your feedback.

If you have any questions about this research, please feel free to contact me by return email or at [ADM CONTACT INFORMATION] or [ENERGY TRUST CONTACT INFORMATION].

Sincerely,

[ADM TEAM CONTACT]

ADM conducts research to support research and evaluation in the energy sector. Survey data are not shared with third parties for marketing purposes. Our full privacy statement is linked here: www.admenergy.com/privacy

Phone (If No Response to Email)

Hello,	
This is	with ADM Associates. I am trying to reach [NAME].

We emailed [NAME] about a week ago on behalf of Energy Trust of Oregon to try to set up a time to get feedback on your organization's experience with the Energy Trust Existing Buildings program. I'm just following up on that email.

IF NOT AVAILABLE: Try to get callback time.

IF REACHED RIGHT CONTACT:

Hello,

IF NEEDED:

This is _____ with ADM Associates. We emailed you about a week or so ago about your organization's work with the Energy Trust Existing Buildings Program. Do you remember that email?

IF DOES NOT REMEMBER EMAIL:

The purpose was to try to set up a time to chat about your experience working with the Existing Buildings Program. This is part of Energy Trust's commitment to continuous improvement. Your feedback will help Energy Trust improve its services to [ORG_AUDIENCE].

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves [ORG_AUDIENCE].

Our chat should take about 30 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

IF REMEMBERS EMAIL:

I'm just following up on that email.

As you'll recall, the purpose was to try to set up a time to chat about your experiences with the program.

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording [IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves [ORG_AUDIENCE].

Our chat should take about 30 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

Phone (If Scheduled Interview Via Email)

AFTER REACHING CORRECT PERSON:
Hello,
This is with ADM Associates, calling as scheduled to talk about your organization's work with the Energy Trust Existing Buildings Program. Is this still a good time to talk?
IF NO TIME TO TALK:
Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your organization's services, your experience working with the Existing Buildings Program, the effectiveness of the partnership, and your observations, if any, about market trends that could affect how the program serves [ORG_AUDIENCE].

Our chat should take about 30 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

Interview Script

Introduction

This interview is really designed to be a conversation so please don't hesitate to ask questions or clarify things as we go through the questions.

I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording

[IF NO] Take notes

Background

The next few questions ask some basic questions about your involvement in the Energy Trust programs.

- 1. To start, please describe your role working with Energy Trust programs.
- 2. What are your key tasks and objectives?
- 3. Who do you work with, both within your company/organization and at Energy Trust, regarding the Energy Trust programs? What are their roles?
- 4. How long have you been in this role? Was there someone else in this role before you?

Program Engagement & Participation

The next few questions are to help us understand how your organization has worked with the Energy Trust programs and its reasons for doing so.

- 5. Who do you work with at Energy Trust?
- 6. Do you also work with anyone at the program implementer, TRC? If so, who?
- 7. Do you mostly work with staff at Energy Trust or TRC?
- 8. How do you work with Energy Trust or TRC in providing energy-related assistance to [ODOE: SCHOOLS / OHCS: INCOME-QUALIFIED MULTIFAMILY CUSTOMERS]?
- 9. Do you rely on Energy Trust and/or TRC to provide the equipment-related expertise or does your office bring its own expertise?
- 10. [IF NEEDED] How, if at all, do you encourage participation in the Energy Trust programs or the installation of more covered equipment types through the program?
- 11. In what ways, if any, has your collaboration with the Program improved the energy efficiency of the buildings you serve?
- 12. Do you focus your efforts on buildings in specific communities? If so, how do you determine which communities to focus on?

13. [ODOE ONLY] How, if at all, do you work with the Energy Trust programs to engage lower-income schools? Are there specific accommodations that facilitate program participation?

Effectiveness of Partnership

The next set of questions are about your experience working with Energy Trust energy efficiency programs.

