

## MEMO

**Date:** June 5, 2013  
**To:** Phil Degens, Manager, Evaluation  
**From:** Oliver Kesting, Business Sector Lead  
Scott Swearingen, Sr. Project Manager, Multifamily  
Susan Jowaiszas, Sr. Marketing Manager, Commercial + Industry|Ag  
**Subject:** Staff Response to the 2013 Multifamily Market Research Study

In late 2012 and early 2013, the Commercial Sector/Multifamily conducted the program's first market research study for Energy Trust. The purpose of the research was to aid Energy Trust in increasing participation in the Existing Multifamily program by obtaining an in-depth understanding of key dynamics operating in both incented and direct-install programs. The information from the study would aid in the effective development of both short and long-term strategies for marketing, as well as program design and resource allocation.

This in-depth information, collected and reported in the customers' own words, is highly complementary to ongoing Evaluation research, including process evaluations and Fast Feedback surveys. To frame the questions, we tapped the recommendations of the recently completed process evaluation, in addition to staff and PMC representatives, for topic areas to explore. Staff feels that similar market research of this nature, or perhaps a shorter format of the study, would be valuable to conduct every 2 years to inform program design and marketing decisions.

In summary, the research documented that customers are satisfied with the program's ability and willingness to support their efforts to implement energy-efficiency at multifamily properties in Energy Trust service territory. It also provided valuable insights into the roles and responsibilities – and decision-making authority – for the various points of contact for a given property. Of specific interest were the findings that conflicted with evaluation recommendations and with other industry research by such groups as ACEEE. These include the assumption that instant savings measures directly lead to capital projects, and that property managers and owners can and would use the energy efficiency of their units as a marketing edge for new tenants. The study also provided information helpful in creating strategies to reach smaller multifamily property owners/managers, as well as investment priorities for affordable vs. market-rate properties.

Program staff will be integrating findings into future program design decision-making and marketing efforts, including, but not limited to:

- Multifamily will be tuning up messaging and targeting it more specifically to the specific role of the individual within the customer organization.
- Based on a stated desire to have a more direct relationship with Energy Trust we will be creating new tools to provide this link.
- The timing of marketing and outreach activities will be examined to make sure it synchs up with capital planning schedules for property managers.
- Energy Trust will develop ways to engage contractors who are working with properties but have not worked with Energy Trust to date.
- Staff will investigate and develop ways to quantify and share the impact that energy efficient improvements may have on the resale value of the property.



**Energy Trust of Oregon  
Existing Multifamily Program  
Market Research Results**

**April 2013**

**Research Conducted and Presented By:**

**Brenda Forrest  
Forrest Marketing**

Forrest Marketing • 4700 SW Elm Lane • Portland, Oregon 97221  
503-274-1278 • [forrestmarketing@comcast.net](mailto:forrestmarketing@comcast.net)

**Energy Trust of Oregon**  
**Existing Multifamily Market Research Report**  
**April 2013**

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## **Energy Trust of Oregon Existing Multifamily Market Research Study**

### **I. Purpose & Method**

**This research report summarizes the results of twenty-seven in-depth interviews conducted for Energy Trust of Oregon among key constituents of the Existing Multifamily program.**

#### **A. Purpose**

The purpose of the research was to aid Energy Trust in increasing participation in the Existing Multifamily program by obtaining an in-depth understanding of key dynamics operating in both its incented program offerings (capital upgrades) and its direct-install ISM program. Issues were explored by multifamily housing segments: market rate property owners, affordable housing owners and small property owners.

Key areas of exploration included:

- Decision-making criteria and processes
- Barriers to participation and suggestions for improvement
- Attitudes toward specific incented measures: Windows, outdoor lighting and insulation.
- Awareness and communications: effectiveness and needs

#### **B. Method**

**In-depth telephone interviews were conducted among Multifamily program constituents:**

- 1. Selection of respondents for research:** Energy Trust selected a representative list of 69 potential research respondents including property management personnel (portfolio managers, property managers and onsite managers), affordable housing organizations and small property owners. Other factors in selection included unit size of property and geography.
- 2. Respondent pre-letters:** Each of the 69 respondents selected for the research received a personalized letter from Energy Trust, signed by Scott Swearingen. The letter explained that Energy Trust was conducting a research study and asked for the respondent's cooperation in participating in the research. The letters were mailed in three batches on January 10th, 17th and 25th.
- 3. Completion of interviews:** The research resulted in the completion of 27 interviews, exceeding the goal of completing 25 interviews.
  - The interviews were conducted from January 16-February 21, 2013.
  - Interviews ranged in length from 15 to 50 minutes with most averaging about 35 minutes.
  - All interviews were conducted by Brenda Forrest, Forrest Marketing.

**C. Research Materials:** The Appendix of this report includes all the materials used in the research project including the discussion guide, pre-letter and information about non-completed interviews.

**Research Caveat:** This research study was qualitative and while it provides very valuable insights regarding the opportunities and challenges for Energy Trust to effectively serve Multifamily customers, the results are not projectable to the entire universe of Multifamily customers that Energy Trust serves in Oregon.

## II. Executive Summary

The following highlights results from each of the key topics explored in the research. More detailed summaries for each topic are in the Detailed Findings section.

This summary begins with an industry overview statement. While this is not a research finding provided directly by respondents, it is clearly an important dynamic to consider in any efforts to effectively market to the multifamily industry.

1. **Industry overview:** This research demonstrated that the multifamily housing industry is highly segmented and complex. The scope and diversity of these market segments underscores the importance of finding and targeting the right people and recognizing their individual needs. Understanding this segmentation may be more important to marketing and program development than tactic driven efforts such as targeting properties by unit size. The following provides a simple overview with the intention of showing some of the complexities and segments.
  - a. **Owners:** The end-users, or owners, are comprised of several segments: market rate larger property owners, market rate smaller property owners, affordable housing owners, retirement/assisted living community owners and homeowner associations (condo owners). Each segment has its own unique needs.
    - The owner segments can be further categorized by whether or not they contract with a property management company to manage their properties.
  - b. **Property management companies:** Property management companies are an important target for Energy Trust because many owners rely on these companies in deciding whether to pursue capital investments. However, property management companies are a highly segmented group. For example, property management companies vary by whether they serve only market rate owners or only affordable owners or both; by whether they are owned by the owner and only serve the owner's properties; by whether they only serve homeowner's associations (condos), and by the geographic area they serve. Again, each type of property management company has its own unique needs based on the ownership it serves.
  - c. **Influencers within segments:** In addition to being segmented by types of owners and property management companies, the multifamily industry is further segmented by influencers and decision-makers across several job descriptions including owners, portfolio managers, property managers, property directors, and onsite managers. In some cases, it would appear that Energy Trust needs to focus on all of these positions to achieve a successful result with an owner.

## 2. Decision-making: Market Rate Housing: Larger Property Owners

**Decision-making process:** Property management company personnel take the initiative in suggesting capital investment opportunities to owners and view this as an important part of their job. Proposals are prepared for owners that include ROI, payback and Energy Trust incentives. Many review all properties annually to assess capital upgrade needs in preparing their recommendations. Vendors or contractors often provide valuable assistance in the preparation of financial proposals for owners. The property owner is the ultimate decision-maker.

**Financial criteria:** Return on investment and payback are the most important decision-making criteria to these owners. Some mention that a payback of less than three years is acceptable; one said some owners won't do upgrades if payback is more than one year. Energy Trust incentives play an important role in whether the upgrades are done. The emphasis on ROI among larger property owners is in contrast to smaller property owners and affordable housing owners, where available capital is most important.

### Other key decision-making factors:

- **The number of units per property:** The total number of units in an owner's portfolio appears to be more important in making decisions about energy upgrades than the number of units in the owner's individual properties.
- **Impact on property value:** Most respondents said raising the value of the property is an important motivation to owners in deciding to implement energy upgrades. While it may not be a primary motivation, it is a compelling benefit.
- **Attracting and retaining tenants:** Attracting and retaining tenants is not a primary reason for owners to do energy efficient capital upgrades but it is a motivation for some. The current low vacancy rates have diminished the importance of the need to attract tenants and this is coupled with the fact that many say tenants do not ask about the energy efficiency of the units from either a cost-savings or environmental standpoint. However, some believe tenants are becoming increasingly savvy about energy efficiency both for their pocketbook and the environment, making it a selling factor that will continue to grow in importance. Others feel that doing energy upgrades attracts a higher quality tenant and ones that will stay longer due to satisfaction after living in the unit.
- **Factors that don't have a significant impact:** It appears that factors that don't have a significant impact on whether an owner decides to invest in energy upgrades include: length of ownership, owner residing out-of-state and the environmental value of energy efficiency.



### 3. Decision-making: Smaller property owners

Factors that differentiate decision-making among smaller property owners include:

**Cash flow:** Cash flow is much more important than ROI and payback in making capital upgrade decisions. As one respondent said, "Regardless of the savings and the incentives offered, if you just don't have the cash, you can't do it". Owning fewer properties leads to less cash flow meaning that owners have to save up for capital upgrades, which can take years.

**Less aware of energy savings opportunities:** Because many small property owners don't have property management companies, they need to seek out energy saving opportunities themselves. As result, they tend to be less aware of programs offered by Energy Trust. One respondent said he believes small property owners are more passive about seeking out information partly because they assume nothing is offered. Another factor that distracts small property owners from seeking opportunities is that they tend to do "all the work themselves" on their properties from renting the units to maintenance to the physical labor of installing capital upgrades. They've got their hands full.

**Preservation of long-term investment:** Smaller property owners tend to keep their properties for many years. One said, "We usually own them for 25 years". Because these properties may represent the owner's sole source of income and because the goal may be to pass the properties along to their children, owners are motivated to do capital upgrades to raise the property value.

### 4. Decision-making: Affordable Housing

Overall, respondents engaged in the affordable housing sector have many needs and are eager for help from Energy Trust. Key factors that characterize their decision-making process include:

**Access to capital:** Access to available capital is more important than return on investment or payback. Affordable housing properties have less cash flow, which produces less excess capital for reinvestment and may limit the number of upgrades they can implement.

**Portfolio approach:** Several mentioned a desire for a broader portfolio approach to evaluating their properties for potential energy investments to "get more bang for their buck" rather than taking on projects piecemeal. Assistance from Energy Trust in this regard would be greatly appreciated.

**Long-term investment:** Affordable housing organizations tend to own their properties for the long-term as opposed to market-rate owners who see multifamily properties as investments to be bought and sold. Energy efficiency upgrades are seen as part of long-term operational savings that contribute to the financial viability of the property.

**Mission-driven purpose:** For affordable housing properties, attracting and retaining tenants is not an issue. These properties have few problems with vacancy and often have waiting lists. But many are mission-driven and committed to providing housing options for low-income residents. Their purpose is to provide housing for individuals and families while reducing the cost of living burden as much as possible. These respondents place a high value on energy efficiency to promote tenant health and comfort, but it is less about building tenant satisfaction, and more about reducing household costs and providing affordability for residents.

**Importance of energy efficiency:** Several respondents indicated that being energy efficient and contributing to the health of the environment is core to their mission. For many, their funders require them to meet green building standards, but they also value the benefits to the residents in terms of lowering housing costs and improving the quality of housing.

## 5. Incentives

- a. **Impact on decision-making:** Energy Trust incentives clearly make a difference in whether capital upgrades are done with many saying the upgrades would not have been done without the incentives. However, some property owners tend to put capital upgrade projects off until they are absolutely necessary, and by that time, incentives of any amount are appreciated because they have to invest in the project anyway.
- b. **Problems and needs**
  - Some respondents mention that once the investment has been made, the uncertainty of whether the incentive will be received from Energy Trust is unsettling. Also, some say Energy Trust is slow to issue the incentive, which can result in budgeting and cash flow issues.
  - Some need clarification on incentives for specific upgrades such as windows and insulation including eligibility of products and incentive amounts.
- c. **Affordable housing respondents had more incentive-related concerns than market rate respondents. Comments included:**
  - The incentive amounts for affordable housing property owners should be greater than the amounts for market rate owners because of the longer-term nature of affordable housing investments. Energy Trust should advocate with the State for a reallocation of its funds to support this.
  - Energy Trust should bundle incentives to assist affordable housing organizations in taking a more "holistic" approach to capital expenditures.
  - Energy Trust should provide incentives to support an energy modeling approach that takes into account the integrated effects of multiple efficiency measures rather than one-off investments.

- The fact that Energy Trust incents prescriptive measures versus performance-based measures inhibits participation in the program.

## 6. Barriers

### a. Owners who refuse to do energy capital upgrades

Several respondents expressed deep frustration with the owner's unwillingness to do upgrades. In all cases, the owner doesn't want to spend money for needed upgrades but the underlying reasons varied. They included:

- Owner views their housing investments as cash cows and views their non-property investments as a higher priority for capital expenditures.
- Owner is not motivated because vacancies are very low and apartments are easy to rent.
- Ownership doesn't see benefit to themselves of reducing energy costs because tenants are paying for all property utilities.
- Owners are elderly.
- Owners are out of state. While not the sole reason for not doing upgrades, residing out-of-state appears to be a contributing factor in some instances.

### b. Relationship-building with Energy Trust

Although respondents were generally complimentary of the knowledge and professionalism of Energy Trust representatives, many cited challenges in trying to build and maintain a consistent relationship with the program. This is largely due to staff turnover issues that result when Energy Trust switches to a new contractor to manage its Multifamily program.

While many were aware of Energy Trust's contracted program model, and were understanding that this can result in turnover, they are interested in knowing how to tap into the program quickly and easily when this happens. As it stands now, many feel the initiative for building the new relationship falls upon the program participant and many express a desire for Energy Trust to reach out to them with updated program contact information. Some seem almost baffled by the fact that Energy Trust can't do something as simple as provide them with a new contact list when these changes occur.

In addition to the challenge of establishing an on-going relationship, some mentioned that when these staffing changes happen mid-project, the resulting workflow problems were enough to make property owners skeptical about the value of future participation in the Multifamily program.

Affordable housing respondents in particular seem to want to build an ongoing relationship with Energy Trust with an assigned contact that really understands their needs and can assist them with developing a portfolio approach to their capital investments.

Finally, there are indications that for some, vendors are their primary contact on Multifamily projects, not Energy Trust personnel, which distances them further from the program.

**c. Paperwork Problems**

Overall, paperwork criticisms were less prevalent among Multifamily respondents than among respondents in the Industrial or New Buildings research studies. Probably the most serious criticism came from an affordable housing respondent who said that because the costs associated with doing the Energy Trust paperwork almost equals the incentive amount, it inhibits their organization from working with Energy Trust to do upgrades. Related to this issue is the fact that although some expressed appreciation for the help vendors provide in doing the paperwork, a few pointed out that this comes with a price—they're paying vendors to do this.

Others mentioned that the paperwork is too time-consuming and that the technical complexity of the paperwork needs to be simplified for non-energy experts. One suggested that Energy Trust develop an "open services agreement" so that returning customers don't have to go through the whole paperwork/contract set-up process each time they do an upgrade.

**7. Specific Capital Upgrades Incented by Energy Trust**

**a. Windows**

Windows are a high interest item among the incented measures and are done more frequently than either outdoor lighting or insulation. In making the decision to upgrade windows, most respondents said that incentives are important to property owners in mitigating the costs. Several indicated they were motivated to improve the efficiency of windows to help reduce energy costs, which benefits both owners and tenants. Others expressed a need but no immediate plans for window replacement projects, indicating continued market potential for the program.

**Reasons for doing windows upgrade:** Among respondents who upgraded their windows, they did so because the property's former windows were old and in poor repair, difficult to maintain, and a source of heat loss. Because window replacement is expensive and can be disruptive to tenants, several property owners combined window projects with multiple capital improvements to minimize the impact on tenants.

**Benefits:** Respondents agreed that windows are a visible improvement and very aesthetically pleasing, which adds value to the property and is an attractive improvement for tenants. In addition to reducing bills and increasing comfort, windows also reduce noise. Several suggested that the improvement is seen as a way to attract and retain tenants, and perhaps get higher rents. Respondents generally receive positive feedback from tenants after windows are replaced.

**Barriers to doing window upgrades:**

- A limited number of respondents said their owners won't approve window upgrades due to concerns over upfront costs and lack of payback, in spite of incentives to reduce costs and potential energy savings.
- Overall, few problems with window upgrades were cited although a handful of respondents mentioned that miscommunication over the eligibility of products, installation issues, and complexity of paperwork posed challenges during the process.

**b. Outdoor Lighting**

Overall, there tends to be a high level of satisfaction with the result of outdoor lighting projects. It appears the process goes well with Energy Trust, the incentives are viewed positively and the results are pleasing to both owners and residents.

Some respondents weren't aware that Energy Trust offers outdoor lighting incentives, and quite a few were very interested in pursuing more information. Others appeared to need a little nudge and some advice in order to go forward; all of which seems to indicate some untapped potential for the measure.

Safety and security is a major reason for doing outdoor lighting projects, which may be especially true with affordable housing properties. There are also indications that outdoor lighting can be a big expense for some and so the energy cost savings and avoided repair costs are a motivating factor.

**c. Insulation**

Compared to other incented measures such as windows and outdoor lighting, insulation is clearly not as top of mind or seen as a priority. Overall, it appears that insulation is not a "popular" upgrade. It's not as visible or as aesthetically pleasing; it's also harder to install and more invasive; it's costly and the payback period is too lengthy.

A few respondents mention that insulation is only done because it's a requirement when windows are done. A couple of affordable housing organizations commented on problems with how Energy Trust qualifies properties for insulation incentives.

## 8. ISM Program

Overall, the ISM program is well received by property management personnel because it involves little decision-making, it's free and it's easy to implement. Although a few commented that they participate in the ISM program for the savings benefits, most indicated they participate because it is easy and they don't need owner approval to install the measures.

- a. **Ease of decision-making:** For most, deciding whether to do the direct-installs is a simple decision. It's not something they give much thought to or have criteria for—in part because it is free and because there is little need for owner approval.
- b. **Satisfaction with process and implementation:** There was a high level of satisfaction with the process of doing the ISM installations. Respondents said it was quick, efficient, smooth and professional. Respondents were especially pleased that very little time or effort was required by onsite property staff.
- c. **Tenant participation and feedback:** Respondents report a fairly high rate of participation among tenants.
  - Importantly, the notification letter provided by Energy Trust seems to help encourage participation.
  - There also appears to be a fairly high level of satisfaction with the new ISM items installed with most tenants leaving them in place.
  - Many respondents don't really know if their tenants have seen a decrease in their utility bills as a result of the ISMs, which is largely because they don't seek out feedback from tenants on this issue.
  - Overall, attracting and retaining tenants does not appear to be a primary motivation for respondents to participate in the program.
- d. **Problems and barriers:** Few real problems were identified with most respondents indicating high levels of satisfaction both from themselves and tenants. A few respondents that implemented ISMs had problems with the quality of the light bulbs or effectiveness of the aerators. A handful more were not aware that Energy Trust offered the service but were pleased to learn it was available.
- e. **Springboard to do incented measures:** Despite the success of the ISM program with property managers, it does not have a high level of visibility among property owners and appears to have little value as a means to convert owners to do capital upgrades. When respondents were asked whether ISMs could help transition owners to do incented measures, most said no. As one portfolio manager said, "ISMs and capital upgrades are night and day. They're two totally separate things." Several indicated that the chief decision-maker for capital improvements is the property owner, and they are rarely engaged with or see the impact of the ISM program.

## **9. Awareness and Communications**

For many, lack of awareness does not appear to be a problem. However, there appears to be a correlation between the number of properties owned or managed and awareness level; specifically, those owning or managing fewer properties tend to be less aware than those who own or oversee larger portfolios. These also tend to be owners that don't utilize the services of a property management company.

Many respondents rely on other sources to get information about Energy Trust programs, including vendors/contractors and multifamily housing associations, e.g., Metro Multifamily Housing. For many, this seems to be an acceptable means of getting needed information and they encouraged Energy Trust to continue to target these information sources.

A few respondents said they wouldn't mind getting more information directly from Energy Trust. But quite a few simply said they don't need any more communications with one respondent specifically saying Energy Trust shouldn't spend more money on outreach.

Respondents tend to seek out Energy Trust programs when there's a need or at annual budgeting times. A couple of respondents stressed the fact that because energy efficiency products and programs are always changing, it would be helpful for Energy Trust to keep them updated with the latest information.

### III. Detailed Findings

This section provides detailed findings from the research. It is divided into eight topic areas as listed below. Each topic area begins with a summary of the topic results and is followed with respondent quotes. The eight topic areas are:

1. **Decision-making: Market rate housing**
  - Decision-making factors for investing in capital upgrades
  - Factors unique to smaller property owners
  - The role of energy efficiency in attracting and retaining tenants
2. **Decision-making: Affordable housing**
3. **Incentives**
  - Satisfaction with amounts and impact on decision-making
  - Problems and needs
4. **Barriers**
  - Owner refuses to do energy upgrades
  - Relationship-building with Energy Trust
  - Paperwork problems
  - Needs and suggestions
5. **Specific Capital Upgrades**
  - Windows
  - Outdoor lighting
  - Insulation
6. **ISM Program**
  - Decision-making factors
  - Conversion to capital upgrades
  - Barriers and problems
  - Satisfaction with process and implementation
  - Tenant participation and feedback
  - Suggestions
7. **Awareness & Communications**
8. **Other Findings**

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#### **The Value of Qualitative Interviewing: Verbatim comments**

This report includes many verbatim comments from respondents. The fundamental principle and value of in-depth interviewing is to allow each respondent the opportunity to express their thoughts and perceptions "in their own terms" and to report the results exactly as expressed by the respondent. Although the Executive Summary section of this report and the topic summaries offer a very useful overview of the research results, they should not be viewed as a substitute for reviewing the verbatim comments from individual respondents.



## **Decision-Making Process and Dynamics: Market Rate Housing**

**This section includes the following three summaries:**

1. Decision-making factors among market rate housing respondents for investing in capital upgrades
2. Factors unique to smaller property owners
3. The role of energy efficiency in attracting and retaining tenants

## Market Rate Housing: Decision-Making Process and Dynamics

### 1. This first section details the primary decision-making factors provided by respondents affiliated with market rate properties when making capital investment decisions.

- Due to their differing needs, smaller property owners are summarized separately in the section that immediately follows this one.

**Decision-making process:** Most property management respondents take the initiative in suggesting capital investment opportunities to owners and view this as an important part of their job. As one respondent said: "Most owners look to their property management companies to bring ideas to them".

- Respondents prepare proposals for owners that include ROI, payback and Energy Trust incentives.
- The owner is the ultimate decision-maker.
- Several respondents reported they annually review all properties to assess capital upgrade needs in preparing their recommendations.
- One respondent provided a fairly detailed timeline of her company's budgeting process and suggested it would be helpful if Energy Trust could present ideas in accordance with their schedule.
- Vendors or contractors often provide valuable assistance in the preparation of financial proposals for owners. One respondent even said that if the owner has a "relationship of trust" with a vendor, it can make the difference in whether the owner decides to do an upgrade.
- One portfolio manager said working with Energy Trust to do energy audits was very helpful in determining payback for owners.

**Financial criteria:** Return on investment and payback are the most important decision-making criteria to owners.

- Owners are looking for cost savings at a great payback rate. As one portfolio manager said, "These people are investors—they're looking for return".
- This is in contrast to small property owners and affordable housing owners, where available capital is most important.
- Some mention that a payback of less than three years is acceptable; one said some owners won't do upgrades if payback is more than one year.
- Energy Trust incentives play an important role in whether the upgrades are done. See Incentives section for detailed findings.

**The number of units per property:** The total number of units in an owner's portfolio appears to be more important in making decisions about energy upgrades than the number of units in the owner's individual properties. For example, an owner with multiple properties, each under 50 units, may have plenty of cash flow and be financially able to invest in upgrades. Whereas an owner with two properties, one over 50 units and one under 50 units, may face cash flow problems and have less capital to do upgrades.