- 14. How often, and how, do you communicate with Energy Trust staff regarding these programs?
- 15. How would you characterize the effectiveness of the collaboration between your organization and Energy Trust relating to its programs that serve [ODOE: schools / OHCS: income-qualified multifamily customers]?
- 16. What might be done, if anything, to improve that collaboration?
- 17. What have been some of the biggest successes of your partnership with the Energy Trust programs?
- 18. What have been some of the largest challenges for this partnership?
- 19. [IF NOT ADDRESSED ABOVE] What would you say are the biggest challenges to serving [ODOE: schools / OHCS: income-qualified multifamily customers]?
 - [PROBE about reaching decision-makers, financial constraints, planning constraints, understanding of the value of energy efficiency, etc.]
- 20. What changes, if any, might be made to either the Energy Trust programs or to your collaboration with it to benefit the buildings you serve?

Trends

Your responses to this next set of questions will help us provide input to Energy Trust on how its programs for business customers should evolve in the coming years.

- 21. Are you aware of energy-related market trends that could affect the kind of work you do with Energy Trust in the next three to five years?
 - [PROBE ABOUT: technologies, market adoption, changes in price, electrification]
- 22. What do you see as the largest opportunity to drive energy efficiency in the types of buildings you serve? Why?
 - [PROBE ABOUT: specific technology, targeted outreach by region or business type, etc.]
- 23. What changes, if any, might Energy Trust make to its energy efficiency programs to reflect market changes and trends?

[PROBES: Adding measures? Removing measures?]

Those are all the questions I have. Thanks for your time.

Trade Ally/Non-Trade Ally Contractors Interview Guide

Recruitment Scripts

The team will contact all potential respondents using mail, email, and phone, as with TAs and other contractors. We will make up to five call attempts. To encourage participation and thank respondents for their time, we will offer a \$50 gift card to all who complete an interview with us.

Advance Letter

Dear Contractor,

Energy Trust of Oregon has identified your firm as one of those helping make their commercial program successful over the past few years. As part of its commitment to continuous improvement, Energy Trust would like your feedback about your experience working with that program.

Energy Trust has hired ADM Associates to contact individuals like yourself to discuss your experiences briefly. Our goal is to understand how you and your organization work with the Energy Trust program and program-related achievements and challenges.

We are sending you this letter to alert you and your organization that representatives from ADM will be reaching out to you in the coming weeks to talk about your work with the Energy Trust commercial program. We estimate the conversation should take about 20 minutes and any responses you provide are confidential. We will report only the overall findings to Energy Trust, not any individual responses. You will receive a \$50 gift card from ADM as a thank-you for your time.

If you have questions about how we treat collected data, please see ADM's privacy policy at https://www.admenergy.com/privacy.

Of course, if you would rather not hear from us again, just let me know by return email. But I hope you can spare a few minutes to give me your feedback.

If you have any questions about this research, please feel free to contact me by return email or [ADM CONTACT INFORMATION] or [ENERGY TRUST CONTACT INFORMATION].

Sincerely,

[ADM TEAM CONTACT]

ADM conducts research to support research and evaluation in the energy sector. Survey data are not shared with third parties for marketing purposes. Our full privacy statement is linked here: www.admenergy.com/privacy

Email

Dear [NAME],

Energy Trust of Oregon has identified your firm as one of those helping make the commercial program successful over the past few years. As part of its commitment to continuous improvement, Energy Trust would like your feedback about your experience working with that program.

Energy Trust has hired ADM Associates to contact individuals like yourself to discuss your experiences briefly. Our goal is to understand how you and your organization work with the Energy Trust program and program-related achievements and challenges. The conversation should take about 20 minutes. Your responses are confidential. We will report only the overall findings to Energy Trust, not any individual responses. You will receive a \$50 gift card from ADM as a thank-you for your time.

If you have questions about how we treat collected data, please see ADM's privacy policy at https://www.admenergy.com/privacy

Please let us know a few times over the next few weeks when you can chat about your experiences. If we don't hear from you, we'll follow up with a call.

Of course, if you would rather not hear from us again, just let me know by return email. But I hope you can spare a few minutes to give me your feedback.

If you have any questions about this research, please feel free to contact me by return email or at [ADM CONTACT INFORMATION] or [ENERGY TRUST CONTACT INFORMATION].

Sincerely,

[ADM TEAM CONTACT]

ADM conducts research to support research and evaluation in the energy sector. Survey data are not shared with third parties for marketing purposes. Our full privacy statement is linked here: www.admenergy.com/privacy

Phone (If No Response to Email)

Hello,	
This is	with ADM Associates. I am trying to reach [NAME].
IF NEEDED:	

We emailed [NAME] about a week ago on behalf of Energy Trust of Oregon to try to set up a time to get feedback on your organization's experience with the Energy Trust Commercial Buildings program. I'm just following up on that email.

IF NOT AVAILABLE: Try to get a callback time.

IF REACHED RIGHT CONTACT:

Hello,

This is _____ with ADM Associates. We emailed you about a week or so ago about your organization's work with the Energy Trust Commercial Buildings Program. Do you remember that email?

IF DOES NOT REMEMBER EMAIL:

The purpose was to try to set up a time to chat about your experience working with the commercial program. This is part of Energy Trust's commitment to continuous improvement. Your feedback will help Energy Trust improve its services to businesses and other organizations you work with.

Do you have some time to talk now?

We are offering a \$50 electronic gift card to all who complete interviews with us as a thank you.

IF NO TIME TO TALK:

Can we schedule a time next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to ensure I accurately capture what you are telling me. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program and how well it serves businesses and other organizations you work with.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

IF YOU REMEMBERS, EMAIL:

I'm just following up on that email.

As you'll recall, the purpose was to schedule a chat about your experiences with the program.

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to ensure I accurately capture what you are telling me. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording [IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program and how well it serves businesses and other organizations you work with.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses. As a thank you, we provide a \$50 electronic gift card to all who complete interviews.

Phone (If Scheduled Interview Via Email)

,
AFTER REACHING CORRECT PERSON:
Hello,
This is with ADM Associates, calling as scheduled to talk about your organization's work with the Energy Trust commercial program. Is this still a good time to talk?
IF NO TIME TO TALK:
Can we schedule a time in the next week or so?
IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to ensure I accurately capture what you are telling me. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your organization's services, your experience working with the commercial program, the effectiveness of the partnership, and your observations, if any, about market trends that could affect how the program serves businesses and other organizations you work with.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses. As a thank you, we provide a \$50 electronic gift card to all who complete interviews.

Interview Script

Introduction

This interview is designed to be a conversation, so please don't hesitate to ask questions or clarify things as we go through the questions.

I will be taking notes throughout the call, but I would also like to record our conversation to ensure I accurately capture what you are telling me. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording [IF NO] Take notes

Background

Thanks so much for talking with me today. I'd like to start off by asking a few questions about your business.

[ASK IF ENERGY TRUST REGISTERED TRADE ALLY]

1. According to my records, are a registered Energy Trust trade ally. Is that correct?

Yes (confirmed status)
No (did not confirm status)

[ASK IF NOT ENERGY TRUST REGISTERED TRADE ALLY]

2. According to my records, you are NOT a registered Energy Trust trade ally. Is that correct?

Yes (confirmed status)
No (did not confirm status)

3. What types of project services do you offer to commercial customers? (Mark all that apply)

Compressed Air
Heating and Cooling
Industrial Battery Chargers
Insulation
Lighting + Lighting Controls
Motors and Drives (including VFDs, pumps and fans)
Refrigeration
Steam Traps
Water and Wastewater
Welding
Custom
Other (Specify: ______)

How many locations does your company have? _____

5. How many of these locations are in:

Oregon: _	
Washingt	on:

6. What particular areas of Oregon and Washington does your company serve? [PROBE about: entire state, Portland, Willamette Valley, Southern and Central Oregon, Eastern Oregon, Coastal Oregon, SW Washington.]

Program Operations

at all?

Now	I want to as	k vou some	augstions ah	out vour v	work with	Energy True	st's commercia	Inrogram
NOW.	i want to as	k vou some	duestions ab	out vour v	work with	energy irus	it s commercia	i brogram.