**Impact on property value:** Most respondents said raising the value of the property is a very important motivation to owners in deciding to implement energy upgrades. While it may not be a primary motivation, it is a compelling benefit.

**Length of ownership:** This did not arise as a differentiating issue; most respondents said their owners are long-term property holders and are not interested in flipping their properties in a year or two. Property management personnel almost seem to pride themselves on only doing business with owners interested in hanging onto their properties. However, some defined long-term ownership as being over five years. This is quite different from the definition among affordable and small property owners where long-term can mean 25-60 years.

**Environmental value of energy efficiency:** Being energy efficient for environmental reasons does not appear to be a key motivating factor. There were two respondents that said it was a primary consideration for deciding to do energy upgrades but these were the exceptions.

**Out-of-state impact:** Based on responses, there is no indication that out-of-state ownership is a key differentiating factor in making decisions about energy upgrades. While in the Barriers section of this report, there are two owners residing out-of-state that refuse to do upgrades, one respondent who deals almost exclusively with out-of-state owners feels strongly that this is not an issue in making investments in energy upgrades.

## **Respondent Quotes**

### **Property Management Company**

Energy efficiency upgrades are one of the first things we look at when we take over a new project—whether it's through an existing client buying a new property or if we take over management of a new client's properties. And then secondly, when we do our annual budget, we also look at it at that point as well. We look at the energy efficiency upgrades for two reasons: one, it's the right thing to do environmentally; and two, it's a great opportunity for cost savings for the client at a great payback rate.

The return on investment is the most important criteria for us. The most common reason one of our clients would decide not to go ahead with an upgrade is because there's not enough of a return on investment. If the payback is less than three years, I would say 90% of our clients would say yes. For others, for whatever odd reason, they just decide they don't want to spend the money—maybe they've got tight cash flow or other things going on in the building—maybe they're doing other capital items so they defer for a year or so.

We take the initiative with the client to suggest energy efficiency upgrades. Most owners look to their property management companies to bring the ideas to them. But it's the owner that is the ultimate decision-maker. We absolutely believe that making energy efficiency improvements can raise the value of a property and it's something we promote to our owners.

### **Property Management Company**

Return on investment is what we really look at versus available capital. Unless it's a new building where we haven't been able to build up a cash base. Sometimes when you take over a new building, it can take a couple of years to get all the basics taken care of to where the cash starts to accumulate.

Generally speaking, it's us that initiates and recommends energy upgrades to owners. We'll speak to the owner and say here's an incentive opportunity, are you interested. However, I have had a couple cases where owners have sold properties and have had money that they want to put into their other buildings and have actively pursued opportunities.

The condition of the property is paramount in our decision whether to do efficiency upgrades. For example, if the windows don't need to be replaced, we wouldn't even be thinking that way. The other big factor is the incentives. We wouldn't do some of these projects if the incentives weren't there.

We have a list of all our properties and the proposed upgrades for each, which we review each year. The list includes all types of capital improvements—windows, roofs, painting and so on. So all of those are on a list that we watch for and each year when there's a particular incentive, we will try to plug the property into that.

We definitely feel the energy upgrades can raise the value of a property. And it can also help increase cash flow from rents and make the property more saleable.

Our company is not aggressive when it comes to promoting energy efficiency per se to owners. But I can say that whenever we have to replace items, energy efficiency is definitely up at the top of the list! For example, in the last several years, all of the hot water heaters we've replaced are the high efficiency models.

### **Property Management Company**

The first thing we consider is does it make sense financially and what's the payback period. To determine this, we worked with Energy Trust for a couple years to do energy audits at the sites. Energy Trust mostly focused on electricity so we were looking at windows, doors, insulation and lighting. Energy Trust would do the audits and give us an idea of what the upgrades would cost approximately and what the return would be—when would payback be. In some cases, if the payback was more than a year, the upgrade was not even considered by the owners.

So doing the energy audits made sense to us and that's kind of where we started. We're a management company so we don't own the buildings and we have to get our owners to buy in if we're going to do an energy upgrade. It has to make sense to them and in most cases the owners are asking, "What's in it for me". They don't want to do something unless they're going to see some more money in return.

Owners are absolutely motivated to do upgrades as a means to increase the value of their property. Owners recognize that. But again, you've got to look at the overall cost and then the return and then is the return going to exceed the cost—how significant is it going to be.

I don't think the environmental aspect of energy efficiency is much of a motivation to owners to do upgrades. But if we can demonstrate to them that the savings will impact their pocket book—your energy costs are going to go down significantly if you replace all the common area lighting for instance or add a sensor here or there. And if we tell them the cost will be minimal or the cost will be paid back in six months, we can usually encourage owners to go forward with that sometimes even without an incentive. But for the most part they aren't motivated to do things just to be green.

Our company tries to focus on green initiatives—reducing the global footprint and all that kind of stuff. So for that purpose we are motivated to encourage owners to do energy upgrades. And at our company, we try to look at ways of reducing energy in our own operations and the way we do things.

### **Property Management Company**

Our ownership is really into being green so that's played a big role in doing energy upgrades. It's the owner that has really been the initiator. In 2010, the owners began a Green Initiative across all their properties. They had us do energy audits in several different areas including lighting, insulation and more. We implemented as many energy upgrades as we could, based on the owner's preferences and the different programs Energy Trust was offering. For the owners, I think the motivation was wanting to be as green as possible and also saving money. And with what's been done to-date, there's definitely electricity and water savings they'll be able to enjoy over the long term. As part of the budgeting and approval process, we always present ROI info to the owners, which is very important to them.

Regarding our decision-making process, it would help if Energy Trust could understand our annual budgeting schedule. The budget season for most multifamily projects is at the end of summer for the next year. This schedule is true in general for all multifamily properties, not just our company. Here's how the schedule works: We like to begin the process in May or June and that's when we want to learn about what the options are. That's the time that it would be really helpful to get any Energy Trust recommendations so managers could budget planned projects and have enough detail to get them passed by owners for the next year. Then August is really the month where property managers like myself are really drilling down and putting our numbers in and collecting bids and entering in information—kind of our wish list of things that we'd like to do for our properties for the year. And then it goes to our owners and our regional managers and they deliberate over it for the next two to three months and it's finalized at the end of December or early January. It's a really long process that's why it starts so early.

In terms of providing ROI info to the owners, our lighting contractor was a really big help to us with our carport lighting project and a couple of our other lighting projects. They

were able to estimate how much it would cost and what our return on investment would be—how long it would take. So they did a lot of the estimating for us, which was really great. We did the carport lighting through Energy Trust but we've also done indoor lighting and I'm not sure that was with Energy Trust. It was basically the very first step of our Green Initiative through our owners so we just ordered it all. And I want to say that our lighting contractor did submit for reimbursement but I'm not sure how much if anything was reimbursed. Any reimbursement would have gone directly to our owners I think and not necessarily to the property site.

As a property management company, we are very committed to energy efficiency. With all of our new building opportunities there's a very big focus on getting LEED certified and building for the long term in an energy efficient way.

The energy audits I mentioned earlier were not done through Energy Trust. It was a challenge for me to do the energy audits because the owner's Green Initiative was rolled out late in the fiscal year and I hadn't budgeted for it. Also, I was on a tight timeline. So we did energy audits through our utility companies and we did interior audits through local schools. I called a couple schools that offered programs and I think it was Portland State University that we used. I can't remember for sure. There was another third party company that came out as well. I had to stay within my budget!

### **Property Management Company**

The owners of bigger properties look at ROI and payback when making these decisions. Yes, they do. Now, I don't see much of that information but the owners see it with their accountants. The larger properties generate more cash flow and most of these people have owned for over 20 years and so they've already done exterior painting or siding or roofing and so something like windows is the next thing for them to upgrade to. I have clients who really feel they need those capital upgrades and maybe it's because they own larger properties and multiple properties. And I think their accountants suggest it.

We manage properties of all sizes. Our largest properties are about 100 units and the rest range in size below that. Most of our property owners are in it for the long haul. I have very few people that flip their properties. We pitch energy efficiency upgrades to all of our owners. For me it's just something really important having lived in these units with sweaty windows and moldy seals.

In our area rent prices are extremely high because we have a very high occupancy rate. So we actually have an overflow of tenants versus units. Because of this, we encourage owners to do the upgrades because any cost savings we can offer back to our tenants, energy being one, is a benefit to them. Most of our units are older and the upgrades really help.

### **Property Management Company**

When it comes to doing capital upgrades, the most important thing to me is to convince our owners. And the most important thing to the owners is money—100%! We get very, very few owners that say they would do whatever, no matter the cost. The

majority of these people are investors and that's what they deal with—100% investment, cash versus return.

We only work with owners that plan to keep their properties for the long-term. When we started our company many years ago, we were hungry but we've gotten to the point where we're a great size. And now we're very picky about what owners we'll manage for. We're not interested in people that want to turn their properties over quickly, say in a year or two. So in our case, I'm not sure I can really say whether long-term owners are more likely to do energy upgrades than short-term owners because I don't work with short-term owners. And it varies among the long-term owners—again, money is the key thing.

One of the reasons we use in convincing owners to do energy upgrades is that they will get a better tenant. This is a very different issue than attracting new tenants or renting the units faster. We hardly ever bring that up—especially with the low vacancy rates. But we stress that they're going to get a longer-term tenant and a more respectful tenant. A great example is when you go into a unit and the carpet looks fairly junky and you hope you can get one more turnover and you cross your fingers. But on average, you're not going to get a tenant that is very respectful of your property. If they want to live in those conditions, there's a reason and it may not be just out of financial necessity. You're going to get a better tenant if they want brand new and they want nice because they're going to keep it in better condition. So overall, you have less damage, less out-of-pocket expenses, you're not going to have as many hair clogs going down the drain, you're going to have a tenant that flushes the toilet without using their fist and your wear and tear on interior parts is probably going to be better. We always explain to owners that because our properties have been well kept up, we have better tenants. Our damage is tiny.

If I were Energy Trust, I would sell the program to owners by going after a base price first. Give your top number price—we offer this—we'll pay you guys to help yourselves out and we'll give you money to help to put this program into effect. Then I would list the following benefits: the cost of your property will increase due to what you spend and probably Energy Trust's cost will offset what you would lose, so you break even. I would go into the tax benefits of it. On top of that I would close on everything else with the idea of your company is going to gain—you're going to gain better word of mouth, which is fantastic—you can't pay for that. You're going to gain a better tenant, more high quality. You're going to have a more satisfied tenant that is going to be more positive about your property. I would get into the benefits to the tenant—they're going to feel it in their wallet and they may go out and have an extra ice cream or buy an extra carton of milk a week. It's ok to bring up stupid little things like that because a property manager would never think of it. Or Energy Trust could say they're going to save \$8-10 dollars a week on this process. And they can say you won't have to do this particular upgrade supposedly for another 15-30 years.

### **Community Association Management Company**

My company has been in business since 1972. We manage homeowner associations. We call ourselves community managers as opposed to property managers. There is some responsibility for maintaining the property but we do way more than manage the property. We make sure their taxes are done and their reserves are steady. We do their accounts payables and receivables and more. I'm responsible for two condominium associations—one is 60 units and the other is 19 units.

The most important criteria to owners is to be cost conscious. The Board reviews a financial analysis before making a decision. ROI and payback are very important. This is far more important than factors like raising the property value or being green. Anything they can do to save money, such as cutting down on the electric bills, that results in reducing the monthly fees to owners is what's most important. They all have to pay HOA fees and the last thing the Board wants to do is incur large increases in HOA fees. So a lot of it is just cost and the Board trying to do their best so they can say, hey we're doing everything we can to make this building efficient so that it's saving everyone in their pocket books. So when the Board reviews a proposal they want to see what the potential is to get back—not only in energy savings but also in the form of Energy Trust incentives. So when we're looking at capital upgrades, we're looking to see if there's anything out there to help us out. Because no owner likes to pay their HOA fees but it's a necessity and if we can minimize costs, that's what we're looking for.

The Association is the ultimate decision maker for any capital upgrades. Each Association has a Board of Directors and what we do is provide them with all the information and try to answer all their questions so that when they go into a board meeting, they have all they need to know so they can make a good educated decision on which way they want to go with all the proposals we provide them.

Our vendors have been very helpful in providing this information. They break out what the overall cost is, what the possible incentives are from Energy Trust and what the savings are electric-wise. They break it all out into little categories on a sheet of paper so the Board can look at it and see what they're paying, see what they're going to get back, and see what they'll probably save in energy.

I will say that while financial considerations are huge, part of the decision-making process is the relationship the owners have built with vendors. If they have a vendor they really trust that is proposing the project, it can make the difference in deciding to go forward. We don't push vendors on our clients. If they have relationships, we maintain the relationships or if they have a problem, we go out and find a new relationship.

The owners of these condos tend to hang onto to them. With one of our condo associations, which is 19 units, there is very little turnover. At another of our condo associations, which is 60 units, there's a bit more turnover—maybe 3 units a year—not much. Many of the owners probably see this as their home for the rest of their life.



I'm sure there might be some interest on the owners' part to increase the value of the building. But I think it's secondary at best. When we did the rehab on one of our condo properties, the estimated value of the property increased \$2 million. So they had to adjust their insurance and from an appraiser's point of view, it increased the value of the building.

### **Property Owner's Rep**

Almost all of the owners we represent are long-term property holders. And for us, long-term is typically defined as anything over a 5-year hold. Some of my owners have had their properties for 15 years. And I absolutely know for a fact that increasing the value of their property is a motivation to do energy upgrades.

The fact that an owner lives out-of-state is just not an issue in whether they decide to do these energy upgrades. Almost all of my clients are out-of-state and it works fine. Most of our clients are headquartered in the San Francisco Bay area or the Phoenix area and they're eager to hear about opportunities to upgrade their properties in the Portland area. They just need to be aware that money is available to help. They say to us, "If there's money, let's talk about that". And then they usually end up doing the upgrades.

### **Property Management Company, Owned by Owner**

Our parent company is the owner of all the properties we manage. We don't do any fee management. Our owner formed the property management company just to take care of his company's properties and he's the chairman of the board.

In our case, the owner initiates the energy upgrades and makes the decisions. So I can't really speak to all his motivations and criteria for doing these things. But as the one who often implements the upgrades, I think the Energy Trust program has worked fairly well. And I can say that raising the value of our properties is a motivation. We feel anything we put into a building increases the value of it. And I think our owner is really trying to look out for his tenants so I'm sure that's part of it too—to help tenants save money.

Our owner has always been interested in energy efficiency for his properties. Back 20 years ago when they first started sponsoring upgrades for customers, he was into it. I don't know who it was that first sponsored it—PGE or Energy Trust—whoever it was, our owner was doing it. He did the weatherization program with the rebates and over the years he's done whatever's been offered whether it's incented stuff or freebies. So he's pretty much always been on point in doing that stuff and especially with some of our older buildings—things like insulation and windows and stuff. We have so many buildings—I can't name off everything we've done.

**The following two quotes are from respondents who said their influence on the decision-making process is somewhat limited:**

**Property Management Company, Onsite Manager**

As the onsite manager, I'm not involved in the decision-making process. But of course, my company will inform me because I need to know in order to facilitate the implementation of those things. But my company is the driver behind initiating energy upgrades and bringing ideas to the owner. This is especially true in the case of one of our properties. It's a group of silent owners—investors. So they're probably not thinking about these ideas. But it's the job of the property management company to think of better ways to manage the building. The portfolio manager for the properties I manage is my boss and now that we've talked, I'm going to email him and ask if he's considering doing any energy efficient capital upgrades through Energy Trust.

**Property Management Company, Owned by Owner**

You know truthfully, I wasn't involved in the decision-making on our big windows project. Our owner has a project management firm that they use for big upgrades like the windows project we did with Energy Trust. They are sort of like the owner's rep and they managed our big windows upgrade project and they dealt mostly with Energy Trust on our behalf. That's because it was a massive project—we did so many windows. So for us, it was pretty simple: we reviewed the application that had been taken care of by the project management firm and signed off on it and sent it in to Energy Trust. I had a couple of conversations with Energy Trust regarding the application but overall it was pretty painless and simple for us.

Whether the owner uses his representative to manage projects depends on the scale of the project. So say if we were just replacing our exterior lights on the clubhouse building, we probably wouldn't involve the owner's rep. But if we were doing all the exterior lighting on the whole property, then at that point we would call in the owner's project management firm.

**2. Smaller property owners: Decision-making factors**

This section includes the findings from five respondents: Four are small property owners that don't have property management companies and one is a property management company that works with small property owners. These findings point out the decision-making needs and differences faced by small property owners versus larger property owners.

**Cash flow:** Cash flow is much more important than ROI and payback in making capital upgrade decisions. As one respondent said, "Regardless of the savings and the incentives offered, if you just don't have the cash, you can't do it". Owning fewer properties leads to less cash flow meaning that owners have to save up for capital upgrades, which can take years. One respondent believes small property owners tend to be more financially conservative in general than larger property owners.

**Owners who also serve as property manager:** Respondents without property management companies are less likely to be aware of energy saving opportunities including programs offered by Energy Trust. They have to seek out the information themselves. One respondent said he believes small property owners are more passive about seeking out information partly because they assume nothing is offered. Another factor is that they tend to do "all the work themselves" on their properties from renting the units to maintenance to the physical labor of installing capital upgrades. They've got their hands full.

**Influence on tenant recruitment and retention:** Attracting tenants is not a motivation for doing upgrades. These owners don't have vacancy problems. In fact, the low vacancy rates may deter some owners from doing upgrades. As one said: "If our units are going to rent anyway, we don't need to do the upgrades". Another owner did say that although he doesn't have problems filling his units, he has chosen not to raise the rents due to the recession. His goal is to raise rents "once the recession cleans itself up" and he believes the upgrades he's doing will allow him to do this.

**Preservation of long-term investment:** Owners tend to keep their properties for many years. One said, "We usually own them for 25 years". Because these properties may represent the owner's sole source of income and because the goal may be to pass the properties along to their children, owners are motivated to do capital upgrades to raise the property value.

## **Respondent Quotes**

### **Small Property Owner**

I think most small property owners tend to be a little more conservative financially. And they're more passive about the way they manage their properties. They don't search out opportunities like those offered by Energy Trust. They get an idea of something they need to do at their property and just assume nobody is going to help them and they just go about doing it. The bigger property owners are of course more professional about it and they know about Energy Trust whereas the smaller property owners don't seem to know about Energy Trust. My guess is that smaller property owners don't study up on things that they consider unlikely—unlikely because you don't expect help to be there so there's not really a whole lot of point in searching for it. And we don't have property management companies working for us that are up on all that stuff. We're doing it all ourselves from managing the property to doing the actual physical work on the upgrades.

Because small property owners have fewer properties generating cash flow, they have to consider these expenses for a much longer period of time before they're really ready to just dig in and do it. But if they were aware of the services Energy Trust offers, then I think that delay in their decision-making would be cut in half.

The reason I did my upgrades on the windows and insulation was because they desperately need to be done. Things such as getting more tenants weren't a factor because I haven't had vacancy problems in quite a while. We've had a waiting list of people that were interested and we've worked from that. But this is partly due to the recession. The type of tenants we're getting—well, some of them are people that have owned houses before and lost them during the recession and so what happens is you have a lot of people going back to apartments so our market is good. You can stay full but you also have to price them within the range that these people can afford otherwise you'll have nothing. So it's kind of a brand new type of tenant that we haven't dealt with before. A lot of them go back to apartments after a bad loss of a house.

I have really stayed clear of raising rents on people. They move into a place because this is what they can afford and I try to respect that. But at some point I would very much like to be able to get the money for the effort I'm paying into it and the potential that it's got. So someday I'm going to have to raise the rents. But it hasn't happened yet. When the recession finally cleans itself up, we might be in better shape to raise the rents and possibly we'll have to go to a different level of tenant to get those higher rents but I'm spending an awful lot on the buildings right now so I'm hoping that that opportunity is going to be there. But I suspect if I had to advertise and people were actually shopping around, that I'd be in much better shape to get the better tenant now than I was before because I've done these upgrades. I guess raising the value of my property is important to me but it also implies higher taxes, that's for sure! This is Oregon!

### **Small Property Owner**

In deciding to do energy upgrades I think cash flow is more important for smaller property owners. Regardless of the savings and the incentives offered, if you just don't have the cash, you can't do it. But when we've been able to do the capital upgrades, we do it to save the energy long-term and some money in the meantime.

The fact that we own these buildings and they're our livelihood does make us more likely to make energy improvements. Our family owns the two properties. We're in it for the long haul and not looking to sell. We usually own them for 25 years. We don't just turn them and that has never been my idea. We usually get the buildings when they need some work so we can raise rents and make a little bit more. But that's what we live on. That's our income. So we're interested in raising the value of the properties. In the long term, at some point, if I ever retire and when I give the properties to my kids, they should be worth more than what we paid for it.

Having the cash flow to do the upgrades is especially hard when you're first getting started as a property owner. In fact, if I were starting as a new property owner with a small building, it would be helpful to get some kind of financing because you don't have the money to do the whole thing and you know you're going to get a rebate but in the early years sometimes it doesn't work because you just don't have the cash flow. I don't know if something like that has ever been arranged for small property owners. But it would be a good idea especially for new people in the business. At least have some

kind of financial arrangement. Maybe it's not possible for Energy Trust to be directly involved in something like that but maybe they could advise people or direct people to a credit union or a bank that's willing to do that.

The other difference with small property owners is that we handle everything ourselves—we don't have a property management company. We even do our maintenance ourselves around the buildings. And if it's a capital upgrade project, we even try to do that ourselves, if we can.

### **Small Property Owner**

My decision-making process is quite simple: Does the upgrade absolutely have to be done and do I have the money.

### **Small Property Owner**

As the property manager for an owner that owns one property, I can't really speak to all his financial criteria for making these decisions—things like ROI or payback—I'm not so involved in. But it was me that proposed the outdoor lighting project to the owner after learning about Energy Trust at the Maintenance Fair owner and he was very willing to participate. I think our owner did the outdoor lighting mostly because of the Energy Trust incentive. Our owner does look at the long-term value of making these energy upgrades. He feels it will increase his property value. I work directly for the owner. We don't have a property management company. This is the best job I've ever had. Working directly for the owner is amazing. He's an amazing person to work for.

### **Property Management Company**

I do feel there's a difference in whether owners do upgrades based on the size of their properties. For the owners of smaller properties, it's harder because it's a much smaller cash flow and some of them literally have to save up for years to do a capital upgrade. I mean if their mortgage, taxes and insurance are barely covering what their income is, then they don't have a lot of cash. Plus some of these properties are older so maintenance may be as high as 25% of their income. They have to save for a long time.

But it's not always cash flow with the smaller owners. For example, I have an owner that I've managed for 15 years and he just has a little 4-plex and he could get a little bit of a rebate back from Energy Trust if he did some upgrades and he still doesn't want to do it whether he has the cash or not. It's just not that important to him. I guess it's because his units are always rented—they're in a great location, he gets pretty close to top of the market rents so he feels like well if our units are going to rent anyway, we don't need to do any upgrades.

### 3. The role of energy efficiency in attracting and retaining tenants

Attracting and retaining tenants is not a primary reason for owners to do energy efficient capital upgrades but it is an important motivation for some.

- Many respondents said prospective and existing tenants do not ask about the energy efficiency of the units from either a cost-savings or environmental standpoint.
- Despite this fact, some respondents still feel an important reason to do energy upgrades is because it attracts a higher quality tenant and tenants that will stay longer due to satisfaction after living in the unit.
- Also some believe tenants are becoming increasingly savvy about energy efficiency both for their pocketbook and the environment, making it a selling factor that will continue to grow in importance.
- For some, the current low vacancy rates have diminished the importance of any factors related to attracting tenants because their apartments are so easy to rent.
- Although several respondents said the importance of energy efficiency to tenants depends on the demographic, their opinions varied: some feel it's the older, more experienced renters that are the most interested but at least one respondent feels the younger tenants are more interested and that this has increased in the last 10 years.