	·
Now, I	want to ask you some questions about your work with Energy Trust's commercial program.
7.	When did you first start working with the commercial program?
	Before 2021 Since 2022 Since 2023 Since 2024 Not Sure
8.	What types of project services do you offer as part of the commercial program? (Mark all that apply)
	Compressed Air Heating and Cooling Industrial Battery Chargers Insulation Lighting + Lighting Controls Motors and Drives (including VFDs, pumps and fans) Refrigeration Steam Traps Water and Wastewater Welding Custom Other (Specify:)
9.	Our project tracking data show that your firm has completed [#PROJECTS] with the Energy Trust Buildings Program in 2022 and 2023. Does that seem about right?
	Yes No
[ASK 1	0 IF 9=NO]
10	. What is the correct number?
11	. Please describe your role working with the Energy Trust commercial program: [PROBE] What are your key roles or responsibilities working with this program?
[ASK 1	2 and 14 IF 7=BEFORE 2021]
12	. How has that process changed, if at all, since the transition to a new implementation team in 2021?
13	. [IF NEEDED] In 2021, the program implementer changed from ICF to TRC.

APPENDIX A-31

14. How has the transition to a new implementation team affected your projects and customers, if

- 15. How has the creation of a separate program for Business Lighting affected your projects and customers, if at all?
- 16. How has the incorporation of multifamily projects into Commercial Buildings affected your projects and customers, if at all?

Customer Experience

- 17. What do you hear from participants about their satisfaction with the program? [IF NEEDED: What do they like and dislike about participation?]
- 18. To your knowledge, how, if at all, have the experiences and satisfaction of program participants differed when you think about participants by...

Size

Business Type

Location (rural/urban)

19. What opportunities, if any, do you see to improve participants' experiences?

Experience with Energy Trust

20. On a scale of 1 to 5, where 1 means "not at all" and 5 means "to a great degree," how much has working with Energy Trust helped your business opportunities?

[ASK 21 IF 20=1]

- 21. Why do you say that? [OPEN ENDED]
- 22. Based on your experience, what areas are working with Energy Trust's commercial program? [OPEN ENDED]
- 23. Based on your experience, what areas are not working as well with Energy Trust's commercial building program? [OPEN ENDED]

[ASK 24 IF NOT ENERGY TRUST REGISTERED TRADE ALLY]

24. Have you considered becoming a registered trade ally with Energy Trust?

Yes

No

Not sure

[DISPLAY 25 IF 24=0]

25. Why did you decide not to become a registered trade ally with Energy Trust? [OPEN ENDED]

[ASK 26 and 27 ENERGY TRUST REGISTERED TRADE ALLY]

26. As a registered trade ally, does Energy Trust provide you with information about changes to the commercial building program?

Yes

No

27. Are you given sufficient information about program changes that may affect your business?

Yes

No

[ask 28 if 27=NO]

28. What type of information do you need from Energy Trust about its commercial program? [DISPLAY 29 and 30 IF ENERGY TRUST REGISTERED TRADE ALLY]

29. Do you recall receiving communications about upcoming Energy Trust's programs and events (for example, trade ally forums, training, others)?

Yes

No

30. Which of the following types of communication, if any, do you recall receiving from Energy Trust?

[MULTISELECT, EXCEPT THAT NONE OF THE ABOVE IS EXCLUSIVE]

Energy Trust Newsletters
Training Information
Program Undates About Chan

Program Updates About Changing Program Incentives

Other-Specify: [OPEN-ENDED]

None of the above

[display 31 if 30<>NONE OF THE ABOVE]

- 31. Which of those types of communication is most useful to you, and why?
- 32. How do you receive information about Energy Trust incentives that are available to commercial customers?
- 33. How would you like to receive information about program offerings?

Trends

Your responses will help us provide Energy Trust with input on how its energy efficiency program should evolve in the coming years.

- 34. What considerations have the greatest weight in driving your customers' decisions about energy efficiency in the commercial and multifamily market segments right now? [PROBE] Is it economic factors, carbon reduction, or something else?
- 35. How, if at all, do you think those considerations will change over the next few years?
- 36. Where are the biggest opportunities for energy savings in the commercial and multifamily market segments over the next five years?