#### Respondent Quotes

##### **Property Management Company**

I guess overall I'd to say that attracting and retaining tenants does not play a big role in deciding whether to do energy upgrades. Some residents who are paying their own utility bill are interested in how energy efficient a unit is but only because there's a cost savings associated with that—it's not from a being green standpoint. We do have a couple properties that are very green focused and the residents there are very green minded themselves. So that's definitely a motivating factor for them to move in. But across our portfolio, of all the properties that we manage, I think very few fall into that category. And again, I can't say it plays a big role in our decision-making.

##### **Small Property Owner**

We don't do energy upgrades to appeal to tenants. We pay all the energy costs at our properties so any savings doesn't affect tenants directly—the electricity and gas and all is part of their rent. We don't individually meter units. We find tenants aren't interested in how energy efficient the units are. Most of the people we get are younger. It's their first job and they're working for places like Intel and Nike and stuff like that. They're really more worried about their job than energy efficiency. And they seem to like us and

I don't know why that is but we always seem to have a line of people waiting to get into our apartments.

### **Property Management Company**

Oh, we absolutely believe doing these energy upgrades helps attract and retain tenants. Portlanders are very educated on energy efficiency. They're above the national norm. And we've got some pretty savvy residents who really appreciate energy efficiency because environmentally it's a good thing and it also saves them money.

### **Property Management Company**

I think renters are interested in energy efficiency. And I think they're interested in energy savings not just for their pocket book but also because of the general idea of it. I think this is especially true among the age group that our portfolio rents to you, which is somewhere between late teens to late twenties. We have mostly students and young parents. And energy costs are important to them—that's not something I saw 10 years ago.

### **Property Management Company**

Okay, I would have to admit that very, very few tenants ever ask about the energy efficiency of a unit when they look at it. I can't think of a single one in the last six months. But I would say it's on their minds. When you look at a place, it's a very overwhelming experience and I think it's something you appreciate more after you've moved in. But I do think it is a calculation that smarter residents do. I would say people that work for a living. I'm not sure students think about that right away. I believe a tenant will stay double the time in an apartment that is energy efficient even if there are other things about the unit they don't like. So we still believe it's a huge selling factor and we see the benefit of tenant longevity out of the idea.

Naturally we get more negative than positive feedback from tenants. I mean we try really hard but you can't please everybody when you have 3,000-4,000 tenants. But when we did the windows project, when tenants dropped off their rent, they would be beaming. You could see it in their faces and they would say thank you. It was thrilling.

### **Property Owner's Rep**

I know one of the reasons the owners do the upgrades is because it's a great selling point for getting and keeping tenants. We've actually had discussions about it in meetings with the owner's marketing people. With the new windows it was not only the fact that they made the units quieter and more comfortable but that there was a direct savings to the tenants in their electric bills.

### **Property Management Company, Owned by Owner**

The extent to which tenants ask about how energy efficient a unit is depends on the demographic. I would say at one of our properties, yes some do ask—we have an older demographic there. At another of our properties, I would say no—I have a ton of studio apartments there and it's a lot of first-time renters who don't know about energy efficiency or don't care about it or don't even know to ask about it. Our tenants pay their

own electric bill and some of the bills are outrageous because we've got incredibly tall vaulted ceilings in some of our units—25 feet tall. These people are sometimes getting \$250-\$300 electric bills before they realize it.

### **Property Management Company**

I would say prospective residents for this property don't ask as much about energy efficiency as residents at other sites I've worked at. I think it's partly because this property isn't as new and people are assuming there aren't as many efficiency measures in place. The other properties I worked at were much newer and I got a lot more questions from people about energy efficiency. So at this property, it's something that we have to bring it up to residents.

I think attracting and retaining tenants is somewhat of a motivation for doing energy upgrades. It's not something we advertise as much as we should though. But I think our residents do appreciate it and I think there's a tendency overall in this region for getting more and more environmentally friendly. We have some residents that are really focused on it and some that don't seem to care at all.

### **Small Property Owner**

With the energy savings in apartments where tenants pay their own utilities, as the owner you don't get that direct long-term savings for yourself. But it improves the quality of the tenants that you're going to get and if it improves life for them, you're going to improve your business in general.

### **Small Property Owner**

We don't really run into prospective tenants asking about how energy efficient the units are or what their electric bill will be. But we don't have many vacancies and I think that's part of it. But I do think the doing the energy efficiency things helps with tenant satisfaction. For example, a lot of our residents had positive things to say about the outdoor lighting. And several residents wrote complimentary letters to the people that did the direct-installs because they were so impressed.

### **Property Management Company**

Not being an onsite manager, I can't speak directly to whether tenants looking to rent one of our apartments ask about the energy efficiency of the unit. But I do know in the buildings where we have replaced windows those questions do come up. Whether it's a deal breaker or not, I couldn't say that for sure.

At this point in time, vacancy rates are low. However, this market is cyclical so you have to prepare for whatever may be coming down the road. The way the building boom is going right now, in a few years time we may be concerned about too many apartments. So even with the low vacancy rates, I would say attracting and retaining tenants is definitely part of the reason we do energy upgrades.



**Property Management Company**

In the 19 years I've been working in property management, I have never had a prospective tenant ask anything about how energy efficient the apartment was—or the property. I know that's not a good average! Actually, you would think they would ask about it because they always ask, "Do we pay our own utilities?" And we tell them yes. We pay water, sewer and garbage here for the residents but they have to pay their electric. But I've never had anybody ask me, "Well how energy efficient are the apartments?" It's kind of interesting—you would think that you would have more people ask that than not.

**Property Management Company, Onsite Manager**

No one that comes to look at renting an apartment here asks anything related to how energy efficient the units are. No one ever asks that! I guess it's something I could use more as a selling point. I hadn't really thought of it but actually I should probably incorporate that more. On the other hand, it's pretty easy to keep the place full. So I'm not reaching for selling points but if I were that would be a good selling point.

**Property Management Company, Onsite Manager**

Tenants don't seem to care or ask about the energy efficient aspect. Not at either of my properties.

**Property Management Company, Onsite Manager**

In the three years I've been here, I haven't had a single prospective tenant or existing tenant ask anything at all about how energy efficient the units are. So I can't say it's very important to us in renting the units.

## **Affordable Housing: Decision-Making Process and Dynamics**

Multifamily survey respondents include non-profit organizations that own and manage their own affordable housing properties as well as property managers that oversee both affordable and market rate housing properties. When it comes to making choices about investing in energy efficiency upgrades, decision-makers for affordable housing properties and market rate properties share many priorities in common but differ in others.

Overall, respondents engaged in the affordable housing sector have many needs and are eager for help. They own or manage a number of properties, many of which are long-term investments. A few mentioned a desire for a broader portfolio approach to evaluating their properties for potential energy savings to “get more bang for their buck” rather than taking on projects piecemeal. Some of the factors that influence them include:

**Access to capital:** For many of these respondents, access to available capital is more important than return on investment or payback. Affordable housing properties have less cash flow, which produces less excess capital for reinvestment and may limit the number of upgrades they can implement. For some, payback is difficult to measure because energy savings are passed on to residents rather than owners.

**Long-term investment:** Several respondents indicated that affordable housing organizations tend to own their properties for the long-term as opposed to market-rate owners who see multifamily properties as investments to be bought and sold. Energy efficiency upgrades are seen as part of long-term operational savings that contribute to the financial viability of the property.

**Mission-driven purpose:** For affordable housing properties, attracting and retaining tenants is not an issue. These properties have few problems with vacancy and often have waiting lists. But many are mission-driven and committed to providing housing options for low-income residents. Their purpose is to provide housing for individuals and families while reducing the cost of living burden as much as possible. These respondents place a high value on energy efficiency to promote tenant health and comfort, but it is less about building tenant satisfaction, and more about reducing household costs and providing affordability for residents.

**Importance of energy efficiency:** Several respondents indicated that being energy efficient and contributing to the health of the environment is core to their mission. For many, their funders require them to meet green building standards, but they also value the benefits to the residents in terms of lowering housing costs and improving the quality of housing.

## **Respondent Quotes**

### **Affordable Housing Organization**

There are three factors that motivate our decision to make an efficiency investment:

1. Long-term operational savings: this is the primary factor for us
2. Resident health
3. Resident comfort

Long-term operational savings are first and foremost. I'll give you some context for why this is: Generally our expenses increase at least 3% per year and sometimes utilities are more than that. Household incomes are only increasing at 2% per year. And so we're in the business of providing affordable housing. But if revenues for grants, which are tied to household income, are only increasing at 2% per year while expenses are more than 3%, you can imagine the future where rents aren't keeping up with expenses and pretty soon we can't preserve the affordability of housing. So ultimately it's about the preservation of affordable housing, which we provide.

And within the long-term operational savings, there's the efficiency savings and then there's just the replacement of items in the building with more durable items. So when we replace windows with a new energy efficiency window, it's increasing the life span of that window with a very durable component so both those impact operation costs.

There are differences in how we make decisions about efficiency investments in our own properties versus those we manage for others. With the properties we own, the savings come directly back to our organization, impacting our ability to make more investments in our portfolio of buildings. With the properties we manage, usually the savings is going back to the owner of the building so there's not a clear incentive for us to prioritize investments in managed properties over investments in owned properties. And secondly, often with the properties we manage, the decision whether to do capital improvements is not ours—often the owner has more of a say in that. Another factor is that in the majority of the properties we manage, the tenants are paying the utility bill. Whereas in the majority of our properties, because we don't want to pass on a high utility bill to a tenant, which maybe be a barrier to housing, we're paying the utility bill.

Resident health and comfort are important factors to us. But I would say that resident satisfaction isn't as much of driving factor in affordable housing as it is in market rate housing. The clear correlation for an owner of an investment property (market rate housing) is when a resident is satisfied, they know that tenant is going to be there for the long-term and it reduces vacancy and hence improves their bottom line. There's a challenge in how you quantify that for those of us in affordable housing. For us, it's less about the resident satisfaction than it is about the health issue of our residents.

Our vacancies are pretty low and vacancies are generally low in the market overall. In fact, we have a substantial waiting list. Our vacancies are really only defined as being the time when we're working to turn over the unit and clean it out and get somebody certified to move in next. It's not really a factor in deciding to do efficiency upgrades.

But if Energy Trust found owners to target with serious vacancy problems—gosh, I don't know if they would be good candidates for upgrades because they wouldn't necessarily have the cash flow to be investing in energy investments. But maybe they'd be good candidates for the ISM measures.

We're fortunate in that our organization is made up of people who are champions of energy efficiency—we're very passionate about this stuff. It's very important to us.

### **Affordable Housing Organization**

The first consideration for us is do we have the money! That's a huge consideration. It's affordable housing so there's not a lot of extra cash flow. So it's also a huge consideration whether we can get some other support or incentives for that type of thing. Our newer properties, those built since 2000, are pretty energy efficient. But with our older properties, built in the 60s and 70s, work needs to be done. And that's where not having enough money comes into play. For example, we have an older property with 133 units and right now we're planning to do a rehab on 25 of the units. And as we go through that, energy efficient things are a main concern and we're trying to get dollars to refinance and rehab the property. Pretty much what we're trying to do is refinance it to get some cash to make some repairs and green features are part of that.

Regarding ROI, that raises the issue of not being able to afford energy modeling. Energy modeling costs money. And we don't have the money to do that. And we would rather put the money into improvements. So modeling is something typically very hard for us to afford and I think that would be true for any multifamily group whether you're nonprofit or for profit. When you're saying ok I'm going to invest in some of these things, I'm going to pay out some extra money to make improvements, you know unless it's personally benefiting you, it's kind of hard to pay that extra cost for the modeling.

We're not doing efficiency upgrades to attract or keep tenants. That's not a consideration. We just don't have a problem with that. We have a waiting list. But we want to make it affordable for tenants to stay in our properties and if their energy bills can be reduced that would be a great thing because they're paying their utilities so if their energy is reduced they could have more money to spend on food and clothing and other essentials. That's the reason we do these things.

We haven't monitored the effect of efficiency upgrades on our tenants' utility bills and it's something I really think would be a great thing for us to do. It would be helpful in our decision-making to know how effective these things are. We would need help in making it easier to get energy bills from tenants since the bills are in the tenants' own names from Pacific Power and I don't know if Energy Trust could partner with us on that and get something in bulk from Pacific Power because right now we have to get approval from each tenant to see their utility bills. So I don't know if that's something Energy Trust could work with Pacific Power on.

Most of our tenants are immigrants—many are Latinos and African Somalis. But I was surprised when I talked to tenants that many are really into green.

### **Affordable Housing Organization**

Frankly, when it comes to efficiency upgrade decisions, usually what we do is chase problems. At this point we're not very pro-active about what we go after although we are trying really hard to change that. So what we're trying to do is set a level for efficiency for all of the buildings and then make sure they're all brought up to that level.

Available capital is the most important criteria in our decision-making. It's not so much payback. Mostly that's because it's so hard for us to measure the payback because a lot of times the savings are transferred not to us as owners but to our residents. So although we do pay attention to it, it is not the most important thing. We're willing to improve the efficiency of our property and have the short-term benefit go to the resident.

Our focus is on providing affordable housing to communities. But our motto is: "A healthy community begins at home". So we're focused on both: We want the housing to be affordable but we also want our residents to feel comfortable and we want them to have a healthy environment. So it has to make sense financially but we also have to address the resident aspects.

We believe doing these upgrades increases the value of our properties. But I'd say our focus is more on the savings. We've been implementing software systems to track our utilities usage and you can tell even these Energy Trust freebies have worked as far as decreasing water and electric usage annually.

Sustainability and environmental health and being green are part of our mission. It's very important to us. We not only try to integrate energy efficient measures in our existing buildings but when we purchase a building, it's something we really look at. We see that most of the energy efficiency gains can be made in our older buildings.

### **Affordable Housing Organization**

Regarding our decision-making criteria, we don't have anything formal or written down in that sense. Depending on the age of the building and the construction type, they have varying levels of energy efficiency. But when we've done upgrades, it's usually been when there's some other thing that has come about that triggers us doing it. We really haven't done anything systematic with our portfolio.

We usually decide to do energy efficient upgrades as a result of something happening. Either it's an acquisition rehab where we're looking at a complete scope of work for the project or it's a property that's already in our portfolio where we need to do a substantial upgrade. And when we're doing a substantial upgrade—going into walls and into people's units—it makes sense to us to look at other things at the same time.

I would say we tend to do more upgrades as part of a deeper retrofit or rehab rather than on a piecemeal basis. That's just because you're already working with a component or it already has to be changed out or you have more flexibility in your budget.

I would say available capital is probably a bigger consideration for us than ROI or payback. But our properties vary significantly from new construction to older 70's style buildings to single-family homes. So it could be really different and all the projects we've done over the years are structured differently based on when they were purchased and how much money was available at the time so it's really kind of on a case-by-case basis.

Sometimes the payback depends on the property. For example, with a lot of our properties, the residents are paying the electricity for the units, not us. So the direct benefit of the reduced payment goes to them and it doesn't affect our property operations bottom line. But what it does impact is our mission statement and that is that we want to house people that don't have other good housing options so we certainly want to reduce their living cost burden as much as possible.

It's a continuous process for us to be evaluating our properties and making decisions about what to upgrade. We do a lot certainly when we have the rehab projects but we could probably be doing more on the sort of day-to-day basis. In some cases, we've got to the point where the increments of change are not so big—windows and insulation are examples—so it's not worth it to upgrade. For example, if you've got good functioning double pane windows, the cost to go to a triple pane window—well, the payback period is really long. So at some point it might make sense to do it but if it's really far out there and we don't have the cash upfront we're going to do something else with that money.

When we've had bigger upgrades, it's me that's involved and it's just me doing it and working with Energy Trust. Our property management company also gets involved with Energy Trust but mostly for some of the smaller features like how can we do basic upgrades on our existing portfolio.

When we fund these projects, we sign documents with the City guaranteeing permanent affordability for 60 years so it's a long-term commitment. We don't turn these properties—we are long-term owners. So our spreadsheets and our budget projections for these properties go out a long, long way. That means even small savings down the road are helpful because if energy costs continue to go up, it could potentially put a project in the red. So it matters.

I mean a lot of for-profit multifamily properties, especially larger ones, are investment properties. And that's fully within their expected use—that they're going to be turned over and sold. They're not mom and pop landlords. But that's not the case for us. We hold on to things. And if it's a privately held property, the owner is going to be more interested in what their return is and if they plan to sell the property down the road, what the value of it is going to be. That's a piece of it. I mean everything has improved in

energy efficiency just because of the code changes and the technology is better and the costs have gone down. But I would say affordable housing has hit a higher mark with energy efficiency than for-profit housing.

We not only want residents to have lower utility bills but just flat out comfort. So indoor air quality and a healthy place to live—mold free and those kinds of things—are very important to us.

The turnover rate is absolutely a factor. The turnover rate whether it's affordable or conventional housing is important because you have expenses associated with that—you still have downtime and we still have a budget we have to adhere to so yes we definitely want to maintain low vacancy rates.

Being energy efficient is core to our mission! And it comes from just collective staff knowledge. It's consistent with green building practices, which are now common not only for profit-based housing but nonprofits as well. And a lot of our funders require us to hit various green building standards so we have regulations and requirements that go with the use of public funds. So a lot of times we're doing more in general than for-profit developers. And again we're doing it for the benefits to the residents—lowering housing costs, improving the quality and healthiness of housing, and the stability of housing.

### **Affordable Housing Property Management Company**

All 30 of the properties I'm responsible for are affordable housing. They're either HUD, USDA Rural Development Tax Credit or something—but all in my portfolio are subsidized. And I would say in a broad scope, our company has very minimal properties that are conventional but we do have a few.

In affordable housing, the biggest factor in making decisions about efficiency upgrades is available cash. It's a huge factor. A lot of these affordable properties don't have money. A lot of them started cash poor and have remained cash poor. So I think conventional properties have more money to do the needed repairs and efficiency upgrades. I can tell you, the owners of these affordable properties are not making money! I'll give you an example: A property we no longer have was a rural development property and the return to the owners was \$2,000 for the entire year and that was split five ways between all the partners! I think the owners got some money in the beginning when they purchased the property—tax credits or whatever. But until that property sells, you're not making any money, for the most part, on affordable properties. There are some exceptions but as a general rule you're not in it for the money these days.

Right now, I have eight properties in my portfolio that are scheduled for rehab between 2013 and 2015. We're looking at doing windows, siding, lighting, carpets, heat pumps, counter tops, Energy Star appliances—you name it! The properties are getting refinanced, restructured and actually getting some money. It's my responsibility to make recommendations to the owners on what upgrades to do. This is where I could use help from Energy Trust. I would like Energy Trust to send me something on

everything it currently offers for affordable properties, including both incented measures and ISMs. Then I can decide which measures to incorporate in the rehabs. When you start getting into rehabs you have a million inspections so we try to keep those to a minimum. If I could first review information from Energy Trust, then I could let Energy Trust know what would apply and what wouldn't and we could determine if Energy Trust had to do inspections or whatever. It would be helpful for me when I meet with owners to have all this information and to be able to say ok, these are the incentives.

Being energy efficient and concern about the environment is something we push with owners. Oh, absolutely!

### **Property Management Company**

I would say about 70% of our properties are market rate and 30% are affordable. A lot of the affordables have limited cash flow and that's the main difference in how decisions are made whether to do upgrades. Whereas with market rate properties, the ROI or payback is the main consideration. Overall, I would say the affordables do fewer upgrades.

### **Property Management Company**

I don't think the decision-making process varies very much between affordable and conventional housing because at the end of the day the owners are still looking at a return. On the conventional side, owners don't want to spend their own money. And on the affordable side, you've got to pay for it out of the property's operations and so there really needs to be a payback otherwise you can't afford to do it.

The owners of our affordable housing properties really vary. The owner can be like a community housing organization or a partnership structure where a nonprofit partners with a bank or it can just be a "guy" that owns an apartment building. It's just all over the place.

We did a fairly substantial lighting retrofit at one of our properties, which is affordable housing. We did lighting in all the common areas. It's a four-story building with 103 units. The interior hallways have lights that are on 24/7. So we have a lot of lights, a lot of electricity there and the property pays for all of the utilities at the property. That means the ownership pays for all the utilities. There are no submeters there so residents don't pay for their own power bill. So we were very motivated to decrease energies there for cost. We haven't completed it 100% but we did enough to submit an application for energy tax credits. We replaced a lot of the common areas and hallway fixtures with more efficient models and that seems to have had the most significant payback for the least costs. We've also done sensors in community rooms and laundry rooms that are motion sensors that are only on when person is in there and not all the time.



## **Incentives**

In this discussion of incentives, respondent quotes are divided into two sections:

- Incentives: Satisfaction with amounts and impact on decision-making
- Incentives: Problems and needs

### **1. Incentives: Satisfaction with amounts and impact on decision-making**

Overall, most respondents seem satisfied with the incentive amounts although several suggested it would be nice if the amounts were increased. More than anything, they seem grateful for the additional financial assistance.

Clearly, the incentives play an important role in whether the upgrades are done. Many said the upgrades would not have been done without the incentives. Other property owners tend to put projects off until they are absolutely necessary, and by that time, incentives of any amount are appreciated because they have to invest in the project anyway.

### **Respondent Quotes**

#### **Community Association Management Company**

I think the Energy Trust incentives are very good. At one of our properties, we did a lot of doors and windows and they spent a lot of money but they got a decent amount back, which was great. At another property, I think they had an \$8,800 project and they got about \$2,200 back, which is a significant amount of money. At this property, the owners saw a real need to take care of the storage area lighting so I think if push came to shove, they would have just done it even without the Energy Trust incentives. That's because they were going to cost as much to repair per light fixture as it would cost to replace them. So the repair costs eventually were going to outweigh the cost of all the new light fixtures and it was probably just better to get something that was current and not dated because the fixtures were 15 years old and they were not efficient in any kind of a way and they were outdated, failing and lights were flickering so we had to do something. Rather than bringing them a proposal to just do those on a onesy-twosey basis, we brought them a proposal to just take care of them all.

#### **Small Property Owner**

The money is nice. It certainly helps and it affects our decision to do these upgrades when we can figure out what we're getting back. You know all of these upgrades are budgeted so we have to figure out if we can put in a new roof this year, can we put in windows—what's the budget. And by having some of that money come back as a rebate—that helps a lot. Obviously more money would be better.

#### **Affordable Housing Organization**

The incentives are very important in our decision whether to do upgrades. Of course we want more money—more funds out there to do the work would be great! But we're grateful for what we get from Energy Trust. We work with a lot of these older buildings,

1970s vintage, where for a relatively small amount of money you can really "bring it up" in terms of energy efficiency. And it's so much more affordable than building something new. It's kind of "green building" if you will—taking old buildings and leveraging the money from Energy Trust to fix them up and make them more energy efficient.

### **Property Management Company**

Oh, clearly the Energy Trust incentives make a difference. They're a big factor in our decision-making. We wouldn't do some of these projects if the incentives weren't there. Regarding the amount of the incentives, well being real honest, the Energy Trust incentives are the only incentives out there that I'm aware of so whenever there are the possibilities, we do look at them very seriously. And for those who might say the incentives aren't enough, my argument would be if the incentives aren't that great, which other incentives are you going to use! It's all we've got and we should be grateful—any amount helps. But my biggest suggestion to Energy Trust would be to try to sweeten the incentives as much as possible!