 [PROBE] Are there particular geographic areas, types of businesses, or technologies that you think could be big opportunities for energy savings?
- 37. Does Energy Trust's program have the right mix of technologies and offerings to meet your customers' needs in the commercial and multifamily market segments?

[PROBES]

Are your customers showing increased interest in certain types of projects or equipment that Energy Trust should be aware of? [OPEN ENDED]

Are there any project or equipment types that Energy Trust is not sufficiently supporting? [OPEN ENDED]

[ASK FOLLOWING IF NOT ALREADY ADDRESSED IN PREVIOUS QUESTION]

- 38. Are there any Direct Install Measures that should be added to the program? If so, what should be added? [OPEN ENDED]
- 39. Are there any Direct Install Measures that should be removed from the program? If so, what should be removed? [OPEN ENDED]

Firmographics

Now, I'd like to ask you just a few questions about your business. All responses will be kept confidential.

40. Which range best represents your firm's annual revenue in 2023:

Up to \$100,000 Between \$100,000 and \$500,000 \$500,001 to \$1 million Above \$1 million

- 41. Approximately what percentage of your work is directly related to energy efficiency improvements?
- 42. Do you have anything else you would like to add to our conversation today about the commercial program?

Those are all the questions I have. Thanks for your time.

Participant Interview Guide

Recruitment

Email recruitment to sampled contacts to: explain the purpose, duration, and importance of participation; offer a \$50 gift card for completing the interview; request available interview times; provide a phone number and ADM contact for information or to schedule or complete the interview; identify an Energy Trust contact to provide bona fides; and state that we will follow up with a phone call. As needed, make phone calls to schedule and complete interviews. The phone calls will follow a script similar to the recruitment email.

Email

Dear [NAME],

Your business or organization recently received a monetary incentive from the Energy Trust of Oregon Existing Buildings Program for completing an energy efficient equipment replacement or upgrade. As part of its commitment to continuous improvement, Energy Trust would like to get your feedback about your experience with that incentive program.

Energy Trust has hired ADM Associates to contact individuals like yourself for a brief discussion about your experiences. We have a goal of talking to about 70 individuals – can you be one of those who help us reach that goal?

As a thank you, ADM is providing a \$50 electronic gift card to all those who complete interviews with us.

Our chat should take about 20 minutes. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses. If you have questions about how we treat collected data, please see ADM's privacy policy at https://www.admenergy.com/privacy

Please let us know a few times when you can chat about your experiences. If we don't hear from you, we'll follow up with a call.

Of course, if you would rather not hear from us again, just let me know by return email. But I hope you can spare a few minutes to give me your feedback.

If you have any questions about this research, please feel free to contact me by return email or at [ADM CONTACT INFORMATION] or [ENERGY TRUST CONTACT INFORMATION].

Sincerely,

[ADM TEAM CONTACT]

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Email Follow-up

Dear [NAME],

I'm following up on an email I sent a few days ago on behalf of Energy Trust of Oregon.

As part of its commitment to continuous improvement, Energy Trust would like to get your feedback about your experience with its Existing Buildings Program – specifically, about [PROJECT] that [COMPANY] did on or around [DATE] and received a discounted price or a monetary rebate from Energy Trust.

Energy Trust has hired ADM Associates to talk to people like you about your experiences. I have been making calls the past week and have not yet been able to reach you. Can you be one of the people who help me reach our goal of talking to about 70 individuals?

As a thank you, ADM is providing a \$50 electronic gift card to all those who complete the approximately 20-minute interviews with us.

If you are available for a call sometime this week or next, you can let me know your available times or even schedule a time here [CALENDLY LINK] or by return email. If I don't hear from you, I'll try again to reach you by phone.

All your responses will be treated as confidential.

Of course, if you would rather not hear from me again, just let me know by return email. But I hope you can spare a few minutes to give me your feedback.