### **Property Management Company**

There's no question that owners wouldn't do most of the upgrades without the incentives. It would be great if everyone were altruistic and just wanted to make a better, more efficient property but they don't! There are a few that would do it. I have one ownership group right now that is doing energy upgrades quite a bit and they're doing it because that's their mission and they want to do it but very few would want to do it for that reason alone.

### **Affordable Housing Organization**

I think the incentives are adequate and even healthy on those projects where we have to do an upgrade—where we're going to do it anyway with or without an incentive. But are the incentives enough to motivate us to go out and say put in windows if we don't absolutely have to, no. I guess what I'm also saying is that the incentives are most helpful when we're doing a major rehab on a property but not so motivating to do individual upgrades.

### **Property Management Company**

The incentives have been helpful on the projects I've worked on. The incentives help make the payback period work for owners. And just the physiological appeal of getting something back helps.

### **Small Property Owner** (This quote is also in the Windows section.)

I thought about doing the windows for years and years. It was a daunting expense. I didn't know exactly how I was going to be able to afford it. And I might be still agonizing over the windows if I hadn't learned from my insulation contractor that Energy Trust offered incentives on windows. Once I realized I was going to be able to get some help on it, I redid all the windows in that building.

### **Property Management Company, Owned by Owner**

I think the owners were very pleased with the incentive on the outdoor lighting project. The interesting thing is that I don't think the owners were even aware upfront that Energy Trust offered an incentive. They were ready to do the lighting upgrade just for safety reasons—it really needed it. Then when we got involved with Energy Trust on one of my other properties, we figured out that we could get a rebate for the outdoor lights.

### **Property Owner's Rep** (This quote is also in the Windows section.)

The rebates were definitely a factor in the owner's decision to do the windows. This is the real world! When the owner hears \$2 a square foot coming back in their pockets for windows, they're all for it! I mean that's the reality. I think the owner thought the incentive amount was good. I handled all the Energy Trust paperwork but I don't have that in front of me and I can't remember how many thousands of square feet the windows were but the incentive seemed proportionately favorable. The owner might not have done the windows without the incentives. Or perhaps, if the incentive had not been there, the owner might have gone with a cheaper window.

### **Small Property Owner**

We did our outdoor lighting mostly because of the Energy Trust incentive.

### **Property Management Company, Owned by Owner**

The Energy Trust rebates are the biggest motivating factor for us to do any of our capital upgrades whether it's windows, exterior lighting or insulation.

## **2. Incentives: Problems and needs**

Some respondents mention that once the investment has been made, the uncertainty of whether the incentive will be received is unsettling. Also, some say Energy Trust is slow to issue the incentive, which can result in budgeting and cash flow issues.

One respondent expressed a need for help in bundling the incentives and taking a more holistic approach to capital expenditures. In particular, a couple of affordable housing organizations would appreciate a "portfolio approach" from Energy Trust; i.e., help in deciding on capital upgrades for all their properties versus a piecemeal, individual property approach. One affordable housing organization expressed interest in an energy modeling approach that takes into account the integrated effects of multiple efficiency measures rather than one-off investments. Another affordable housing organization is aware that the New Buildings program offers energy modeling incentives and would like to see the same in the Multifamily program.

Two respondents had problems with insulation incentives: one wants clarification on how to qualify and the other felt the incentives were too low.

One affordable housing organization had multiple concerns about the incentives. The respondent starts with comments about Energy Trust incenting prescriptive measures

versus performance-based measures and goes on to explain how this results in inhibiting their participation in the Multifamily program and becoming a lose-lose situation for their organization and Energy Trust. This respondent suggests that Energy Trust consider a change in allocation of funds to affordable housing properties because of the longer-term nature of affordable housing investments compared to market-rate housing.

## **Respondent Quotes**

### **a. Uncertainty and timeliness of incentive distribution**

#### **Property Management Company**

I guess there's always that factor of doing things up front and then getting reimbursed and it's always kind of a hassle—kind of like a rebate program, which just isn't as desirable. It's a bit unsettling because you are purchasing things that you're not necessarily sure you're going to get a credit for and you're not sure it's going to fit in with your budget and if you're going to be over financially for the year because of this project you're taking on. So the uncertainty I guess is the part that would be nice to remove.

#### **Community Association Management Company**

The only problem I have with Energy Trust is getting clarification on approval of incentives. I got a little worried on whether the owners were going to get the incentives. I felt it had been almost six months so I was going to bring up the paperwork and start making some calls to Energy Trust and then I got a call from my accounting department saying they received a check and what account did they want it applied to in regard to the property because they have their reserve accounts and their operating accounts. So I was happy to hear we got the check and we'll get it in our next status report to the owners. I wish Energy Trust could send us notification when the incentives are approved. Maybe that's difficult for Energy Trust because maybe they don't always know where to send the mail. But I think Energy Trust's forms give a place to provide a mailing address versus a site address.

#### **Affordable Housing Organization**

The reimbursement from Energy Trust has been a bit slow. With some projects this hasn't been a problem because we didn't need the money immediately but with other projects—those with tight timeframes or certain funding requirements—it would have been beneficial to get the incentive quicker.

### **b. Help in bundling incentives and determining what incentives are available**

#### **Affordable Housing Organization**

I wish we had somebody from Energy Trust who would be knowledgeable enough to help us bundle the incentive stuff together—is there a tax credit, is there Federal money for a program, etc. Someone to help us make the best incentive package overall so that the work that we put into our properties actually gets more of a return. I guess I just want someone that realizes our organization is on a mission and we have some capital

and we want to do this and we're a great community partner and if they could reach out to us and say hey we can help you do this project in the most affordable way with the incentives available.

I was reading an article this morning about deep energy retrofits and we don't even have that in our consciousness right now. In one of our older buildings, 1970's-80's era, we might have some really good candidates to try and cut energy consumption by 50% or greater and it won't even float to the top of the list because we need someone to say we can get the money from here and here's what Energy Trust will do and here's how we can go about it.

I know people are going to have a hard time believing I'm saying this but folks at the City of Portland tend to have a good view of what's available in terms of incentives. So one of the best bundles we put together at my previous company included incentives and tax credits and Energy Trust rebates that went together and just made our storm water management project incredibly affordable. The City reached out to us.

### **Affordable Housing Organization**

I know that Energy Trust has incentives in its New Buildings program for energy modeling or third party testing but I don't know if there's anything like that for the Existing Multifamily program—I've never been told there was. As an example, we just really improved the building envelope and the new doors and everything on one of our properties and we don't know if it's been effective! It's kind of nice when you have that opportunity and information to see if the upgrades aren't performing correctly so you can make those corrections.

### **c. Problems with insulation incentives**

**Affordable Housing Organization** (This quote is also in the Insulation section.)

We have a problem with how Energy Trust determines incentives on insulation. We've had to do whole building envelope repairs because water and mold and things that have come in and the insulation was not performing correctly partly because it wasn't installed properly and it was missing in a lot of places. But I guess because the properties were built in 2000 or later, the insulation was to code already so there was no incentive for that and yet we're really making an improvement to the energy efficiency by replacing the failing insulation. Energy Trust pays for failing windows and replacing a window but there's no incentive for the same situation with insulation. I guess my understanding is that if there's been a failed insulation, it goes on a case-by-case basis with Energy Trust. We would like more information on the actual policy for this and what's required—what kind of document would Energy Trust require that would give us incentives for insulation and how is that different from windows.

**Small Property Owner** (This quote is also in the Insulation section.)

I feel the Energy Trust incentive amounts on insulation are low. The reason I say that is because I own another property in Tillamook and we've dealt with the PUD there—they don't have an Energy Trust per se but they do their own and the amounts of return are

much, much higher down there and I don't know why that is. We did a full building insulation down there and they paid a good part of it.

**Affordable Housing Organization: This respondent had multiple concerns with the incentives.**

The priority measures for us are envelope measures but those are difficult to do with the incentive structure because Energy Trust only incentivizes prescriptive measures versus performance-based measures. We are frustrated with the program in that we can't create an energy model that demonstrates the integrated effects of multiple efficiency measures and get incentivized on that. The Multifamily program seems to be more geared to short-term apartment investors rather than long-term owners of affordable housing.

By prescriptive, I mean that Energy Trust has done an analysis of typical energy efficiency replacements that can happen in multifamily buildings. So for example with windows, Energy Trust says if we replace all the windows with high performance double pane windows like we see people in the market doing to weatherize their apartments, we'll give X cents on the dollar incentives. And that means whatever window meets the minimum threshold criteria, you'll get X incentives. So meanwhile we're thinking well those windows are too low performance for us. We need bigger energy savings and we're invested beyond the 10-year time horizon. We're invested for the next 30 years in these buildings. So we want to put in triple pane windows that have higher performance and less air leakage. Well we can't get any more incentives than has already been determined for this program. We can only get the incentive for the double paned windows that Energy Trust has pre-determined. Meaning that we can't use the program because we want to put ultra high performance windows in and the meager amount of the incentives we'd get for double pane doesn't help pay for the premium of a high performance window.

So what would be better for us and for Energy Trust is if we could provide an energy model that predicts what the savings are—like what exists in the New Buildings program and have Energy Trust give us an incentive based on the modeled energy savings. That would have two benefits: One, for an owner like us, it would get us more incentives and we could make those deeper energy savings investments; and two, for Energy Trust it would allow them to capture more savings because right now even if I put in a triple pane window, they're only capturing a double pane window's worth of savings by giving me that incentive.

This situation results in two things for us: One, we're going ahead and doing things and in some cases, we're not even bothering to work with Energy Trust because the savings is not worth our time to go through. And then secondly, because we're not capturing some savings, we're doing less in our portfolio than we could be.

Energy Trust does have the ability to advocate for—at a State level—a change in the way the public purpose charges are allocated. For example, they could say we know that investments in institutional apartments are important—these affordable housing

buildings are going to be around for the next 30-60 years and unlike people with 10 year time horizons, maybe the incentives should be a little greater in affordable housing. So they could change like other states have done, through the structure of the incentive amount for affordable housing. Recognizing that doing that is a greater public good than a similar investment in a standard apartment building. To be fair, apartment buildings unlike industrial or warehouse facilities don't have huge amounts of savings to be captured and I think it's why historically the investments have been low.

Because affordable housing generally means a longer-term investment versus market rate housing, Energy Trust should be thinking about how to capitalize on that longer-term investment with greater savings.

## **Barriers To Doing Energy Efficient Capital Upgrades**

This section includes the following four barrier-related topics:

1. Owner refuses to do energy upgrades
2. Relationship-building with Energy Trust
3. Paperwork problems
4. Needs and suggestions



## **Barriers To Doing Energy Efficient Capital Upgrades**

### **1. Owner refuses to do energy upgrades**

Three respondents reported that their owners simply refuse to do energy efficient capital upgrades. In all cases, the owner doesn't want to spend money but the underlying reasons varied. They included:

- Owners view their multifamily housing investments as cash cows and view their non-housing investments as a higher priority for capital expenditures.
- Vacancies are low and it's easy to rent the apartments so attracting and retaining tenants is not a motivation to do upgrades.
- Tenants are paying for all property utilities so ownership doesn't see benefit to themselves of reducing these costs.
- Owners are elderly.
- One respondent suspects that property management companies may not be pushing owners hard enough to do upgrades because they don't want to "ruffle feathers".
- Owners are out of state. This was somewhat of a factor with two respondents.

Each of these respondents expressed deep frustration with the owners' unwillingness to do upgrades. Some offered suggestions for how Energy Trust might encourage these owners to participate in energy efficiency upgrades.

### **Respondent Quotes**

#### **Property Management Company, Owned by Owner**

Our owner isn't on board with doing energy efficiency upgrades. Basically it just comes down to the bottom line. Our owner loves the idea of saving the money but not when there's a financial investment involved in making that happen. She's just says, "Well we'll stick with what we've got." I have talked to the owner repeatedly about doing upgrades especially the windows. Frankly, this whole situation is kind of awkward for me because I'm a representative for the owner but I don't really see eye-to-eye with her on this particular issue. And it's very frustrating for me because I personally see so many benefits. I'm also a person who cares deeply for the environment and I am conservation minded. But for her, the owner, it's all the bottom line, the dollar. And sadly, even with that being true, she doesn't even really care about all the savings that come with doing the energy efficiency upgrades partly because we bill back all of our utility charges to the tenants including hallway lighting, the hot water in the building—everything in the building. So for her, she doesn't see a financial benefit because she's

not paying the bills anyway! To be honest, I haven't gone so far as to present the owner with a return-on-investment proposal for items such as windows. She just tells me she can't afford it so I haven't gone further.

**Out-of-state factor:** To a certain degree, I think the fact that the owner lives in San Francisco does have something to do with her reluctance to do energy upgrades. I think in San Francisco they are so restricted: They deal with a lot of things like you have to go green in this way, you have to do this as a matter of being a landlord in the city. And I think she feels like this stuff gets rammed down her throat and by golly, if she's not required to do it, she's not going to do it.

**Change won't come until we have trouble renting the apartments:** To get the owner on board, it will have to come down to enough people actually saying to us I'm leaving because of the leaky windows or my energy bills were too high in the winter or because I can save this much money at this other place over here that has green energy. When we have enough of that documented, I might be able to convince the owner to have that conversation with me. But frankly, until that happens, she just doesn't have the incentive to proceed.

**Help from Energy Trust:** I like the idea of having Energy Trust put together some actual numbers that I could show the owner but on the other hand, I am hesitant to ask anyone to do that knowing that it could very well be a complete waste of their time. So when I see a realistic opening or possibility for reintroducing that topic of information, I will do that and I will contact Energy Trust if I feel we can reasonably move forward. Then maybe we can put some numbers together to show to the owner. I have spoken with folks from Energy Trust before and that's how I know that the owner is not on board because I have actually pursued this in the past and ran into a brick wall.

**Importance of "going green" to tenants:** I've tried selling the owner on the idea that green living is actually a marketable amenity in Portland. Portland is all about green. In fact she's had me attend seminars to find out ways we can increase our marketability and our resident retention and all those things that of course you want to do when you're managing apartments and wanting to get the top dollar you can get. And I'll come back from a lot of these classes and say you know what one of the number one things we can do in Portland is go green. And I have not gotten her on board yet. She doesn't care. She just doesn't see enough of a benefit to herself. She doesn't recognize that it's more than how much money you save when it comes to going green in Portland—going green in Portland is way of life and it's a very popular way of life and I think as that becomes more and more true and people actually resist renting our apartments because going green is so important to them, that's when I think we're going to start to get her attention.

#### **Property Management Company, Owned by Owner**

The owners of two big properties we manage are not interested in doing energy upgrades to the extent where it costs them anything. One of the properties is 108 units and the other is 489 units. The one with 489 units is old, built in 1973, and there are

tons of things that need to be done but certainly to a great expense. For example, we have just single pane windows there but it's not really any thing the owners have ever looked at to do. The owners haven't given us capital dollars at this property for years to do any improvements. I really don't understand why that is. Well, I guess I have my own personal theories about that and I think it's because this property is a cash cow. I think it makes a lot of money and I think they would just rather have that money to do other things. Our owners are a corporation and it started out smaller but it's gotten a lot bigger and now they have their hands in all kinds of other investment things. So they see the apartment properties as doing fine without upgrades so their attitude is "why do it". And it's easy to get tenants these days so that's not a motivation. At least now it's easy to get tenants—that could change.

I suppose Energy Trust could try to reach the owners directly but I think it's unlikely they could ever get through to the owners. It's not that the owners' multifamily business is so huge, it's just that now they're doing so many other things that are a higher priority to them.

The owners are interested in upgrades that can get them money back in rent payments. For example, if I want to go in a kitchen and put in a nice new fancy fixture or a beautiful faux wood vinyl floor and charge \$10 more for rent, I can easily get approval for that. But I can't get approval for windows or doors because the owners claim they don't see the payback so they won't do it. They say they do look at payback and ROI.

**Owners have done appliance upgrades:** I am aware of Energy Trust and I think Energy Trust is fantastic! We've received two fat checks from Energy Trust for the washers and dryers we did at one of the properties. On the washers and dryers, we worked through a local company. They connected us with Energy Trust and they did almost all the paperwork. It can be a lot to do the paperwork so it was nice to get their help. The owners had to approve the decision because it involved extending our contract through the local company. So again it was the local company that initiated the idea of an upgrade and we went to owner and they agreed to it. I was pushing for the owners to do this. I've been managing this property for four years and we just got the washers and dryers last year so I pushed for about two years to get it! This was something that had to be done.

### **Property Management Company, Onsite Manager**

I am very familiar with Energy Trust because we've done the direct-installs at both my properties. The problem is I can't get the owners of either of the properties I manage to participate in the energy upgrades. The reason is partly because the owners are old. The owner at one property is 93 years old and the owner at the other is close to 80 and he has plans for his kids to eventually take over the property. Both of these owners don't want to spend money and frankly, it's just hard to get through to them. And I don't want to bash my owners because they pay my wages but they aren't up to par on the modern way of how things should be done. The owners are so particular and so stubborn and so penny pinching. So welcome to the property management company's world! We deal with this on a daily basis.

If I were Energy Trust, I wouldn't try to sell the owners by saying it will increase their property value because they already hear that enough from the property management companies. I would think the more compelling message would be that it would save them money in the long run. Tell them they're getting 30% off if they participate. And so it's a win-win. It's just getting them to spend the money. They just don't like hearing that. They would rather run with their tail between their legs, some of them. Or they'll spend the money where they want to spend the money and not where Energy Trust or people like me think they should spend money. They do understand things like ROI and payback—that's their kind of talk.

Energy Trust needs to work through the property management company to get the owner to do the upgrades. Realistically, that's the only way it's going to happen. I don't think it's going to work for Energy Trust to go direct to the owner. It's going to be hard to reach the owner directly partly because management companies aren't willing to let information go—they want to be involved. But I think Energy Trust could provide the property management firm with information and I would suggest some kind of visual thing—brochures or something that the owner could actually look at and see the savings if they participated in programs with Energy Trust. It boils down to Energy Trust needs to sell the property management company to where the management companies end up selling Energy Trust to the owners. I think management companies sometimes don't want to ruffle feathers with the owners—to push them into doing energy upgrades—so I think that's where the challenge is going to be.

**Onsite managers don't have decision authority:** Onsite managers don't have decision authority. It's not the onsite managers like me that Energy Trust needs to get through to. Energy Trust has me sold! And just so you know, most onsite managers are sold on what Energy Trust does but our hands are tied with budgets and with owners and with management companies. It's all the "uppers" that make the decisions. We have no authority and we have to answer to our property management companies for everything we do. They're our bosses. But I want to say that my management company is phenomenal! They embrace everything! The problem for my management company is they have finicky owners that they have to adhere to.

**Vacancy rates:** I think this whole thing about vacancies being low is a little fictitious. Vacancies are up and down. They're not that low. It's right in the middle—we're just kind of stagnant in the middle. I haven't been full yet. I still have eight vacancies at this property and pretty much have had that many vacancies for the last six months.

Right now at one of my properties, I have serious issues with mold coming through so we're doing attic and window inspections. The owner might have to spend some money because the situation has become so bad. If he had been smart and taken care of this four years ago, we wouldn't be doing it like this and spending more money. But he wasn't smart so now we're in a little bit of a pickle. But because I had this conversation with you today, I'm going to call my management company and say hey make sure to

remind the owner about Energy Trust because when he goes to do this, he might be able to get more bang out of his buck.

## **2. Relationship-building with Energy Trust**

Respondents were generally complimentary of the knowledge and professionalism of Energy Trust representatives, but cited several challenges in trying to build and maintain a consistent relationship with the program.

Perceptions of staff turnover prevented property managers from building a regular connection with Energy Trust staff, and often resulted in delays in workflow. In a handful of cases, the delays happened mid-project and were enough to make property owners skeptical about the value of future participation.

While they were aware of the Energy Trust's contracted program model, and were understanding that this can result in turnover, respondents are interested in knowing how to tap into the program quickly and easily. Several respondents felt that once their contact leaves, they have difficulty finding the right new person to contact. The initiative for building the relationship appears to fall upon the participant; many express a desire for Energy Trust to reach out to them with updated program contact information. One respondent suggests Energy Trust provide a contact list and then update it when contacts change. Another respondent really wants to establish a relationship including having an Energy Trust representative for ongoing assistance. And one respondent reported that vendors are their primary contact on Multifamily projects, not Energy Trust personnel, which distances them further from the program.

### **Respondent Quotes**

#### **Small Property Owner**

One thing that is a little discouraging working with Energy Trust is that I've had three to four different people I've worked with there. People come and go so fast and you never build a relationship to know where you're at. So that is one thing that is a downside of working with Energy Trust. The people in general have been as helpful as they can be. This last gentleman we worked with at Energy Trust was doing a good job but within a couple weeks he was gone. I don't know if it was his choice or Energy Trust's choice. So we got a new guy working with us and he's nice too. But again, we keep starting all over with people. It would be nice if the turnover weren't so great because it makes things go smoother and quicker when we don't have to start over every time with a new person.

#### **Property Management Company**

The consistency of the workflow and staffing needs improvement at Energy Trust. For example, due to staff turnovers, the energy audits weren't happening effectively or on a schedule we had agreed upon initially. Also, sometimes it was a little clunky the process of getting the paperwork done so in some cases the ownership would agree, for

example, to replace windows and then when they would go to complete the paperwork and send it in to get the energy rebate or the tax credit, the person at Energy Trust that they were working with either wasn't there any longer or wasn't very responsive or didn't provide them with very good direction on what to do. So there was frustration on our part and the owners.

I think this problem is partly because these Energy Trust people are contract employees. So there were staff changes or the contractor's contract was up and when those changes occur, it's harder for it to be seamless. So I get that. But it's unfortunate. For example, one owner in particular got pretty frustrated with the process and I would say they would be less likely to do a project with Energy Trust again. They paid money out-of-pocket to replace the windows and then to have that delayed to get the money back is kind of unfortunate.

We think the information is good from Energy Trust. But once the owner says ok I'm interested in this, just having that consistency of having of follow-up or dealing with the same person or having a representative or something might help. Because we were passed around by several different people and it required us to be very motivated to follow-up on behalf of the ownership or it wouldn't have gone anywhere. I realize the consistency of staffing is probably out of Energy Trust's control because it is a contract job. But it does make it more difficult.

I don't really have a specific contact person at Energy Trust. There's a woman that works there that I guess I would say is sort of my contact but I don't even know if she still works there. It has been nice working with her. So, if I had a new project, I would email her first and she would probably route me to whoever handles that. We've actually brought her in here to talk to our group about the program. She seems to be the one consistent person. At one point, we were working with a guy at Energy Trust but I don't think he's there anymore. And another guy was helping us fill out forms and do paperwork but I don't think he's there any more.

### **Small Property Owner**

The biggest problem with Energy Trust is working through the bureaucracy of it. You know in all fairness I have to say Energy Trust has chaos going on over there. When we did the windows, we would have five or six people calling us not knowing what the other person had told us. It was just chaos. (See Windows section for details on this respondent's experience.)

### **Property Management Company**

In the first three to four years that I worked with Energy Trust, everything went really well. They were very helpful! They did all my paperwork for me, helped me with the State and overall, Energy Trust was much faster. And then in the last couple of years that I worked intensely with Energy Trust, things started to get strange and Energy Trust sort of bowed out of helping me with the paperwork, which was ok. I think it was probably one of those turnaround times when they hired a new contractor. There were two guys I was dealing with on an every day basis and I know they aren't there

anymore. To be honest, one of the guys wasn't very smart at his job but he had a good heart and he would always find someone else to help me out. But this was maybe six or seven years ago.

Currently, I don't have a direct contact at Energy Trust. It's been so long since we did any capital upgrades, I don't know who my contact is. The last person I dealt with was the guy that did our ISMs.

### **Property Management Company**

I don't have a contact at Energy Trust. The person I worked with before was with the previously contracted company and so I don't have a contact any longer. The next time I need to contact Energy Trust, I will probably just have to Google for the information!

### **Affordable Housing Organization**

Because Energy Trust uses different sub-contractors for their programs, you never know who the person is to go to because the people are constantly changing. So sometimes it's a little confusing. But maybe it's more our on part that we need to dig into this—maybe it's our responsibility to figure out who to deal with.

However, I will say that in my experience, the bulk of those folks working on behalf of Energy Trust have been pretty great—very knowledgeable, very professional and easy to work with. So it may be difficult to find who to talk to on a particular project but it seems like once you find that person, it's pretty easy from there on. So maybe Energy Trust could provide a link or an email list or something that updates us on who to contact. And if the contact person has changed or if Energy Trust has a new contractor managing the program, they could include the names of the contacts and what they're working on in particular.

I think now I could pick up the phone and know who to call but it took me a couple tries to get the right person but now that I've figured it out it's much easier. But I don't know when it might change again.

I think we would really benefit from a sit-down meeting with Energy Trust where we could go over some questions we have. We have three projects coming up pretty soon and they range pretty wildly so we do have a lot of questions for Energy Trust. We want to know what is the best bang for your buck if you're making these energy investments.

### **Affordable Housing Organization**

None of us has a direct relationship with anyone at Energy Trust. Maybe our previous Facilities Manager had one—I don't know. It would be nice if we had some kind of Energy Trust representative because I feel we're a larger company but maybe in the grand scheme of things, we aren't perceived that way by Energy Trust. But it would be great to just have someone to talk to that understood your organization, which has not been our experience dealing with Energy Trust in the past. I always feel like I have to talk to a bunch of different people who don't really know our organization.

So I feel what it comes down to is that it would be awesome if we had an Energy Trust representative and we could meet with them to establish a working relationship and to discuss specific projects. And it would be nice if we could meet with them every quarter. It would be great if it was someone knowing what we do already and then they can suggest programs, etc. I think it would also make sense if at our first meeting with Energy Trust we could walk through specific projects we're considering. So aside from just being able to meet with each other and start a business relationship, I would want to look at least one specific project and get information on how Energy Trust can help us with it.

### **Community Association Management Company**

I don't have an ongoing relationship set up with anybody at Energy Trust. Typically our first contact on a new project is with our vendors and not Energy Trust. Then the vendors do a lot of the legwork for us because they see an advantage to their company in bringing that stuff to us and to the Homeowner Association Board. A lot of times they'll do the basic legwork for the Associations including filling out the forms and providing information on the projected savings and the Energy Trust incentives. It's nice for us. It saves us a lot of work and it's routine for the vendors—they make it a practice and I think it becomes second nature to them. And then they send us the Energy Trust information and we get it all signed and we send it back to them and they send it out to the appropriate parties.

### **3. Paperwork problems**

**Overall, paperwork problems were less prevalent among Multifamily respondents than among respondents in the Industrial or New Buildings segments. Problems reported included:**

- The technical complexity of the paperwork needs to be simplified for non-energy experts.
- The paperwork is too time-consuming.
- Although some expressed appreciation for the help vendors provide in doing the paperwork, a few pointed out that this comes with a price—they're paying vendors to do this.
- One suggested that Energy Trust develop an "open services agreement" so that returning customers don't have to go through the whole paperwork/contract set-up process each time they do an upgrade.
- Probably the most serious criticism came from an affordable housing organization who said that paperwork costs almost equal incentive amounts implying that this inhibits them from working through Energy Trust when they do upgrades.

### **Respondent Quotes**

#### **Property Management Company**

One of the problems working with Energy Trust is the paperwork. It's our biggest complaint. I think if Energy Trust could simplify their paperwork on projects, it would



help. Energy Trust should bear in mind that most property owners are not engineers and that sort of thing. So some of the things Energy Trust may take for granted are not as simple for the property owners. We have our contractors handle the paperwork as much as possible. And I'm sure we're paying for that but it's not an item that we're able to call out of their proposal—it's just the cost of doing business with them.

### **Property Management Company**

Our feedback for future projects would be an easier process with paperwork to complete a project. It was just very time consuming to do the paperwork because I'm not necessarily in the Energy Trust business and some of the detail was fairly hard to dig up. I guess one of the things that can be challenging with this industry is that you often are so overwhelmed—you have your every single day duties and then you're interrupted all throughout the day. There's never a moment where you're sitting at your desk all day and you can just get things done! So simplifying any paperwork is just really great!

I guess I'd like paperwork forms that are more specific—where you could check the boxes or even just purchase something through one vendor. I'm not sure that would be a possibility but I know we had to purchase everything and then basically submit for reimbursement. We did a carport upgrade that we had done the lights through a local lighting company and then had essentially gotten the credits and it's the credit portion of the paperwork that I'm speaking of. Even though the lighting company we worked with did a good portion of the paperwork, we ended up filling out the rest of it and we didn't have all the information and it was kind of a long process.

### **Affordable Housing Organization**

**Costs to do paperwork are almost equal to incentive amount:** When I use the Energy Trust program, the time that I invest in going through the process and the paperwork and the extra cost of the trade allies to perform the required paperwork on their side, ends up being close to the incented amount. So we find that the incentives really just pay for the paperwork and all of the administrative and management costs and doesn't necessarily increase what we can do on a project by paying for bricks and mortar.

We pay trade allies management costs to go through the paperwork process including signing up for the Energy Trust program and putting bid requirements in our bid documents. The trade ally increases the price of their work to go through the administrative work. So we know we want to pay for the additional capital cost of the equipment but we find that the soft costs appear to us to be on par with what the Energy Trust incentive is so we see the incentive as paying for all the soft costs and not paying for the hard costs of equipment, which is unfortunate because you want that to pay for the premium or the delta between a code piece of equipment and an energy efficient piece of equipment.

**Develop a "open services agreement" to streamline paperwork process:** We go through the same kind of paperwork process with each project and because we're not doing projects consistently—we might do two in one year and one in next year and then

skip a year. So we have to relearn the paperwork process again and sign new agreements and contracts and essentially the paperwork is a contract because Energy Trust's paperwork includes terms and conditions which we have to get an executive signature on. It sure would be nice if there were an open services agreement or a multiyear contract or a way to sign up as a portfolio owner that would come with some agreements already in place and kind of streamline that process. I do think Energy Trust has actually done a good job on trying to streamline things—the paperwork. But it would be worth continued attention to the streamlining process.

### **Affordable Housing Organization**

I had a recent experience with Energy Trust that wasn't great. I was filling out the paperwork for the \$50 refrigerator rebate. So I filled out maybe 14 applications for that and it becomes like a 15-paper packet. You have to include the invoice and Energy Trust has to prove you paid the invoice so they're actually calling the utility companies. But when I first submitted all these, they actually got lost and so I called months later to say we haven't received payment so then Energy Trust needed me to send all the info again. And they were still really confused about all our properties and what was what. I had a couple different people call me and I thought one person was going to handle it and then other person called and asked same questions. So it was a lot of work to get \$50. It was a really frustrating process. No one really knew why the applications were lost in the first place. Since I had this bad experience, our vendor has now started applying for the credits for us. I don't know how that got started but now they're doing it including paperwork. So it's made it easier for us and maybe that is something our vendor got started through Energy Trust.

### **Other paperwork-related quotes included:**

#### **Property Owner's Rep**

I don't find the paperwork cumbersome. But you need to understand I used to work for the Portland Development Commission and HUD. So the Energy Trust paperwork is a walk in the park compared to that!

#### **Affordable Housing Organization**

The paperwork in my experience hasn't been that much of an ordeal. But to be frank, that would be more of a question for our contractors. They're the ones having to get all the invoicing and things together. So I don't know how difficult that is. I know it was initially really hard to find forms on Energy Trust's website and I think that's gotten better. But I haven't really looked at that much lately because we have someone else here doing that now. But I know that was difficult at one time.

#### **Small Property Owner**

The paperwork wasn't easy but it was well worth it for me.

#### **Property Management Company**

The paperwork was done back and forth by email, which was simple. It doesn't take any guesswork.

#### **4. Needs and suggestions**

**This section includes needs and suggestions mentioned by respondents that would help increase their participation in the Multifamily program. Suggestions ranged from providing more engineering assistance to help with measuring outcomes to more funding for digital thermostats and refrigerators.**

#### **Respondent Quotes**

##### **Small Property Owner**

One of the things Energy Trust needs to provide is support from somebody that knows the engineering end of it. We've worked with this guy who used to work directly for Energy Trust and I don't know what happened but it didn't pan out. He might be an Energy Trust trade ally now. But he knows what he's talking about and he's proved it. He's helped us and we've employed him on the side beyond Energy Trust just to get the right information. Sometimes he's a little hard to work with but he knows what he's talking about. So he is filling this engineering need of ours but it would be nice if Energy Trust could do that directly for us.

For example, how this guy helped us on the boiler was that he set up the gauges and the logs and everything of how it worked before. And then as we did different things, he's looked at it to prove where it's come from and it's worked. I don't know exactly what all the different gauges were but we projected that this would happen and it would save this and it has worked. We've done a lot of work on replacing valves on radiators and that kind of thing. It's a pretty technical end of it and it takes a lot of detail.

##### **Affordable Housing Organization**

We would love more support from Energy Trust in measuring the outcomes of our capital improvements, in really tracking it so that we could have some quantifying measures to see if we are using it to it's full potential. Also it would be great if Energy Trust could help not just with measuring results but also if they could build a database with benchmarks. Because in affordable housing, there aren't too many white papers. There isn't much research on what's effective and what isn't. So if Energy Trust could provide something like that I think it would get a lot of people interested and talking about energy efficiency in affordable housing—more so than now.

##### **Affordable Housing Organization**

I know if we're using State weatherization dollars, we're not allowed to use Energy Trust dollars. It's one or the other. It would be nice if they could layer funding so you could use both funding sources not just one or the other. And of course only if it's justified by the customer showing they can get more savings through energy efficiency improvements for a project with both sources. We could have done more if we had both. So that would have been nice.

### **Property Management Company**

One program I would love to see is something regarding thermostats. I'm not sure if there is something for that. But it's something we talked about with our owners but from a cost perspective it didn't end up being an option or we ended up not budgeting it for the year. But that's something that I think would benefit the residents and their energy usage, having a digital thermostat versus the basic turn dial one, which aren't as effective. So that's something that would be interesting going forward from our point of view.

### **Affordable Housing Organization**

We have a 133-unit property where we're eventually going to tear down 108 of the units. We're going to build 146 units of family housing and really try to incorporate more open green space for kids and play space and we'd really like to incorporate some way to use less water. Now I know Energy Trust is mainly about the power companies and water is not as big of a deal there but it sure would be helpful if there were some kind of incentive or pilot program that we could be a part of regarding water. I've heard that the energy cost of providing water is so expensive so you would think the energy reduction would go down with water reduction.

### **Affordable Housing Property Management Company**

Many years ago, Energy Trust did a refrigerator grant for affordable housing. This wasn't just a rebate for old refrigerators—they were free! It was awesome—one of the best things ever. All we had to do to comply was to make sure we stayed affordable for 10 years. So what I would like to see again on a broad scope are more programs like that. Not just cash back but something that gives these poor properties something kind of for free. I hate to say for free but you see what I'm getting at. We have a lot of properties that were built 30 to 40 years ago that are pretty cash tight so that was my favorite program that Energy Trust did in the last 12 years I've been here. Maybe it wasn't through Energy Trust—maybe it was through Oregon Housing.

### **Property Management Company, Owned by Owner**

I need information on the rebate for the refrigerators. Last November, I went on the Energy Trust website and downloaded the list of refrigerators that qualify and the particular refrigerator we've been using for a number of years appears to no longer qualify. I'm confused about this. We have an account with GE so we buy our appliances from them and we want to stick with GE. So I went down the list of GE and Hotpoint refrigerators listed and then when I called GE on those particular model numbers, about 90% of them were no longer available. So I need to know if Energy Trust has updated the list. We're leaving money on the table by not using the refrigerator that has the rebate so I need to figure this out. Could you give me the name and number of someone to call at Energy Trust?

## Specific Capital Upgrades

**This section summarizes findings regarding three capital upgrades that are incented by Energy Trust: windows, outdoor lighting and insulation.**

### **A. Windows**

Windows are a high interest item among the incented measures and are done more frequently than either outdoor lighting or insulation.

Among respondents who upgraded their windows, they did so because the property's former windows were old and in poor repair, difficult to maintain, and a source of heat loss. Because window replacement is expensive and can be disruptive to tenants, several property owners combined window projects with multiple capital improvements to minimize the impact on tenants.

In making the decision to upgrade windows, most respondents said that incentives are important to property owners in mitigating the costs. Several indicated they were motivated to improve the efficiency of windows to help reduce energy costs, which benefits both owners and tenants.

Respondents agreed that windows are a visible improvement and very aesthetically pleasing, which adds value to the property and is an attractive improvement for tenants. In addition to reducing bills and increasing comfort in hot and cold temperatures, windows also reduce noise. Several suggested that the improvement is seen as a way to attract and retain tenants, and perhaps get higher rents. As one respondent said, "People are much more likely to rent a place if it has new windows because their heating costs will go down." Respondents generally receive positive feedback from tenants after windows are replaced.

Few problems with window upgrades were cited although a handful of respondents mentioned that miscommunication over the eligibility of products, installation issues, and complexity of paperwork posed challenges during the process.

A limited number of respondents said their owners won't approve window upgrades due to concerns over upfront costs and lack of payback, in spite of incentives to reduce costs and potential energy savings. Others expressed a need but no immediate plans for window replacement projects, indicating continued market potential for the program.

Respondent quotes are organized into the following four sections:

1. Responses from those that have done window upgrades
2. Problems encountered during window upgrades
3. Lack of owner approval for window upgrades
4. Interest in future window upgrades

## **1. Responses from those that have done window upgrades**

### **Property Owner's Rep**

My cohort and I—he's out of Seattle—are aware of Energy Trust and its programs so we suggested to the ownership that they consider doing the windows at their property. We had already recommended they do the siding project there and so we said, if you're going to do siding you might as well do windows and we believe we can get you rebates for your windows. They said we like rebates and we just took it from there. And the windows really needed replacing—they were 25 years old. Single hung. They were junk.

The rebates were definitely a factor in the owner's decision. This is the real world! When the owner hears \$2 a square foot coming back in their pockets for windows, they're all for it! I mean that's the reality. The secondary consideration is, quite honestly, the fact that these are going to be quieter, more energy efficient windows for the residents—I mean that's a great selling point for the owners, I know that for a fact. We know for a fact there was a certain attraction there. Hey, look new windows! It's quieter, it's warmer, it's cooler, it's whatever you need it to be. Also I know that the tenants pay their electric bills so there's been a direct benefit to them—a direct pass through to them.

I think the owner thought the incentive amount was good. I handled all the Energy Trust paperwork but I don't have that in front of me and I can't remember how many thousands of square feet the windows were but the incentive seemed proportionately favorable.

The owner might not have done the windows without the incentives. Or perhaps, if the incentive had not been there, the owner might have gone with a cheaper window. We were very happy with the owner's choice. They didn't go top drawer but they did go with a high U value based on our recommendation. I think they would have gone with a lesser energy efficient window and probably—this shouldn't be an across the board statement—but the \$2 a square foot that they got, they probably would have saved that amount by going with a cheaper window. We got an 8-foot square window—that's \$16. For \$20 bucks, we can get brand X. So I think it helped the owner make up his mind to go up a couple jumps in quality.

From my standpoint, everything went great on the project. And from Energy Trust's standpoint, I think everything went well. For the property director, it was probably miserable because it was a 16-month project with the implications of tenants yelling at her all the time. I know the construction was a bother. But I also know both the owner and property director are pleased with the results. We try to make these things as painless as possible for the owner. It's what we do for a living.

### **Property Management Company, Owned by Owner**

The results of our window project have been wonderful! We've had great feedback from the residents. They've said the energy efficiency is great and that their electric bills have gone down considerably. But not only that, the apartments are so much quieter—we weren't expecting that! The tenant satisfaction factor was a big consideration for us in doing the windows. And the tenants went through a considerable amount of grief because we were re-siding the property at the same time that we were doing the windows. So while the units were occupied, there was a lot of construction going on. So it was nice that they could have those windows and they could see a physical result that their electric bill goes down and their apartment was a lot quieter—it's not as dusty and things like that.

### **Property Management Company**

The reason we did the windows was more or less because of the incentives Energy Trust offered. Energy Trust was offering 15% and the State was offering 35% so it was a 50/50. At the time the program was kind of new in existence and the way we were able to explain it to owners was by saying it would reduce their costs substantially. We explained it was dumb not to do it. You'd have to be an idiot not to spend the money because you're going to gain the money on the sales price of the property, you're going to have a better tenant, a longer-term tenant and a happier tenant because they're going to look at their property and think it looks updated and enjoyable or they're going to have a lower power bill and actually realize they can pay a little more rent because they're going to save in the long run with their power. To us, it was a win-win all around—there wasn't a single negative aspect to the whole program.

We had no problem selling the owners on this. It was a no-brainer. We really get it down to brass tacks. For example, we were showing them how you get 50% back—if you spend \$1000, you're going to get \$500 cash back. On top of that, you spent your \$1000 and on average, you're in a 33-40% tax bracket and you get to take that portion off as well and then we're going to give you a discount because we're using this window guy that orders direct and doesn't have an actual showcase so he gets the product at same price as the showcase manufacturer does so on \$1000 say you'd save another \$90. So you keep getting the price down. And we had it down to a science and they were like paying only maybe 38% or something like that. And of course we go on to say your property is going to add in value by half of what you spend so you're not even out-of-pocket a dime! It comes close to being we're paying you to do this. We sold so many of those window projects to owners. And it was really very simple to sell. It took very little coaxing.

Telling owners that it would increase the value of their properties was definitely a motivating factor to them. And another way to sell the idea to the owner was to stress how it would attract and retain tenants. We basically believe in that. It's another way to get people to stay longer. We believe if we have the nicer looking unit and it's efficient, you're going to have a tenant that wants to stay there longer. As opposed to properties where windows are a little drafty and your power bill spikes. We have a lot of properties with baseboard heating and ceiling heat, which is very expensive.

### **Community Association Management Company**

The problem with the windows was that they were old Kolbe style windows that had wood inside of them and they had begun to leak so that that wood inside of them was rotting out as well as causing other issues. They were dated and probably most of them were original—from the early 1980s. They were due for replacement. The property also had some separate issues that were related to their patios and decks. Anyway, the condo association realized that as much work as they had to do on the building, they turned around and did a \$3.2 million special assessment and redid all the stucco and put in rain screen systems and put in all new doors and windows.

### **Property Management Company**

The windows were replaced because they were old and there was heat loss. And also I'm trying to get higher rents out of the apartments so I wanted to do the windows. These apartments are a little harder for me to rent because they're away from campus and they're all one-bedroom, pretty plain—not the cute little cottage look. So it's a little harder for me to sell those and so I thought if we go with the windows, it definitely makes a huge difference on people's energy costs. People are much more likely to rent a place if it has new windows because their heating costs will go down. I don't know how much, I don't know any percentages or anything but I think it's a substantial amount. But that's our biggest reason to do the windows—it helps us get tenants and higher rents—it's almost like an amenity to them. People will absolutely rent a unit with new windows before one with the old aluminum windows.

### **Small Property Owner**

I thought about doing the windows for years and years. It was a daunting expense. I didn't know exactly how I was going to be able to afford it. And I might be still agonizing over the windows if I hadn't learned from my insulation contractor that Energy Trust offered incentives on windows. Once I realized I was going to be able to get some help on it, I redid all the windows in that building.

All you had to do is look at the windows to realize something had to be done! It's a 1975 building and still had the aluminum windows and the sliding glass doors in the back were becoming problematic and parts were not available for them any more and so we just decided to bite the bullet. And I was just ecstatic to find out that Energy Trust would help. I was happy to get any help at all and I got more than I expected from Energy Trust. And I got an energy credit from the State. I like that!

The tenants haven't actually given me any feedback about whether they've saved money by me changing the windows but I'm sure they have. And frankly, I have never really asked them either. But I'm certain life has improved for them. I know the heat getting in and out of the patio doors has improved a lot!

### **Small Property Owner**

We've done windows on a couple properties and we're planning on doing another windows project later this year. What motivated us to do the windows was simply they needed to be done. They were so old, they were dysfunctional. They weren't so much



leaking as they were difficult to clean, they looked ugly and they didn't work well. The little extra money we got from Energy Trust helped but it's no big deal.

### **Property Management Company**

Replacing windows is kind of expensive. I think what motivates owners to do it is the windows are aging and just have to be replaced and the owner sees it will be more efficient and that there's going to be a cost savings associated with it. What I'm saying is I don't think tenant benefits play much of a role in the decision unless you have a really, really nice landlord or owner that really cares about tenant comfort.

### **Small Property Owner**

I think we did some windows about 8-9 years ago on both of the buildings I own and I think the Energy Trust was involved on both of those but it's been a long time and I can hardly remember! But it's not something we'd be doing again soon. The reason we did the windows is that they were old and some of them were aluminum frame windows and they just weren't very energy efficient. We did notice a decrease in utility bills after doing the windows—oh, yes, it makes a difference.

### **Affordable Housing Property Management Company**

We've done windows at many of our properties. We've used Energy Trust for many years including the window rebates. I've been here for 12 years. We actually did windows for a property in Grants Pass last year and that went really well. It was actually a pretty quick, easy process but I don't remember how much we got back.

The decision whether to do windows varies by property. For example, right now we have some siding issues with some of our properties and of course, when you're pulling your siding off, it's an opportune time to replace the windows. But the recommendations to do these things come from my assistant or myself and we often recommend doing multiple upgrades at once instead of going back at a later point and doing things separately.

### **Property Management Company**

Keeping our tenants happy is definitely part of the reason that we do window upgrades. Believe it or not, one of the things that seems to be most appreciated by tenants when you install windows is the noise reduction!

### **Affordable Housing Organization**

With some of our properties, we've had major construction defect issues and we've done major rehabs that have included windows. We did the window replacements because all the windows were failing. Window replacements are very good for the tenants because they pay their own electric bill. We've also heard that those triple windows are really a good way to reduce energy costs. I mean your window is where most of your heat loss is. So it would be nice to know from Energy Trust whether going to triple pane is worth it and, if so, then maybe Energy Trust should be allowing an incentive for triple pane windows.

## **2. Problems encountered during window upgrades**

### **Property Owner's Rep**

I think the only thing that didn't go well for me was some of the windows were disqualified because they weren't a certain U value. That wasn't any fault of Energy Trust. We put it all back on the contractor and the supplier and it ultimately got worked out but it resulted in a delay in the disbursement of the check to the owner.

### **Small Property Owner**

There was a lot of frustration working on the windows project with Energy Trust. Because the buildings had storm windows, they tried to tell us we wouldn't get as much money and we tried to explain it. But some of these people are very young and have no construction experience and so I don't know how they got their jobs at the Energy Trust. But they obviously hadn't worked with construction techniques and problems and things and so you have some gal come down and say, well you only get one dollar per square foot because this is a double pane window that you're replacing. And I would say no, it's a single pane window with a storm window in it. And I said would you like me to take the storm window off—there's four little crips holding it on and I could have taken it off before you got here. This went on and on. We probably had to talk to six or more people before they got that resolved—before they said oh, it's just a storm window and you could have taken it off if you wanted to so that shouldn't count. There was so much chaos that I finally bowed out and told my maintenance guys to handle it with Energy Trust. Mainly we just wanted to get the money.

By the time we finally got it to the point where the person understood what a storm window was, it was fine. Maybe it was a new program for Energy Trust or something and they were just getting started. Anyway that's the only criticism I have of it.