If you have any questions about this research, please feel free to contact me by email or at [ADM CONTACT INFORMATION] or [ENERGY TRUST CONTACT INFORMATION].

Sincerely,

[ADM TEAM CONTACT]

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Phone (If No Response to Email)

Hello,	
This is	with ADM Associates. I am trying to reach [NAME]

We emailed [NAME] about a week ago on behalf of Energy Trust of Oregon to try to set up a time to get feedback on your organization's experience with the Energy Trust program that provided a monetary incentive for an energy efficient equipment replacement or upgrade your organization completed. I'm just following up on that email.

IF NOT AVAILABLE: Try to get callback time.

IF REACHED RIGHT CONTACT:

Hello,

IF NEEDED:

This is _____ with ADM Associates. We emailed you about a week or so ago about the monetary incentive your organization received from Energy Trust for an energy efficient equipment replacement or upgrade. Do you remember that email?

IF DOES NOT REMEMBER EMAIL:

The purpose was to try to set up a time to chat about your experience with that assistance. This is part of Energy Trust's commitment to continuous improvement. Your feedback will help Energy Trust improve its services to organizations like yours.

Do you have some time to talk now?

As a thank you, ADM is providing a \$50 electronic gift card to all those that complete interviews with us.

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording
[IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves your market segment.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses.

IF REMEMBERS EMAIL:

I'm just following up on that email.

As you'll recall, the purpose was to try to set up a time to chat about your experiences with the assistance you received.

Do you have some time to talk now?

IF NO TIME TO TALK:

Can we schedule a time in the next week or so?

IF YES:

That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record our conversation to make sure I capture what you are telling me accurately. The recording is confidential. Is it ok that I record the call?

[IF YES] Start recording [IF NO] Take notes as best as possible

USE AS NEEDED:

Our chat will cover your experience with the program as well as how well it serves your market segment.

Our chat should take about 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses. As a thank you, ADM is providing a \$50 electronic gift card to all those who complete interviews with us.

Phone (If Scheduled Interview Via Email)

AFTER REACHING CORRECT PERSON:		
Hello,		
This is with ADM Associates, calling as scheduled to talk about the assistance your business or organization received from Energy Trust. Is this still a good time to talk?		
IF NO TIME TO TALK:		
Can we schedule a time in the next week or so?		
IF YES:		
That's great. I'll go ahead and start. I will be taking notes throughout the call, but I would also like to record		

[IF YES] Start recording [IF NO] Take best notes possible

USE AS NEEDED:

Is it ok that I record the call?

Our chat will cover your experience, including how the program outreach staff contacted you, what information they provided you, and how you made decisions about what kind of equipment upgrade to do.

Our chat should take less than 20 minutes, although we want you to feel free to share as much information as you want. All your responses will be treated as confidential. We will report only the overall findings to Energy Trust, not any individual responses. As a thank you, ADM is providing a \$50 electronic gift card to all those that complete interviews with us.

Interview Script

Confirmation of Participation

First, I'd like to confirm that information I have, which is that your organization received a
monetary incentive from Energy Trust to complete [PROJECT] on or about [DATE] at one or
more of your organization's work places. Is that correct?
 IF NO: What is incorrect?

Program Marketing and Awareness

The next couple of questions are about how you learned about the Energy Trust incentive program.

2. Was this the first time your organization received a monetary incentive or other assistance from Energy Trust to buy or upgrade energy-using equipment?

Yes

No

Not sure

[ASK 3 TO 5 IF 2=NO]

- 3. About how many times has your organization received assistance from Energy Trust to buy or upgrade energy-using equipment? Your best guess is fine.
- 4. When was the first time your organization received assistance from Energy Trust to buy or upgrade energy-using equipment? Your best guess is fine.
- 5. When your organization previously received assistance from Energy Trust, what type or types of equipment was that for? Your best guess is fine.