### **Property Management Company**

There was a problem we had with the way the installation of the windows is allowed to be regulated in Oregon. And as a result, we're probably going to have a serious problem in the next two to ten years because of it. I don't know what they call it. But basically they left the old aluminum or metal frames in and were allowed to install the windows over those frames. So there was a gap of 1/2 inch or larger around each window that got filled up with a piece of vinyl stick trim. Maybe if we had physically watched the installation, we would have been able to prevent this. Anyway, we know now that this method is not quite as efficient as it could be.

The vinyl pieces eventually fall off and they way they're called from the outside of building, we're probably going to have issues with every single window we've installed. They're weren't installed properly in my opinion, which would have been to pull the framing out and stick your fit inside of it and screw it to the wall. And then you'd have an actual piece of flashing that came down properly. So we're going to have an issue. The windows we installed were designed for California where they get a lot less rain and there's a lot of stucco siding and they didn't have the ability to get in and tear that stucco apart and do it properly. So for some reason it was allowed to be installed in Oregon.

And after it was done, I found this out through an Energy Trust guy that used to help us out and do the inspections—he's the one that brought it to my attention and he was fairly disgusted with it. It's not really Energy Trust's fault. It was just the guidelines and even he said the same thing—I can't believe our company or somebody wouldn't restrict this a little more so it could be more efficient, which was obviously the goal. But again nothing to do with Energy Trust program. It was the State and Energy Trust was following their guidelines.

### **Property Management Company**

We're in the process right now of trying to replace windows in three or four different buildings and we recently submitted some applications before the end of 2012 and after the first of the year we received a letter wanting some pretty involved information, enough so that quite frankly if it weren't for the help of our contractor, I'm not real sure we'd be able to comply with it.

It's primarily the complexity of the information required and the fact that the requirements necessitate that the data be presented to Energy Trust in a way that works with their programs—it's not something that is pleasant. Frankly when we got the letter, we called our contractor and she was as much up in the air about it as we were and didn't know what to do but we basically left it in her hands. She's working with the State right now and hopefully they'll be able to work out the details and we'll be able to go on with the upgrades—that's our hope.

This most recent round seems to be a little more convoluted than in the past. Generally speaking we present our interest to be part of the program, there's some fees that are required and then there's some follow-up afterwards once the job is done so the tax credits and that sort of thing can be issued. That's expected. This complying with this new stuff, whatever these guidelines and computer programs are, is something new as far as I'm concerned. In fact, at this point in time, it's completely up in the air. We're not sure what they want and our contractor isn't sure what the energy folks are requesting. So we're in limbo here waiting for all the details to be worked out. Hopefully it will be. Some of our clients, we do fee manage a few properties, and in some cases, the owners are retired and quite frankly if they had to deal with this kind of complexity, I'm quite sure they wouldn't want to continue with the project.

### **3. Lack of owner approval for window upgrades**

#### **Property Management Company, Owned by Owner**

Oh my gosh, are we ever a candidate for windows! We not only own a lot of buildings but we own old buildings. I manage two buildings that are 100 years old. My most modern building was built in 1946. So windows are needless to say, a huge deal! Most of our buildings have single pane, old windows in them. But the cost is so prohibitive in the owner's opinion that it just prevents her from seriously looking into it. One of the fabulous features of these older buildings is the big, wonderful windows and lots of them. So it really adds up.

And this time of year, needless to say, we hear from our residents quite a bit—calling us to complain that their utility bill is so high because the windows are so leaky. And they ask what we can do. I pass all of this information on to the owner and as I said, it's always a big issue at this time of year. I just had a conversation with the owner about it last week. I talked to her about one of our buildings in particular where we've had multiple people complaining about how leaky those single pane windows are and her response was I know but people don't have any idea how expensive it is to fix the windows. She says she just can't afford it.

**Property Management Company, Onsite Manager**

The problem with our windows is they are all old—from 1975. They're all single pane. There's mold and mildew. And the wind blows the curtains when the windows are shut. I know I have issues with our windows and roofs and that they need to be replaced. The thing that I just don't get is why our owners won't do this if they're getting discounted if they go through Energy Trust.

I think the reason they won't do it is because the owners are old and they don't like to spend the money so it's hard to get through to them what they need to do. Right now at Lincoln Court I'm trying to get windows and roofs. And when Energy Trust came out and did their thing, they submitted a program that would offer the owner 30% off if he did the windows and I can't get him to do it. It was for the windows and a whole bunch of other things. But I really wanted the windows. We need them really badly. And even with 30% discount Energy Trust offered, I couldn't get him to participate.

**Property Management Company, Owned by Owner**

I can't get approval for windows or doors because the owners don't see the payback so they won't do it.

**4. Interest in future window upgrades**

**Property Management Company**

We haven't looked into doing windows. Although we do have aluminum windows that are definitely at the point of where they're failing. And it's probably our number one complaint from residents. So really we would love to do that but I'm not sure how it would work budget wise or what the Energy Trust incentives are. But the windows and the thermostat are our next really hot buttons if you will—it's what we're really interested in.

**Property Management Company, Onsite Manager**

Our windows are nearing the time when they need to be replaced. We're starting to get some sweating and stuff in some of them already. As far as I know, there's no plan to replace them now but I think when we're ready, our property management company will contact Energy Trust because our supervisor is really into Energy Trust.

## **B. Outdoor Lighting**

Overall, there tends to be a high level of satisfaction with the result of outdoor lighting projects. It appears the process goes well with Energy Trust, the incentives are viewed positively and the results are pleasing to both owners and residents.

Some respondents weren't aware that Energy Trust offers outdoor lighting incentives, and quite a few were very interested in pursuing more information. Others appeared to need a little nudge and some advice in order to go forward; all of which seems to indicate some untapped potential for the measure.

Safety and security is a major reason for doing outdoor lighting projects, which may be especially true with affordable housing properties. There are also indications that outdoor lighting can be a big expense for some and so the energy cost savings and avoided repair costs are a motivating factor.

Respondent quotes are divided into three sections:

1. Completed outdoor lighting projects
2. Have not completed outdoor lighting projects but interested
3. Other responses

### **1. Completed outdoor lighting projects**

#### **Small Property Owner**

We learned about the Energy Trust incentives for outdoor lighting at the Multifamily Maintenance Fair last year. We were very surprised to learn about the incentives and that's why we decided to do the outdoor lighting project. We had thought about upgrading our outdoor lighting and the incentives just made it worth it. So after we learned about the incentive for outdoor lighting, I talked to the property owner and he was very willing to participate. He's very into the going green as much as possible. And the owner was very happy with the incentive amount. We haven't actually got the incentive back yet for the outdoor lighting because we haven't sent in all the final paperwork.

The outdoor lighting project went really well. We worked on it for quite a while but have now finally got it finished. The residents are loving the lights! A lot of our residents have had positive things to say about the outdoor lighting. No one has had a negative comment. They are putting off good lighting—in fact, they put off a lot more light. Frankly, we're surprised at how good the lights look.

In addition to the outdoor lighting project, which had to do with ballasts, we also did a security lighting project outdoors where we changed the lights to Energy Trust ones. We had an electrician that works for Energy Trust and he came and did a bunch of stuff and we got the incentive on that too. The security lights were a whole separate thing—they're on the back of the buildings, not on the stairways and in the areas in front of the buildings.

### **Property Management Company, Owned by Owner**

We did a big exterior lighting upgrade at one of our properties. It was fantastic! It went really smoothly. We did it with a local lighting company. It took us a while to get that going but we got a lot more lighting installed and a lot more efficient lights. We did it because it was really dark at that property. There's a lot of trees. And we have a bit of a senior population there and it was just safety overall. We also did an outdoor lighting upgrade at another one of our properties.

I think the owners were very pleased with the incentive on the project. The interesting thing is that I don't think the owners were even aware upfront that Energy Trust offered an incentive. They were ready to do the lighting upgrade just for safety reasons—it really needed it. Then when we got involved with Energy Trust on one of my other properties and through that we figured out that we could get a rebate for the outdoor lights.

### **Affordable Housing Organization**

We have done some outdoor lighting upgrades through Energy Trust. It really helps us as a property owner to upgrade exterior lighting. Exterior lighting is a lot of our lighting and we pay the bill for it so it helps us as the owner to save on our operating costs, which in turn allows us to make other improvements on the property. However, outdoor lighting costs are really big. It's really expensive to change the outdoor lighting that we have. But security is a big issue for us and so we have a lot of exterior lighting for safety reasons and boy if we could bring down the cost with LEDs on that it would be great! It's actually pretty inexpensive now to transform a regular CFL light to an LED light. I wonder if Energy Trust has thought of subsidizing that or maybe even marketing that in some way. I think a lot of property owners would be interested. LEDs have really come down in price and it might incentivize some people to go ahead, especially on the outdoor lighting—the big fixtures that suck up a lot of energy. If we were able to transform those into LEDs, it would be beneficial. It would be big, it would be huge.

### **Affordable Housing Organization**

We have done outdoor lighting in our new projects and in our rehabs. In the most recent ones we've done, we've worked with an architect and relied on them to advise us on fixture location and type of fixture. We got some LED ones recently which are more expensive upfront but long-term the bulbs should last a lot longer and use less electricity so we're willing to spend more money upfront for that long-term savings. The other thing that impacts us is because of our use of public funds, there's a city of Portland program called CPTED (Crime Prevention through Environmental Design) that has to do with designing your buildings or your rehab with safety and security in mind so we may light the exterior of the building more than somebody else just to ensure safety—that's something we're not going to compromise on.

### **Property Management Company, Owned by Owner**

We did exterior lighting projects at five properties. The Energy Trust incentives were the biggest motivating factor for us to do this. We learned about the problem with the

lighting when we had some guy come out and do energy audits. We had 70-watt high pressure sodium fixtures in there and they went to 42 watt CFL fixture and so we saved some money that way plus we got the rebates from Energy Trust.

As far as working with Energy Trust, I don't think there were any major obstacles or anything like that. One of the things I did encounter was trying to find fixtures that met the criteria and that were also a reasonable cost. Like the CFL exterior fixtures—the 42 watt. Well, there's only one company that makes those that are at a reasonable price so you're very limited. And they're made in China so they're not the greatest fixtures in the world and we've had some problems with them since. But trying to get the same identical fixture, you're looking at \$150-160 bucks. Well it's just not worth it to convert that over if they're that expensive.

### **Property Owner's Rep**

I have done an outdoor lighting project where we did the carports and exterior security lighting and entry lighting at patios and entryways. I spearheaded that for the owner and did the paperwork. I worked with a woman who I think was affiliated with Energy Trust somehow. It went well.

### **Property Management Company**

We've done outdoor lighting at some of our properties. With one of our properties, we did do interior lighting through Energy Trust but the property wasn't in a position to do both indoor and outdoor from an available capital standpoint. But with other buildings we have absolutely done that and with some we are looking at it.

### **Property Management Company**

The measures that seem to be the easiest and the cheapest to do are the lighting. We replaced the exterior light fixtures and also the outdoor sensors. With the sensors, we did the outdoor to make sure the lights go on at the appropriate time. But I don't know if the exterior lights have had much of an impact financially—I just don't have that information. For some reason, I have a better sense of what the indoor lighting retrofits accomplished in terms of payback.

### **Community Association Management Company**

We did outdoor lighting at one of our properties but I'm not sure whether it was part of Energy Trust. But I know they replaced most of their lighting in the whole entire building and I think the exterior lighting was part of that. I'm not really sure.

## **2. Have not completed outdoor lighting but interested**

### **Small Property Owner**

I've heard that Energy Trust has incentives for outdoor lighting. And the outdoor lighting is something I may be interested in—at both my property locations. We need better outdoor lighting at both locations and I'm not sure what the option's going to be.

For starters, the problem with my outdoor lighting is it just needs work. I've got a lot of soffit lights that are just out. But the biggest problem is I don't have enough lights and yet I don't want to pay the electric bill. So I guess what I'd be looking for is an energy efficient lighting system that I can apply. I do need to light more than what I'm lighting now. I have a 6 x 16 foot electric sign that I'd like to change the ballast in and see if there's any kind of higher efficiency light bulbs for that. It would need to still be operable in cold weather. And I've got parking lot lights and a lot of things that just need improvement. I haven't planned it out well enough yet to know what I want to ask for but when I do, I will talk to Energy Trust. And if there's any improved technology, I need all the advice I can get because I'm real weak on that! I keep saying I want to do outdoor lighting this summer and I guess the reason is I have too much happening between now and then to get to the lighting now. I want to get that roof done first. So when I get closer to doing the outdoor lighting, I will definitely call Energy Trust.

### **Property Management Company**

I've never done outdoor lighting so I'm not sure what all that involves. It just hasn't come up but I would be very interested because it's something that's always on our radar. Our properties have outdoor lighting but we wonder whether it's sufficient. We just don't know. And if a tenant was hurt, injured, attacked or something like that we wonder whether our lighting would come into effect or be raised as an issue. So I'd be interested in learning more about what Energy Trust has to offer.

### **Small Property Owner**

I didn't know that Energy Trust offered incentives on outdoor lighting. We've never done anything with our outdoor lighting. We've got a couple of outdoor lights at one of our properties. And we may be adding some lights to our parking lots. We have one mercury vapor light in our parking lot that was probably there for 10 years before we even bought the building. It still works but I don't know how energy efficient it is.

### **Affordable Housing Property Management Company**

We have considered outdoor lighting—absolutely! But I had no clue that there was an Energy Trust incentive for outdoor lighting. And we just did an outdoor lighting upgrade at one of our properties. I would be interested in getting more information from Energy Trust about outdoor lighting.

### **Property Management Company, Owned by Owner**

We're interested in doing outdoor lighting. Oh, yes absolutely. We looked a little bit at changing out our carport and landscape lighting but just haven't gotten to that project yet.

### **Property Management Company**

We've done zero outdoor lighting! I guess my first reaction is to say we don't have a lot of outdoor lighting needs but when I think about it, we do have some needs and I realize it probably would be a great thing. You know, it's just something that doesn't cross our minds, even me.



### **3. Other responses**

#### **Property Management Company**

We haven't done any large outdoor lighting projects. Occasionally we'll improve the lighting in our parking lots but that's something our maintenance fellows will do—just add a halogen light here or there. We haven't done anything in mass in our parking areas.

#### **Property Management Company, Onsite Manager**

The outdoor lighting—the pole lights—are still mercury lights but nothing is underway now to replace those. The other outside lights, the ones on the porches right outside the doorways going up the steps, those we're replacing ourselves with the florescent light bulbs.

## **C. Insulation**

Compared to other incented measures such as windows and outdoor lighting, insulation is clearly not as top of mind or seen as a priority. Overall, it appears that insulation is not a "popular" upgrade. It's not as visible or as aesthetically pleasing; it's also harder to install and more invasive; it's costly and the payback period is too lengthy.

A few respondents mention that insulation is only done because it's a requirement when windows are done. A couple of affordable housing organizations commented on problems with how Energy Trust qualifies properties for insulation incentives.

### **Respondent Quotes**

#### **Property Management Company**

We've looked at insulation but I'll tell you the two biggies for me in terms of cost are insulation and window replacements. But with the insulation, the payback period is so lengthy, most clients just say no. I would love to do it because I think there's a lot of value there. But it really is one of those things where the client looks at it and says that's a lot of money and my payback period is too lengthy to spend that money. And I think part of that is we just came out of a recession and clients are having to allocate money on property improvements and the last thing they really look at are insulation and windows. I mean if the properties were 100% improved it would be different but everybody had to tighten their belts for quite a few years. And now when they can spend money again, the first things to be considered are the common areas and exterior maintenance—painting and roofs, etc. So when times get better, they look at those things first and they say the energy efficient upgrades like insulation are not a priority just because of cost.

#### **Property Management Company**

We've done insulation only when it was required. We've never given a whole lot of thought to insulation because it's always been a requirement through either Energy Trust or the State. So we were only interested in insulation because we couldn't get the incentive for the windows without doing the insulation. And we did a lot of under floor insulating and I don't know if that had an impact or not. I never was clear on how much that was—Energy Trust probably has a formula somewhere. I did look at the payback on the insulation. It was hard to explain other than the fact that yes, you are going to get this window compensation. So the explanation of flooring insulation didn't even make a lot of sense. But we had the incentive so it was still a good thing.

But we did the insulation because it was a requirement—that was 100% of our reason. I do believe the requirement was a fantastic idea. I think it was very smart that Energy Trust added that and they wouldn't allow you to get something else without doing this. I don't think people would do it otherwise, I don't think they would care. You know, windows are very aesthetically pleasing—they look nice. But nobody cares about insulation. We've absolutely never done insulation without doing something else.

### **Small Property Owner**

I was going to do the floor insulation anyway but then the contractor that I hired to do it suggested I contact Energy Trust about incentives. Frankly, I usually try to most of the work at the apartments myself. But with the insulation, neither myself nor the guy who usually helps me are young enough and nimble enough to crawl around in a crawlspace in a 10,000 square foot building! So that's why I started thinking about getting some bids on it and I talked to this guy and he suggested I contact Energy Trust about the insulation and that's also how I ended up learning about the window incentives from Energy Trust. So it worked out great.

The problem with our insulation was a couple frozen water pipes and in some places, there was actually no insulation and in portions of the building you could actually see the ground through the cracks in the drill holes for the plumbing. That was just not good—it had to be taken care of! Also, it just needed a cleaning out underneath the building. Over the years, the floors in the bathrooms had developed dry rot and had to be taken out and a lot of the waste was just left under the building and that attracts carpenter ants and things like that. So we just had to do the floors. Our tenants have mentioned that after we did the floors, that the room was warmer—it kept the drafts down.

### **Small Property Owner**

At my Portland properties, we insulated all of our pipes. And it went well. It's done! One thing we haven't done—the building was insulated at one time and we haven't redone the upper floor insulation but I don't know that we can because there's some mechanical stuff in the way. But it's insulated up to where we can still see the piping and that kind of stuff.

I feel the Energy Trust incentive amounts on insulation are low. The reason I say that is because I own another property in Tillamook and we've dealt with the PUD there—they don't have an Energy Trust per se but they do their own and the amounts of return are much, much higher down there and I don't know why that is. We did a full building insulation down there and they paid a good part of it. Plus, they physically showed up for the inspections—we hired outside folks that did the work and when things went wrong they stepped up and said no, that's not the way it should be. I don't if they have more engineers than Energy Trust or what.

### **Property Management Company**

Insulation is done as needed. What I mean by that is that sometimes along with the windows being installed, it's mandated that insulation has to be put in. As far as insulation by itself, I'm not aware of any properties where we've done that alone.

### **Property Management Company**

I haven't done any insulation myself. The reason insulation is done less is because it's more invasive. You have to tear stuff out to do it. With lighting you're not tearing apart walls. With insulation sometimes you have to tear apart walls or have a contractor do it. So it's just more of a pain.

### **Community Association Management Company**

I haven't done much on insulation—not a whole lot. Other than if something gets wet from some kind of leak, then we replace that. But nothing in the form of trying to get a rebate or a credit from Energy Trust. The reason is that it just hasn't come up in my world yet. It hasn't been an issue is really the big thing. But now that you've asked me about it, I realize I never really thought about insulation so maybe if there are things like that that people aren't thinking of, maybe Energy Trust should get that info out there to get everyone thinking.

### **Affordable Housing Organization**

The incentives aren't there with insulation. Actually I think we've never done insulation with Energy Trust. But that gets back to our frustration with the fact that Energy Trust's Multifamily program only incents prescriptive measures versus performance-based measures.

### **Affordable Housing Organization**

Let's say you have an attic that has R28 insulation and code might be R35 or something like that. Well the cost to rip out the old stuff to just get that extra 6-7 more Rs is just not worth it or at least not worth it if we don't have the funds for it. If we can get more bang for our buck in some other way, that's what we're going to look at rather than do the insulation. We've got to the point now where the increments of change are not as big so unless there's a real incentive to change insulation from R25 to R30, it might just stay at R25 whereas 10 years ago you may have had R10 and you could take it up to R35 so there was this huge improvement and it was a no-brainer to do it.

### **Affordable Housing Organization**

We have a problem with how Energy Trust determines incentives on insulation. Let me explain. We've had, and I know we are not the only ones, some construction defect issues, on four of our properties. But as we rehab the properties and go through with the incentive process, because our properties were built in 2000 or newer, those four properties with construction defect issues, the insulation was to code already so Energy Trust doesn't pay any incentive for replacing insulation.

However, we've had to do whole building envelope repairs because water and mold and things that have come in and the insulation was not performing correctly partly because it wasn't installed properly and it was missing in a lot of places. So we really are doing an improvement to the property by replacing the insulation and having it installed properly. But there was no incentive for that and yet we're really making an improvement to the energy efficiency by replacing the failing insulation. Energy Trust pays for failing windows and replacing a window but there's no incentive for the same situation with insulation. I guess my understanding is that if there's been a failed insulation, it goes on a case-by-case basis with Energy Trust. We would like more information on the actual policy for this and what's required—what kind of document would Energy Trust require that would give us incentives for insulation.

### **Property Management Company**

As part of the energy assessment we did for our owner's Green Initiative, we looked at insulation. And we got sort of an average rating on our insulation, which was installed in 1990 when the apartments were built. Frankly, it definitely doesn't seem like we have a lot of insulation—our buildings don't seem to be that air tight or noise tight for that matter so I would definitely would be interested in knowing what the incentive would be and what the process would be on that through Energy Trust.

### **Property Management Company**

We haven't done insulation in a long time—not in a lot of years! Now, when we've done a few roofs over the years, and it's been a while, we have done some insulation where we could at the same time.

### **Insulation: Other Responses**

#### **a. Insulation not needed**

##### **Property Owner's Rep**

We have not done insulation much because most of our properties are pretty well insulated already. The owners recognized that way back when and have taken care of the insulation.

##### **Property Management Company, Onsite Manager**

Because our property is fairly new, we don't need to do insulation so that's why we didn't opt to do that.

##### **Small Property Owner**

We don't really have a need because the apartments are pretty well insulated. That's something that's really good about them!

##### **Property Management Company, Onsite Manager**

We're not considering insulation at this time. At two of our properties, we just had a big rehab. We did a lot of work and everything is energy efficient over there. But I don't think Energy Trust was involved in that rehab.

#### **b. Respondent not involved in decision-making on insulation**

##### **Property Management Company, Owned by Owner**

I know we did insulation at some properties but I'm kind of on the periphery of that—I don't get too involved in insulation projects. But I think the owner subcontracted that out to an insulation company. It's hard to remember.

##### **Property Management Company, Onsite Manager**

When it comes to insulation, I might or might not end up being involved in that kind of decision. Probably more toward not being involved. But they would inform me if they decided to do it because I would need to facilitate it at the property site.

## **Direct-Install Instant Savings Measures (ISM)**

Overall, the ISM program is well received by property management personnel because it involves little decision-making, it's free and it's easy to implement. There is little need for owner approval to install the measures, which are assumed to have some impact on water and energy savings for either the tenant or the property owner. A few acknowledged that it is a goodwill gesture to offer the benefit to tenants. Few real problems were identified with most respondents indicating high levels of satisfaction both from themselves and tenants. Despite the success of the ISM program with property managers, it does not have a high level of visibility among property owners and does not appear to be a springboard for doing incented measures.

### **Findings and respondent quotes are divided into six sections:**

1. Ease of Decision Making
2. Springboard to do Incented Measures
3. Problems and Barriers
4. Satisfaction with ISM Process and Implementation
5. Tenant Participation and Feedback
6. Suggestions

#### **1. Ease of Decision Making**

Respondents didn't have a lot to say about decision-making because it's a simple decision to make. It's not something they give much thought to or have criteria for—in part because it is free and because many don't even need owner approval to do it.

Several respondents were complimentary of a specific Energy Trust person who has been the program's long-time coordinator. She appears to make it painless for the property management companies to participate by setting it up on their behalf. People rely on her to do a good job, which makes their job easier.