[ASK 6 IF 2=YES OR NOT SURE]

6. How did you learn about the Energy Trust incentive program?

[PROBE for details. For example, if respondent indicates seeing an ad, ask where that ad was.] [MULTISELECT]

Advertisement - Specify: [OPEN-ENDED]

Bill insert

Program representative

Market actor – Specify: [OPEN-ENDED]

[For example, contractor, vendor, architect, consultant]

Word of mouth – Specify: [OPEN-ENDED]

Energy Trust website

Other – Specify: [OPEN-ENDED]

Don't recall/didn't say

[ASK ALL]

7. What suggestions do you have, if any, for making it easier for organizations like yours to learn about Energy Trust assistance?

Identification of Project

The next couple of questions are about how the equipment needs for your recent installation or upgrade were determined.

8. Please tell me why and how you decided to install equipment that would qualify for Energy Trust incentives.

[PROBES:

What benefits did you hope to achieve with the program-qualifying equipment?

IF SAVE ENERGY:

Did you want to save energy for environmental, cost, or other reasons?

IF TO GET INCENTIVE:

I understand the incentive reduced the cost of the program-qualifying equipment, but what was your reason for wanting that equipment in the first place?]

9. Did someone come to your workplace and identify ways to save energy? If so, who?

[PROBE about contractor, vendor, program representative]

[MULTISELECT EXCEPT #3]

Program representative

Someone else: Specify: [OPEN-ENDED]

[For example, contractor, vendor, architect, consultant]

Nobody came to workplace

[ASK 10 IF 9<>NOBODY]

10. Did you contact that person or did they contact you?

Respondent contacted

Program rep., contractor, or vendor contacted

[ASK 11 IF 9=NOBODY]

11. How did you identify the equipment you decided to install?

Consulted with a contractor or vendor

Other – Specify: [OPEN-ENDED]

[PROBE about sources, features]

[ASK 12 IF 10=RESPONDENT CONTACTED OR 11=CONSULTED WITH A CONTRACTOR/VENDOR]

12. How did you find that person?

[ASK 13 IF 9<>NOBODY OR IF 11= CONSULTED WITH A CONTRACTOR/VENDOR]

13. How did that person help you decide what equipment to install?

[IF NEEDED] Did that person suggest upgrades that you had not thought of before and, if so, were those helpful suggestions?

[IF NEEDED] What did that person tell you that convinced you to get equipment that qualified

for Energy Trust incentives?

[PROBE ABOUT: equipment benefits, payback/ROI/cost savings]

[IF NEEDED] Did that person give you information about Energy Trust incentives that were available?

[DISPLAY 14 IF (6=PROGRAM REP. AND 9=PROGRAM REP.) OR (6=MARKET ACTOR AND 9=SOMEONE ELSE)]

14. Was the person who helped you identify the savings opportunities the same person that you learned about the incentive program from?

Yes

Nο

Don't recall/not answered

Program Processes

15. Did anyone help you with your application for incentives? If so, who?

Yes – specify: [OPEN-ENDED]

No

Don't recall/not answered

[DISPLAY 16 AND 17 IF 15=YES]

- 16. What assistance did they provide?
- 17. How valuable was that assistance?

[PROBES, IF NEEDED:

Would you have been able to complete the application without the assistance? How challenging would it have been to complete the application without the assistance?]

[ASK 18 IF 15=NO OR DON'T RECALL]

18. How did you go about completing the application process to get the Energy Trust incentives?

[PROBES, IF NEEDED:

How did you get the incentive application?]

19. Did anyone from the program carry out any inspections of your workplace either before the incentives were approved or after the equipment was installed?

[PROBE for whether inspection was before or after] [MULTISELECT]

Yes-before incentive approval

Yes-after installation

No

Don't recall/not answered

[DISPLAY 20 IF 19=EITHER YES RESPONSE]

- 20. What was your impression of that/those inspection(s)?
- 21. What feedback do you have for me, if any, about the process for applying for and receiving the program incentives?

[PROBE: Was the process reasonable given what you received?]

- 22. Were there any types of equipment that you wanted but weren't able to get Energy Trust incentives for? If so, what?
- 23. At any point, did you talk with anyone from the program about incentives for renewable energy or lighting equipment?

Yes

No

Don't recall/not answered

[ASK 24 AND 25 IF 23=YES]

- 24. What did you talk about?
- 25. What assistance did they offer, if any, in getting those incentives?

Future Opportunities

26. Do you have more energy-related improvements or facility upgrades planned in the near future?

Yes

No

Not sure/not answered

[ASK 27 IF 26=YES]

27. Do you plan to work with Energy Trust again on those?

Yes

No

Not sure/not answered

[ASK 28 IF 27<>YES]

- 28. Why would you decide not to work with Energy Trust on future improvements or upgrades?
- 29. Are there any particular technologies that you think may provide big opportunities for your organization to save energy in the future?

Yes

No

Not sure/not answered

[ASK 30 IF 29=YES]

30. What are they?

Firmographics

The last few questions are about your organization.

31. Does your organization own or lease the facility or facilities where you did the energy efficiency equipment upgrade we've been talking about?

Own

Lease

Not sure

Refuse to answer

Other – specify: [OPEN-ENDED]

[ASK 32 IF 31=OWN]

32. Does your organization occupy the facility or facilities, lease them to someone else, or occupy part and lease part?

Occupy entire facility/facilities

Lease entire facility/facilities

Occupy part/lease part

Not sure

Not answered

Other – specify: [OPEN-ENDED]

[ASK 33 IF (31=OWN OR OTHER AND 32<>OCCUPY ENTIRE) OR 31<>OWN]

33. Are you or your organization responsible for paying for gas and/or electricity in the facility?

Yes

No

Not sure

Not answered

Other – specify: [OPEN-ENDED]

- 34. How many buildings does your organization own or lease in Oregon? Your best guess is fine.
- 35. How many employees does your organization have in Oregon? Your best guess is fine.

One to 10

11 to 25

26 to 50

51 to 100

101 to 500

More than 500

Not sure

Not answered

 ${\bf 36.}\ \ Which of the following best describes your organization's ownership structure?$

[READ LIST]

Publicly traded company

Privately owned company, including an individual proprietorship

Non-profit or not-for-profit

Government

Other – specify: [OTHER]

Energy Trust is interested in knowing whether its services are reaching all segments of the business community.

37. What are the languages your organization uses when interacting with customers? [IDENTIFY ALL

THAT APPLY]

[MULTISELECT]

English

Spanish

Mandarin or Cantonese (Chinese)

Vietnamese

Russian

Other - Specify: [OPEN-ENDED]

[ASK 38 IF 36=PRIVATELY OWNED COMPANY]

38. Is the principal owner of this business a woman or a person of color?

[IDENTIFY ALL THAT APPLY]

[MULTISELECT]

Woman

Person of color

Neither

Not answered

[ASK 39 AND 40 IF 36=NON-PROFIT OR NOT-FOR-PROFIT]

39. Was this organization established to provide services specifically to women, persons of color,

low-income individuals, or people in rural areas?

[IDENTIFY ALL THAT APPLY]

[MULTISELECT]

Women

Persons of color

People in rural areas

None of above

Not answered

40. Is this organization led by a woman or a person of color?

[IDENTIFY ALL THAT APPLY]

[MULTISELECT]

Woman

Person of color

Neither

Not answered

[DISPLAY 41 IF 38 OR 40=PERSON OF COLOR]

41. What is that person's race or ethnic background?

[IDENTIFY ALL THAT APPLY]

[MULTISELECT]

Asian or Asian Indian

Black or African American

Hispanic, Latino, or Spanish Middle Eastern or North African Native American or Alaska Native Native Hawaiian or Pacific Islander Other – Specify: [OPEN-ENDED] Not answered

[DISPLAY 42 IF 38=PERSON OF COLOR]

42. Is your organization a COBID certified business or is eligible to be COBID certified? [IF NEEDED: COBID is short for Certification Office for Business Inclusion and Diversity. Generally, COBID businesses are small businesses, business owned by women, minorities, veterans, or other small/emerging businesses.]

Yes – COBID certified Yes – COBID eligible No I don't know Refuse to answer

Those are all the questions I have.