A few commented that they participate in the ISM program to reap the savings, but most indicated they participate because it is easy and they don't need owner approval to install the measures.

#### **Respondent Quotes**

##### **Affordable Housing Organization**

We do the ISMs for two reasons: because they're free and because everything that has to do with water, we want to implement because we pay the water bill for the majority of our properties. So we've implemented a lot of the Instant Savings type of retrofits. Basically every one of our properties has CFL light bulbs and low-flow faucets and things of that nature.

### **Property Management Company**

I've known the woman who handles this for Energy Trust for several years and I've actually had Energy Trust do some of the "in-unit" stuff—they call them swap-outs. It's one of the first things we look at. So anytime we take over a new project, whether it's an existing client buying a new property or we take over management of a new property, it's one of the first things I look at just because to me it's the right thing to do and also we like to do as much as possible inside the units even though our clients (property owners) don't get a financial benefit for it, our residents certainly do.

### **Property Management Company**

We have never asked a single owner for approval to do the ISMs. We just do it. Then when the owners talk to us, we tell them it happened. We had an owner that just asked if we would do that (ISMs) and I told them we did it six years ago and that's why your bill got knocked down so much—you've saved thousands of dollars.

### **Property Management Company**

We did the showerheads and CFLs in units for residents. The woman at Energy Trust kind of coordinated that for our entire portfolio. At one point she was going through all the properties that we manage and going ahead and doing that in addition to the energy audits that they did. We don't even get the owner's approval to do the ISMs. We just do it.

### **Property Management Company**

We don't need the owner's approval to do the ISMs. We would just do it.

### **Property Management Company, Onsite Manager**

We did the ISMs at both properties I manage. We don't need the owner's approval to do this. My property management company just decides to do it. But the owners have no problem with this—owners love free! Anything free they'll take—all day long!

As the onsite manager, I had no choice about doing the ISMs because as I said, my company makes all those decisions. They said we're going to get whatever freebies we can on these properties and I had to do it. The reason I mention this is because we had already done this with Energy Trust 3-5 years ago and it was absolutely the worst experience ever and I never wanted to see Energy Trust again. It was a horrible experience. I spent the first two weeks after Energy Trust left replacing everything. The light bulbs and showerheads were horrible! The light bulbs took forever to turn on and they light up slowly and the showerheads were not durable. But low and behold, this second go-around with Energy Trust turned out to be one of the best experiences ever! The lights were just awesome—they light up instantly. And the showerheads, not only did they use regular showerheads but they also had the hand-held showerheads. So when a tenant had a hand-held, Energy Trust replaced it with a hand-held. The tenants left the items in place and it all was great. So Energy Trust has come a long way over the last 3-5 years.

### **Property Management Company**

It was decided by my boss that we were going to do the ISMs and then we were told it was going to happen. I imagine they decided to do it so the tenants could save money. But that's just my guess.

### **Small Property Owner**

We've had Energy Trust install the ISMs but when units turn over, we make sure they have low-flow aerators, showerheads and stuff and if they don't, we buy them and install them ourselves.

### **Property Owner's Rep**

I'm aware that Energy Trust offers ISMs. But as the owner's rep, I wouldn't be involved with something like that. It's something the property director would decide on and implement for the owner. My role is with the capital upgrades. I'm not out there promoting ISMs to owners.

### **Property Management Company, Onsite Manager**

I didn't actually set up the ISM work we had done. The owners of the property, a nonprofit housing organization, handled all the set up. They just let me know it was going to happen so that I could oversee it when it happened. So I'm not sure why or how they decided to do it other than they wanted more efficient light bulbs and saw that the program was available and took advantage of it. When the installation happened, I coordinated with Energy Trust and I was here at the property to make sure it went smoothly.

### **Property Management Company, Onsite Manager**

I think the decision to do the ISMs was driven by the main office of my company. So I wasn't really part of that decision-making process so I'm not sure I'm really qualified to answer questions about that. It was just something they said hey we're going to do this and it's going to happen on this date so then I just facilitated it. To fully answer the question, I'm sure the property does save money because there are common areas with electricity and common areas with water like the laundry room so the building does benefit from the efficiency. And then as far as each unit being more efficient that just helps the tenants. And helping the tenants helps the property—keeping the tenants happy and keeping the place rented.

## **2. Springboard to do Incented Measures**

When respondents were asked whether ISMs could help transition owners to do incented measures, most said no. As one portfolio manager said, "ISMs and capital upgrades are night and day. They're two totally separate things." Several indicated that the chief decision-maker for capital improvements is the property owner, and they are rarely engaged with or see the impact of the ISM program.



## **Respondent Quotes**

### **Property Management Company**

ISMs and capital upgrades are night and day. They're totally two separate things. From an owner's standpoint, there's just no connection or perceived value of going from doing ISMs to capital upgrades. My owners are investors and they're pretty smart people—it's architects, doctors and lawyers that own these properties. So from an investor's standpoint, the only upside of doing ISMs is probably the water, the low-flow showerheads. But I would say if I asked my owners if there was one thing they could adjust, probably only 3-4% would say I want low-flow showerheads put in to reduce my bill because I don't think they even think that much about it.

If Energy Trust wanted to use the ISMs as a springboard to do capital upgrades, they would have to figure out a more remarkable way to explain it to owners. If Energy Trust could figure out a way to say we're going to go in and do this and you have 10 units and we guess your water bill usage is this, we're going to cut it to this and going to save you this much money a year. And if a year doesn't sound like enough, you're only getting \$100-200, make it something big, make it \$1,000 and then figure out what kind of year it would take. Make it some kind of bigger money—add incented measures to the savings. Like those windows are going to last 15-30 years and so if you have your water bill and you save \$5,000 in 15-30 years and you can figure that out—your windows are free! Within that time frame, if you have to buy another set of windows because something else new came out, they didn't cost you a dime. You pay in advance and somebody pays you back the whole time. That would be a great seller and it's the only way I can think those freebies would work and they've never been explained to our owners that way. That they should upgrade because it's free—it would only cost them 40-45% and on top of that the resale value and geez you turn around and you just spend money to save money. Everybody loves to hear that.

### **Property Management Company**

From my standpoint, I don't see at all how the direct install measures could ever lead to an owner doing capital upgrades. I think the ISMs are very different from the incented measures. The instant savings—the showerheads, light fixtures and aerator stuff—owners don't even really see that stuff. At least in multifamily, owners are not going to see that very much because it's affecting the residents and in most cases, the residents pay for their own electricity so the owner isn't going to see any impact of that at all. Maybe with the showerheads and the water saving features, the sewer water bill may go down, but unless it's significant, which it may be, but sometimes it's not significant enough especially if the water rates go up anyway.

### **Property Management Company**

I would say it's a big difference doing the ISMs to doing incented measures. From light bulbs and showerheads to jump to capital improvements like windows—there's a huge span there. I'm not sure that our owners even relate that stuff, the ISMs to capital improvements. But there is a thought there—it really is the all-around energy efficiency

for your property, from your insulation to your showerheads. I don't know if there's a different way Energy Trust could market it as a whole package.

### **Property Management Company, Onsite Manager**

You've got to realize, most owners aren't even in the same state as us. They're out of state so it's not like they're visually seeing the ISM improvements. They're not like the tenant saying oh my gosh my electricity bill dropped a little bit because of the light bulbs I'm using and because of the showerheads, etc. At that point it's more of a tenant thing—the tenant feeling the goodness of the freebie. The owner's not seeing it so much. And I'm not sure they care about it that much. Owners aren't that into preventive measures. The fact that their tenants might love the ISMs because their electricity bill will go down and it may mean they're going to embrace that next lease that comes around rather than decide to move just isn't something that motivates owners to spend money on capital upgrades.

### **Property Management Company, Onsite Manager**

It sure seems like a logical progression to me that an owner would do the ISMs and then move on to capital upgrades. But I don't know what the train of thought is among the higher ups at my company. They're the ones that drive those decisions and I don't know if they're thinking that way or not.

## **3. Problems and Barriers**

Overall, there aren't many problems with the ISMs. A few respondents that implemented ISMs had problems with the quality of the light bulbs or effectiveness of the aerators. A handful more were not aware that Energy Trust offered the service but were pleased to learn it was available. One respondent who knew of the program didn't participate because of the disruption to tenants, and one more was frustrated by a property owner who won't participate due to a previous bad experience with another efficiency effort.

### **Respondent Quotes**

#### **Property Management Company, Onsite Manager**

We've had two issues with the direct-install ISMs: One, the low pressure showerheads result in a situation sometimes where the high pressure of the water coming through the supply pipe will cause the pipes to vibrate because the showerhead doesn't handle the high pressure well enough. So we've had to switch them back out to the original showerheads that were in there before so pipes don't vibrate. We only switched ones that had the issue. There might be others that had the issue that the tenants went ahead and did it themselves. I don't really see it as Energy Trust's fault.

Two, the light bulbs above the bathroom sinks, the vanity bulbs, those got switched out as regular high efficiency light bulbs as opposed to vanity high efficiency bulbs so we ended up switching those to vanity bulbs.

**Property Management Company**

We worked with Energy Trust in June of 2011 on a few projects, specifically on installation of new showerheads, aerators and energy efficient light bulbs. Our feedback from that experience is that the aerators limit water flow quite a bit—more than expected of an aerator. And the light bulbs that were installed are all burning out or have already burnt out within a year or a year and a half of installation. Our feedback for future projects would be for Energy Trust to provide higher quality products on bulbs. The showerheads are great; we received a lot of compliments and they have held up well so far.

**Affordable Housing Organization**

For the most part the CFL bulbs work really well in most applications but there are some where for instance you have a light fixture that's on and off much more frequently and you don't get any where near the life span that they say. And then of course you've got the mercury in those suckers and they don't get recycled the way they should be. So that's not perfect.

**Affordable Housing Property Management Company**

There were a few little hiccups with the process but once we got going, it went fine. One of the issues was that at first Energy Trust said they couldn't go to certain geographic areas but then they said they could. So a little bit of a hiccup but nothing major. It went fairly well. But we do have complaints now from the residents that a lot of the lighting is not bright enough. But that's about it.

**Small Property Owner**

I didn't know Energy Trust had a program for installing CFLs, showerheads and aerators. I sure would be interested in hearing more about that! I want to pursue that. It would be foolish not to it because it would be good for both tenants and me. I can see how it would help tenants with their electric bill! And help me with the water bill.

**Property Management Company, Owned by Owner**

I don't know about Energy Trust's direct install ISM program. We install low-flow showerheads and low-flow aerators on the sinks but we implement those things on our own because we have our own maintenance department, which I'm in charge of. But we don't do it through Energy Trust.

**Small Property Owner**

I didn't know that Energy Trust offered the ISMs until I attended the Multifamily Maintenance Fair last year. Energy Trust was there and they gave out a couple of aerators. So after attending the Fair, we did have Energy Trust come out and upgrade the apartments with CFLs, aerators and the showerheads. And that was fantastic! But I think apartment managers need more information about what Energy Trust offers and that we shouldn't have to rely on attending a Maintenance Fair to learn about it.

**Property Management Company, Owned by Owner**

I'm sitting here looking at these forms Energy Trust just recently left me. There's a

walk-through service request and ISM authorization form. I just recently learned that Energy Trust offered these ISMs and even then I didn't realize they brought us the stuff and installed it! I thought they just recommended that we do it ourselves. I'm just amazed! Our residents don't pay their electric bills, we do. So I'm going to follow-up with Energy Trust on this.

### **Property Management Company, Owned by Owner**

I'm aware of the ISMs offered by Energy Trust but we have never done any of those. The reason we initially didn't do it was because of the invasiveness of the window and siding projects we had underway and we didn't want to enter the resident units again to do the light bulbs and shower heads. But since then, we've talked to some other properties that have done ISMs and their maintenance staff have told us they actually spent quite a bit of time going back into the units because the residents had issues with the low-flow and taking them off. So time-wise, we just don't want to get involved with that. I can't think of anything Energy Trust could do to get us to change our minds.

### **Property Management Company, Owned by Owner**

Our company, the owners of the properties, won't let us do the ISM measures. I've been pushing for over a year to try and get the showerheads, aerators and CFLs in the apartments and my company is not letting me do it. It's the most ridiculous thing! It's free and it's Energy Trust for heavens sake! And trust me, I know how great Energy Trust is. There's no argument from me. It's crazy they won't do this. I mean why not—it just doesn't make sense. It's savings all around. And there's no risk to our property. And we can do any or all of the measures. It couldn't have been any more laid out well by Energy Trust—they schedule it and come out and do it all. I mean it couldn't be any easier.

For the life of me, I cannot figure out what the problem is. No one at the company wants to push it through I guess. Now our company did have a really bad experience with another company where they signed up for some energy saving measures and ended up ultimately having to pay thousands of dollars for something that they didn't really know what they were doing. They also had a bad experience years ago with low flow toilets. There was some mechanism that was put in, not through Energy Trust, but they put in all these low flow toilet things and then they had all this sewage backup. So I don't really know if it's because they've been burned before that that they don't want to do the Energy Trust things.

I'm going to keep trying. We have a new regional manager now and I'm going to try again with him. But this poor guy from Energy Trust was calling me every week for the better part of a year to check in on the ISMs. I had asked him to keep calling me—he wasn't annoying me. But I finally had to tell him it wasn't going to happen and to stop calling.

#### **4. Satisfaction with Process and Implementation**

There was a high level of satisfaction with the process of doing the ISM installations. Respondents said it was quick, efficient, smooth and professional. Respondents were especially pleased that very little time or effort was required by onsite property staff.

##### **Respondent Quotes**

###### **Property Management Company, Onsite Manager**

The process went really smooth. The guys were prompt and they were great to work with. They came and did it for us. It was great that the only thing I had to do was open the apartment doors and that was about it.

###### **Property Management Company**

At the property I managed in Tigard, Energy Trust put all the energy stuff in the apartments—like the showerheads, lighting and stuff. It was a lot of work they did! At that property I had 200 units. But it worked really well. The people that came out for the installation were wonderful. And very efficient. They did it in one day and it was a great experience.

###### **Property Management Company, Onsite Manager**

The installation of the ISMs went really well. I loved it! I watched Energy Trust go to all 180 units at our property—it was a 2-day process and it was phenomenal how they did it! Very efficient. And it was really great for my maintenance staff.

We even had one tenant accuse Energy Trust of trying to steal from them. And the way Energy Trust did the installation, there was no way that could have been true because Energy Trust had back-up for that. This is a problem property out here at 188th and Burnside, so it's been a challenge over the last couple years but I've gotten it nice and cleaned up.

###### **Property Management Company**

I know all about the Energy Trust ISM program. We couldn't have taken advantage of more freebies than possible! We did every single property in our entire portfolio! We have about 680 properties that have been treated by Energy Trust.

The guy that ran the ISM program for Energy Trust ended up hiring one of our landscapers to do all installs: She does all her own notices, she goes into the units by herself—we don't have anything to do with it! Which to me is absolutely great! In comparison, when we did the Energy Trust inspection, I had to sit there in every single unit while the inspection was done—the last one was 18 units and I was there for a couple of hours and it's very boring. So I ended up doing half of work for them just to get it done quicker.

### **Small Property Owner**

We had them upgrade apartments with CFLs, aerators and the showerheads. And that was fantastic! Everything went really well with the installation. No problems.

### **Property Management Company, Onsite Manager**

The whole process went really smoothly. I think the way they came in and did it was very professional. There were no problems.

### **Property Management Company, Onsite Manager**

Overall, we're pleased. Obviously it's a good idea to have the efficiencies. We had all light bulbs, aerators and showerheads switched. The process went very smoothly. The Energy Trust team went in and it was really quick, efficient and smooth.

### **Affordable Housing Organization**

We haven't ever had any problems with the direct-install items. We've been using them extensively in our properties. And trying to keep them in place. We do replace some of things at turnover so if somebody moves out, we get it back to where we want it to be when somebody new moves in.

### **Affordable Housing Organization**

We had CFLs, showerheads and faucet aerators installed in all of our properties. The process went very well. But it's been at least 3 years since we did this.

### **Small Property Owner**

I have done that. We did the CFLs 4-5 years ago. They came through and did all of those and then the aerators and showerheads, we've gotten before from Energy Trust. We were very satisfied. When Energy Trust changed the light bulbs that was very nice.

### **Property Management Company**

One interesting thing we realized was that because we'd done the freebies a few years ago, we just assumed we didn't need to do again. But technology changes every couple years and now we realize we need to always be thinking about it. We have a property downtown that was built 4 years ago that we're already doing freebies inside the units again and it's a LEED certified building. So that shows you how rapidly things change—that a LEED building this new already needs upgrades.

## **5. Tenant Participation and Feedback**

Respondents report a fairly high rate of participation among tenants. Importantly, the notification letter provided by Energy Trust seems to help encourage participation. There also appears to be a fairly high level of satisfaction with the new ISM items installed with most tenants leaving them in place. Many respondents simply said, "We haven't had any tenant problems with the installations."

Although respondents report that tenants seem satisfied, respondents don't get much feedback from their tenants nor do they seek feedback either positive or negative.

Many respondents don't really know if their tenants have seen a decrease in their utility bills as a result of the ISMs. While some property managers acknowledge that providing this type of benefit to tenants can help with retention, no one indicated that they use the measures as a means to attract or retain tenants.

### **Respondent Quotes**

#### **Community Association Management Company**

Energy Trust gave us a really nice letter and we sent that to all the residents a long time in advance so they knew exactly what was going on and it seemed to help participation. So out of 200 units, I would say 15 people opted out, so not many. And some residents took the stuff off but most everybody really appreciated it because they understood why we were doing it and that it could save them money. Our residents do pay their own electric. And some do find their own bills do go down. So most people were pleased. Of course some tenants are never pleased when you say you're going into their apartment. For that matter, you're always going to have people that don't like whatever it is you're doing. That's just the way it goes.

#### **Property Management Company, Onsite Manager**

We gave residents the notice and nobody said no! After the work was done, we had no complaints at all from residents. No one said they didn't like the way something worked or wanted it removed. The residents did leave all the new stuff in place. To tell you the truth, our residents haven't really mentioned whether the ISMs resulted in a decrease in their utility bills. We tend to just hear about problems.

#### **Small Property Owner**

We did the ISMs with all the units. We gave residents the option of not participating and no one decided not to participate. And they left the new things in place. Our residents pay their electric bills. I live at the property and personally in my own apartment, I started seeing a decrease of \$8-10 a month in my electric bill. And the owner did notice a difference in the water bill as well. Within about a month and a half, he noticed it had dropped—I don't know how much. We had several residents write complimentary letters to the people that did the ISM installations because they were so impressed. We passed those letters along to Energy Trust.

#### **Property Management Company, Onsite Manager**

About 50% of the residents opted to participate, including the CFL lighting change, the aerators for the shower/bathtub and the aerators for the bathroom sink and kitchen sink. And also what was nice is that if the resident had a hand-held showerhead, Energy Trust replaced it with a hand-held. On the electric part of it, it saves the tenants because they're the ones that pay the electric bill. On the water, it saves the owners because we pay for the water bill.

**Property Management Company, Onsite Manager**

We had proper notice from Energy Trust so I was able to give tenants advance notice and everyone knew what was going on. I don't think any tenants had a problem with participating. And the tenants left the new stuff in place.

I didn't really get any feedback from tenants. And no feedback probably means tenants were either indifferent or had a positive reaction. The only complaint was about the vibrating pipes (see ISM Problems section). And no one said anything about the vanity bulbs—we noticed that on our own. Our tenants do pay their own electric bills. But I haven't gotten any feedback on their bills being lower. It would be interesting to know if there was a noticeable impact.

**Property Management Company**

We did a bunch of the freebies inside the units. And the residents love those! I just think that Portlanders are very environmentally conscious. So even though they may not see a direct savings on some of this stuff, they like it.

**Affordable Housing Organization**

Our tenants seem to like the direct installs. They don't talk to us much about it including either positives or negatives. But if they did have problems, we would try to understand what's going on.

**Property Management Company, Onsite Manager**

We have to give tenants the option of not participating. But Energy Trust gives us this notice and on the front side it says yes we'll allow you to switch out bulbs, showerheads or one or the other. And the backside, it says I don't want to participate and don't want you in my apartment. I got 99% participation and I think the only ones that wouldn't participate were the ones that had big dogs and work during the day so I think the only reason they didn't participate was because they weren't here to keep their dogs calm.

I will say the tenants were nervous because they'd been through it before. They were afraid they were going to have to switch out their light bulbs and showerheads like they had to do the last time we did this. But they were just all amazed! At the same time, the tenants at this property are all third world refugees so they barely speak English so they don't really understand what energy efficiency is or Energy Trust or anything.

**Affordable Housing Property Management Company**

We didn't give our residents a choice about participating—we just went in and did it. I guess someone could have said no, but no one did. Sometimes our residents take the stuff off because they don't like it but for the most part, they leave them in. This is especially true in our senior properties—those folks tend not to mess with them. Some of our tenants pay their own electric bill, others don't. It depends on the property. But I haven't ever heard from any of our tenants that their electric bill decreased after the ISM installations.



### **Property Management Company**

We don't have any problems with our residents participating. We send out 24-hour notices, which we put on the door. Every once in awhile someone will say no and then we just renegotiate the time with them or we ask them do they want to pay us the \$50 fee to come back—some kind of penalty—and a lot of times that will diffuse it pretty quick.

### **Property Management Company**

Our residents do pay their own electric bills. But after we do the ISMs, we don't really hear from them as to whether their bills decreased. No, that never happens unfortunately!

## **6. Suggestions**

Two respondents offered suggestions for the ISM program, both with more of an emphasis on the water usage components. One indicated interest in getting help to measure the effectiveness of the program so they can more accurately track any savings.

### **Respondent Quotes**

#### **Affordable Housing Organization**

We have taken advantage of many of the ISMs. But we don't do it for all our properties. We have done it once for ten of our buildings and then we haven't taken advantage of the ISMs again. One thing we like to see is a portfolio approach to ISMs because here we have staff that goes into the unit once it's vacant to turn it over and to clean it up. And at that point we want them checking for the presence of low-flow aerators and showerheads because sometimes tenants replace them with a higher flow item. And so it would be nice to have the ability to have access to aerators and showerheads directly from Energy Trust that our staff could install. It would be nice because Energy Trust would still be capturing the savings—each aerator they give to us saves X amount of money; and it would be nice for us because these things have a tendency to disappear in a property and now that we've had 10 properties done all at once, we want to be making sure that the savings are maintained over the long term.

The other idea is Energy Trust should do an ISM for toilets. Often the flappers malfunction and that can lead to huge amounts of water wastage. I think Energy Trust could very inexpensively go through and replace the guts of the toilet with a Fluid Master 400A replacement kit. Those kits are \$10-20 and the time is minimal to replace them but the savings is huge. So that might be something for them to consider.

#### **Affordable Housing Organization**

We would like some way to be able to measure the effectiveness of the ISMs. Tracking the results of replacing small fixtures is difficult. But if Energy Trust could help us in some way to do that, it would be helpful. We put in all these low-flow fixtures and the water pressure was great but we have no idea whether the water bills were reduced.

The tenants pay for water but the water bill comes to us. The City of Portland unfortunately doesn't bill tenants directly so we divide the water bill among tenants. So our water bills keep going up but that's because the cost of water keeps going up so I don't know on our end what the savings from the ISMs really are. We need some better way of monitoring the utility bills after the installations.

## **Awareness and Communications**

Respondents were asked about their awareness of Energy Trust, need for additional communication and to discuss program messages compelling to them.

For most, lack of awareness does not appear to be a problem. However, there appears to be a correlation between the number of properties owned or managed and awareness level; specifically, those owning or managing fewer properties may be less aware than those who own or oversee larger portfolios. These also tend to be owners that don't utilize the services of a property management company. One property owner expressed a strong need for Energy Trust to reach out to small property owners like himself.

Many respondents rely on other sources to get information about Energy Trust programs, including vendors/contractors and multifamily housing associations, e.g., Metro Multifamily Housing. For many, this seems to be an acceptable means of getting needed information and they encouraged Energy Trust to continue targeting these information sources. One affordable housing organization suggested Energy Trust put more emphasis on targeting contractors that have expertise in affordable housing work. A few respondents said they wouldn't mind getting more information directly from Energy Trust. But quite a few simply said they don't need any more communications with one respondent specifically saying Energy Trust shouldn't spend more money on outreach.

Respondents tend to seek out Energy Trust programs when there's a need or at annual budgeting times. A couple of respondents stressed the fact that because energy efficiency products and programs are always changing, it would be helpful for Energy Trust to keep them updated with the latest information.

A few suggested some additional targets as conduits for information including the Spanish speaking community and public school children. A couple of respondents with access to large networks of owners offered to help out by providing leads to Energy Trust or by including Energy Trust information in their own mailings to owners.

A few respondents suggested message statements that could promote participation with several related to money, including:

- Take advantage of the money—it's available
- The money is the most important thing
- Payback should absolutely be communicated to people
- Energy Trust can help with the long-term viability of properties

## **Respondent Quotes**

### **Property Management Company**

As I said, we look at energy efficiency ideas when we take over a new property or at annual budget time. But it would be nice to look at it more frequently than we do and

what would help is if we got updates from Energy Trust so it would be more in the forefront of our minds because we all have busy lives and work to do.

Because owners look to their property management companies to bring the Energy Trust message to them, Energy Trust needs to target people like us. A great way to do it would be through Metro Multifamily Housing. It has a huge, huge audience—it's going to cover a lot of the big players.

Things are always changing when it comes to energy efficiency so it's important to keep me informed of what's available in terms of programs and products. One of our vendors actually sent a flyer that says they have a new product for energy efficiency inside of elevators and we're going to consider doing it. But it also said there was a potential Energy Trust rebate on it, which a lot of clients like. Even though a lot of clients see the benefits of doing energy upgrades, the tipping point is them being aware that there are these energy rebates available. And I know these programs change from time to time and sometimes the funding dries up, etc. So just being cognizant of what's available is key to me. Frankly, I don't know how Energy Trust would disseminate that information but it's worth thinking about.

Overall, I just think getting the message out there more is absolutely the key. I just think more and more people being aware is the key. I really do. For landlords and owners to be aware that this program is out there and also again to keep people informed of all the changes in the energy efficiency products and programs available. Again I'll give the example of the LEED building that was built 4 years ago—I would have never thought that we would be doing the Energy Trust freebies so soon. I just thought hey it's a LEED building, it's a newer building but there's an opportunity there which goes to show you that it's an issue that needs to be in the forefront of your mind.

In terms of a message, payback should absolutely be communicated to people.

### **Property Management Company**

I don't think there's low awareness of Energy Trust in the multifamily industry. I don't think that's much of an issue unless it would be with smaller single SRO owners or people that just have half a dozen apartments and are not members of the apartment associations. There are four to five apartment associations in the Portland/Vancouver metro area. Metro Multifamily Housing Association being the big one. And Metro does pass on a lot of that Energy Trust incentive information to us so that's helpful.

But, quite frankly, I am not aware of receiving any information from Energy Trust that has been sent directly to our company. Information about Energy Trust comes to us primarily through our contractor and through associations like Metro Multifamily. The incentives we become aware of are quite frankly the result of our contractor mentioning to us new incentives and that sort of thing. Of course, our contractor has a vested interest in providing work for her company but at the same time, it's not like we're out looking for those incentives because we know that if something does become

available, we'll learn about it either through the Metro Multifamily Housing folks or primarily, we'll be made aware of it through our contractor.

I think it would be good if Energy Trust sent us some information directly—it would be helpful. And email is especially good because we're not into using paper and adding to the trash bin so to speak. But I also think Energy Trust should work closely with Metro Multifamily Housing—they are a very efficient target for Energy Trust in terms of reaching multifamily property management people.

### **Small Property Owner**

I think awareness of Energy Trust is low because we had no idea of Energy Trust until we went to the Metro Multifamily Housing Maintenance Fair last year. In fact I've mentioned it to other property managers that the information for apartments is just not out there! So yes, I think Energy Trust needs to do more to inform people. Even if Energy Trust had somebody that went around to apartment communities and said, hey I'm not trying to sell you anything, I'm just trying to leave you this free pack of information because it's a great program. I mean there is so much money that can be saved—these owners and property managers can be saving a lot of money. You hear on TV about how homeowners can get incentives for their old dishwasher or refrigerator or whatever. But for apartments, I had no idea you could do the same thing.

### **Small Property Owner**

I strongly feel that Energy Trust needs to reach out to small property owners like myself. Many of us just don't feel we can afford to do these projects and we don't know that there's help out there and we don't seek it. It was extremely helpful to me to find out I could get help through Energy Trust and I feel fortunate that I just happened to discover this through one of my contractors. I do think we're a harder group to reach because we don't have property management companies so Energy Trust needs to find a way to reach us directly as the owner.

Maybe Energy Trust should get leads from people like me that have had good experience—people like me could provide the names of other smaller property owners. And then Energy Trust could call those people or send them something and also mention the name of the owner that has participated. The smaller property owners tend to know each other in small towns. So something like that could be shared. Right off the top of my head I could give you several names of other property owners that would be interested. It makes sense as a way to reach the smaller property owner. It's as good a way as any! I would guess that Energy Trust doesn't have all these names. Plus, even if I were to tell other property owners about my good experience, they still may not understand all the advantages and may not take the initiative to call Energy Trust. But if Energy Trust calls them or sends them some kind of email, it might get things going. I think a lot of us see advertising on TV but it does not imply the kinds of services that are available for rentals. I don't think there's much opportunity out there for owners of rental properties to get information on Energy Trust. And I think a good message is: Energy Trust is doing you a favor and you had better take advantage of it! Anyway, I'd

be happy to provide some leads to Energy Trust. I owe Energy Trust something—they've given me a lot of good money!

### **Property Management Company**

I would love to find a way to market Energy Trust a little better to my owners. Because I do think energy efficiency is really starting to become an issue. It's just much more out there. Prospective residents are really thinking about it and I believe especially the younger people. And with the economy being the way it has been, obviously any money we can help people save is very important. So if there's anything I can do to help market Energy Trust a little more I would like to do that. If Energy Trust has brochures or anything like that, I would be more than happy to combine them with the stuff we send to our owners. We have hundreds of owners literally. Maybe we could do a little joint newsletter. I wouldn't mind sending it out with our owner statements or emailing to it to them. We just need anything that reminds our owners of the things that really do help.

### **Community Association Management Company**

I'm very aware of Energy Trust just because I'm in the business. However, I think the more information a manager like myself has, the better they can help their community association. So I think a newsletter or something like that wouldn't be a bad way to go for Energy Trust. I also think Energy Trust should look into the Oregon/Washington Community Association Managers (OWCAM) and the Community Association Institute (CAI). These are the associations that govern community managers like myself that serve homeowner associations. They are always looking for good presentations. It's a good way to get the word out to a lot of vendors and owners and community managers on what Energy Trust has and what it can provide. I think someone from Energy Trust came and spoke at either OWCAM or CAI awhile back. It was several years ago. It was when BETC was big. At least there's still something out there for us—Energy Trust! We just don't talk about BETC any more, we just talk about what is!

We get much of our information about Energy Trust from our vendors and when we talk to them about upgrades, we expect them to be knowledgeable about Energy Trust options. So vendors are also an important target for Energy Trust.

### **Affordable Housing Organization**

I think Energy Trust should target contractors a lot more. And specifically, contractors that have experience in affordable multifamily housing. There are probably only ten contractors in Oregon that do the majority of the multifamily affordable housing. It's partly because of all the Federal regulation—there's so much federal regulation and requirements for affordable housing. It would be a benefit to everyone if Energy Trust could get the message out to these contractors. Because right now, it's not the contractors that are suggesting to us those upgrades that would include Energy Trust incentives and it would be helpful if they were more knowledgeable.

I don't know what Energy Trust's marketing budget is but I think something that would have effect in our community, especially with the Spanish speaking population, is just some simple marketing outreach and branding saying: make sure and turn off your

faucets, use minimal energy, etc. Very simple things like that would have a big payoff! Radio is big still in the Spanish speaking community. Radio isn't very expensive to advertise on. So again simple things like that would have big benefit to energy usage in general.

Our organization does a lot of after school programming in-house. As part of that, we do energy related things with the kids and we also have energy fairs and we ask Energy Trust to participate. Kids are a big part of getting to the parents. I think it's important to get the energy message out there in the public schools.

### **Affordable Housing Organization**

I do get updates from Energy Trust. I feel well informed. I don't feel the need for more outreach or communication is particularly an issue. And I know enough to know when I should call and find out more. I can track down somebody to talk to pretty easily. Obviously Energy Trust needs to continue what it's doing but I would say if Energy Trust is looking at a limited amount of money and you're going to divide it up differently, I wouldn't say to put more into outreach. I would say just get more money on the street.

The most compelling Energy Trust message for us would be something that addressed the long-term viability of our projects. That's it! A message that says Energy Trust can help us do things that will work for our affordable housing now, in year five, in year ten and in year forty!

### **Affordable Housing Organization**

We do like getting communications such as emails but it depends on what it is. It's a sticky wicket—you don't want to get tons of sales calls and you don't want to get bombarded with stuff. But at the same time, if there's something that's realistic for us to implement then it's critical for us to be knowledgeable about it.

### **Property Management Company**

Oh, absolutely I'd like more regular information from Energy Trust on the latest programs. Right now, most of our information comes from our vendors. They suggest programs we could do that would include Energy Trust incentives. That's how most of our projects get started.

### **Small Property Owner**

Energy Trust might send out flyers or something just telling you what's available. But I think everybody's pretty much aware of Energy Trust—at least the people that I've met. When it comes to a message, the money is very important. Energy Trust just has to advertise the money—that it's available to people.

### **Property Management Company, Owned by Owner**

Because the owner's rep has dealt more directly with Energy Trust on our big projects, I don't necessarily know what rebates and things are available for different projects. And so it would be helpful if those kind of resources were made available to property

managers directly. I think that's the only thing for me. Email is a good way to get info to me.

**Small Property Owner**

The only thing I'd like is to get more information on is the latest stuff—for example, the LED stuff. That's what is most important to us—the latest stuff on how to save some energy. I do get some mailers from Energy Trust. But I don't have people calling me. I think the mailers work for me. I usually read them. It doesn't matter to me whether I get information via snail mail or email. Just as long as I get the information.

**Affordable Housing Property Management Company**

I like to get information on the programs via email. I know there's information on the website but what happens is that I will make a note to go on website and then I never get to it.

**Property Management Company**

I don't think we need any more communication from Energy Trust in terms of program information. However, our company now operates in seven states and Energy Trust is only in Oregon so maybe information about other states and other municipalities might be helpful but I don't know if that's necessarily Energy Trust's job to provide us with information on other states.



## Other Findings

This section captures responses from two areas of questioning that were not explored in-depth with respondents but are included for directional input:

1. **Positive comments about the Existing Multifamily program**
2. **Opportunistic times to do energy upgrades: Vacancies and failed equipment**

### **1. Positive comments about the Existing Multifamily program**

Many respondents had positive things to say about the overall value of the Multifamily program, the benefits of specific features, and the quality of personnel.

#### **Respondent Quotes**

##### **Affordable Housing Organization**

I think Energy Trust has done really well in explaining to us the benefits of new technology and efficient technology. And I think they've done well in understanding our position as an owner with limited funds available. I'd also say the people I've dealt with at Energy Trust have always been really good and helpful—with answering questions and helping with paperwork.

##### **Affordable Housing Organization**

I would say one of the best things about the Multifamily program is that some of the staff are experts in their field. We found these folks have a wealth of information that's very helpful as we work with limited design budgets to scope out the work. They essentially can help us scope out lighting replacement work. So that's very helpful. So we feel good about the people we come in contact with at Energy Trust.

Another positive about the Energy Trust program is that it's durable and consistent. And even if we have frustrations and things we'd like to change about the program, the fact that there is some consistency helps us have assurance that these incentives are going to be around tomorrow. Because housing development is a long-term process. When we initially conceive of rehabbing a building, by the time we get around to doing it, three years might have passed and we wouldn't be making assumptions based on incentives if there was a risk that those incentives would not be there tomorrow. So the durability of the program is a good factor.

Another benefit of the program is that it gives us some kind of clear stretch performance standards above code. And it's helpful in low budget projects to use Energy Trust's standards to direct our contractors.

When we've included energy efficiency measures that are incented by Energy Trust in our projects that involve a moderate rehabilitation of a property, not substantial where you're gutting a building, we've typically seen 30% reduction in energies.

### **Community Association Management Company**

The best thing about the Energy Trust Multifamily program is that it helps provide a way for people to get things done that maybe they otherwise wouldn't do. I think it helps people make decisions to make energy efficient improvements that without the program they wouldn't be able to afford. It provides them with an incentive to get some of their money back and also have energy savings.

### **Property Management Company**

One of the key benefits of the program is that Energy Trust does the energy audits up front. That was very helpful for us. And they did that free of charge. They came out and did an assessment of the property and gave us a spreadsheet that talked about recommendations, payback periods, and what types of things we could do. And then in addition to that, they helped us fill out the application—the tax credit application, the rebate application—and they sent it in for us.

### **Property Owner's Rep**

On both of capital upgrade projects, I had a lot of direct contact with a woman at Energy Trust. And it's been fabulous! No problems. Whenever I had a question for her or whenever she needed a piece of documentation from me, she'd email me or call me. It worked well. I know this woman actually works for the contractor that manages the Multifamily program for Energy Trust, but she represents Energy Trust. It's just like my situation: I represent the owners on their properties and I might as well be on their payroll. It's what I get paid to do.

### **Property Management Company**

The experience with Energy Trust was great! We were satisfied. Energy Trust was great to work with. There weren't any hiccups with Energy Trust. The programs were tailored to exactly what I needed so I don't have any negatives. Everything went well. I even helped teach Energy Trust some methods when it came to things such as installation. But I think I learned as much from them as they learned from me. So I'm a bad example of someone being able to offer suggestions on how Energy Trust could improve because from my experience, it's been good. And most of the time, my owners were satisfied. Some wanted photos of the completed work but that's about it. We didn't like the State—we had a lot of problems and Energy Trust tried to help us as much as they could until it got to the point where Energy Trust wasn't able to help us much with the State because the State was making so many changes.

### **Affordable Housing Organization**

The person I've worked with actually works with the consulting firm that contracts with Energy Trust and she's been great to work with. She's been responsive, easy to work with, gets the big picture and is an advocate for what it is that we're doing. So that's good. Also, I'd say the program has been fairly easy to work with. Turn around time is pretty quick and they've been pretty flexible. A lot of times, the work we're doing with Energy Trust is just a piece of what we're doing so having that flexibility is really nice—they play well with others is one way you could put it.

**Property Management Company**

I would rate every aspect of the Energy Trust program as excellent! On a one to five scale, Energy Trust is a five. I just don't really have any complaints or suggestions. It's handled so well. I have prompt service. I have excellent service. They're very nice people to work with.

**Property Management Company**

I'm a big supporter of the program and I think it's just great. I've known one of the women that works there for several years and she's great.

**2. Opportunistic times to do energy upgrades: Vacancies and failed equipment**

Although this issue was not explored in-depth with respondents, it appears that neither vacancies or failed equipment is a time when respondents think of doing additional capital upgrades. The limited findings on this issue include the following respondent quotes:

**Property Management Company**

When items break down, we do look at replacing them with energy efficient items—say replacing appliances with Energy Star appliances or if a light fixture doesn't work any more, we'll replace it with an energy efficient light fixture. But my understanding is that you don't necessarily get a rebate from Energy Trust for a one-off type of deal. The amount that you spend has to be substantial enough for it to be worthwhile for Energy Trust to give you an incentive. So when things break or are not working anymore, I don't think we contact Energy Trust because those are just one-off type of things. And we don't really consider at that time whether it's a good time to do other upgrades.

**Affordable Housing Organization**

As I mentioned, our approach is too focused on "chasing problems" and we're trying to change that. But when things break or need fixing, we often just call our contractors and vendors to make repairs and don't really think about contacting Energy Trust.

**Property Management Company**

We don't think about doing upgrades when units become vacant. That's not really an issue because the turnovers are so quick. We definitely wouldn't leave an apartment vacant just for a change. Most of the contractors we work with can get in and out of a unit pretty quickly. They may be in the building for 2-3 weeks or a month but as far as each individual unit being impacted, that's usually minimal. Vacancies are just not related to when we would decide to do capital improvements.

**Property Management Company**

When units become vacant, we don't see that as a better time to do upgrades. Vacancies are just not a factor in when we do upgrades. It's one of those things I never give any thought to because we try to stay on top of the opportunities all the time.

**Affordable Housing Organization**

Our vacancies are really only defined as being the time when we're working to turn over the unit and clean it out and get somebody certified to move in next. It's not really a factor in deciding to do efficiency upgrades.

#### **IV. Appendix**

**This appendix includes the following materials:**

- 1. Non-completes:** A recap of the reasons for non-completed interviews.
- 2. Pre-letter sent to respondents**
- 3. Discussion guide used in research**

## **Multifamily Research: Non-Completed Interviews**

**Energy Trust mailed pre-letters to sixty-nine (69) potential respondents. All 69 respondents were contacted and interviews were completed with 27 of these respondents. The following recaps the results of the remaining 42 non-completed interviews.**

- 1. Respondent did not return call:** Twenty-three (23) respondents did not return calls from Forrest Marketing within the timeframe of the study.
- 2. Respondent agreed to participate but didn't follow-through:** Four (4) respondents were reached and expressed a sincere willingness to participate but were not available at the scheduled time and despite efforts to reschedule, the respondent never followed through. Although this only occurred with 4 respondents, it's an unusually high number with this type of research.
- 3. Respondent declined interview:** Only one respondent declined to participate. She was very courteous and simply said her office was very busy at this time and couldn't participate.
- 4. Inaccurate contact information:** Nine (9) respondents were eliminated because they could not be reached at the contact information provided.
- 5. Other reasons for non-completes:** Five (5) respondents were eliminated for the following reasons:
  - Two respondents were eliminated because after being contacted by Forrest Marketing, the information they provided was deemed insufficient to be considered a completed interview.
  - Three respondents were eliminated because it was realized after the pre-letter was sent that they represented a duplicate of another respondent.

**Existing Multifamily Market Research  
Sample Pre-letter Sent to Respondents**

January 10, 2013

Respondent Name

Respondent Title

Company Name

Company Address

Dear [Name of Respondent]:

Energy Trust would like your opinion on how its Multifamily program can best meet your needs. To get your input we have retained an independent researcher, Brenda Forrest. Brenda will be calling you in the next week to ask whether you are willing to participate in a brief telephone interview.

We understand the value of your time and when you receive a call from Brenda, she will schedule a phone interview at your convenience.

Your participation in this research project is of course voluntary but I encourage you to participate. We highly value your input and hope you will take a few minutes to share your thoughts with us.

If you have any questions about this research project, please don't hesitate to contact me at 503-546-3625, or [scott.swearingen@energytrust.org](mailto:scott.swearingen@energytrust.org). Thank you for your cooperation.

Sincerely,

Scott Swearingen  
Business Sector Project Manager  
Existing Multifamily

## Multifamily Market Research Discussion Guide

**Note:** It was agreed that the highest priority questioning areas would be #2, 3 and 4 below.

### 1. Introduction and warm-up

### 2. Decision-making dynamics

- **Describe how energy efficiency decisions are made:** Probe for: process, criteria and roles/titles of those involved.
- **Who is the ultimate decision-maker?**
- **Financial criteria:** Explore importance of ROI, payback hurdle rates and available capital in making energy efficiency investments.
- **Expected duration of ownership:** Explore impact of expected duration of ownership on decision-making and perceived benefits related to projects.
- **Impact on property value:** To what extent is raising the value of the property a motivation to implement energy efficiency improvements.
- **Impact of vacancy and turnover rates on decision-making**
  - How do vacancy rates, especially when low, inform investment decisions.
  - When units become vacant, is this an opportunity for Energy Trust to assist with improvements and how can Energy Trust "connect" with customers to do this.
  - How important is it to customers to retain tenants and keep turnover low. Probe for specific factors that are important in retaining tenants such as utility bills.
- **Out-of-state impact:** How does out-of-state ownership impact likelihood of implementing energy efficiency upgrades (versus in-state)

### 3. Benefits, barriers, motivations and needs: Incented projects and ISMs

An important area of questioning will be to explore issues related to incented measures and ISMs individually as well to explore issues related to moving customers from direct installs to incented projects. As agreed, the priority will be on incented measures. The issues below will be explored by segment (large, small and low income) and will include:

#### a. Incented measures and ISMs: Explore for each:

- Benefits of incented measures and ISMs
- Barriers to incented measures and ISMs
- Motivations for participating in each program
- How Energy Trust can make each program more effective

#### b. Converting ISMs to incented projects

- What is the impact of offering ISMs on getting properties to follow through with incented capital projects?



- Identify barriers to customers moving from direct installs to capital improvements.
  - What motivates them to do incented projects after receiving ISMs? Probe for type of information or steps Energy Trust could take that would facilitate this.
- c. Likelihood of doing incented projects by property size**
- Are smaller properties more likely to do incented measures. If so, why. How could program be designed to encourage smaller properties to do incented projects?
  - Are larger properties less inclined to do incented measures. If so, why. What can be done to motivate them to do more incented projects?
    - Probe for significance of the cost of capital upgrades being more at larger properties and how it may make a difference.
- 4. Specific areas of improvement: Outdoor lighting, windows and insulation**
- What motivates customers to do each of above types of projects; what are perceived benefits and what can be done to encourage customers to do more of these projects.
  - Probe for: overall comfort, reducing energy bills, improving appearance, customer service and keeping dust and insects out. For windows and insulation, if response is “drafty” or “windows leak” or “cracks”, probe: “Why is that a problem exactly?” to get at whether it is comfort or energy savings.
- 5. Tenant engagement practices and influences**
- How important is energy efficiency as a method to retain/attract tenants? To what extent does it play a role in your energy efficiency decision-making?
  - How interested do tenants seem in energy efficiency issues? Do they ask about it and if so, what issues are most important to them.
  - For ISMs, probe for the importance of allowing tenants the option of not participating in the program and also of leaving the old bulbs, showerheads and aerators in the units.
- 6. Priority of energy savings and awareness of Energy Trust**
- How important is it to you to incorporate energy efficiency measures in your projects/properties—is it a priority?
  - What is your level of awareness and perception of Energy Trust's role in helping you with these needs?
- 7. Incremental upgrades and/or replacing failed equipment**
- Explore decision-making dynamics when respondents are replacing failed equipment or doing upgrades: Are they thinking of efficiency and incentives; do they think to contact Energy Trust—why or why not; what would motivate them to contact Energy Trust?
  - Explore how respondents decide who will do the work: their own operations and maintenance staff versus people they routinely work with versus those in the Energy Trust trade ally network. How can Energy Trust encourage use of the program regardless of who does the work.

- Explore decision-making criteria and timing around doing incremental projects separately or along with deep retrofit projects (significant remodels).

## **8. Communications**

- How effective are the communication materials provided by Energy Trust in meeting your needs?
- What are the most effective ways for Energy Trust to communicate and share information with you? Probe for specific communication tools.
- In your opinion, what is the most important message Energy Trust could be communicating about the Multifamily program? Any other messages?

## **9. Wrap-up**

- Do you have any other suggestions for how Energy Trust's Multifamily program could better meet your needs?
- Are there any other issues we haven't covered that you'd like to comment on?
- Thank respondent