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Final Report

2012
Energy Trust of Oregon
Trade Allies Survey

Funded by:

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Prepared by:

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We would like to thank Energy Trust of Oregon for giving us the support needed to conduct this project. We also wish to acknowledge the many trade ally companies that agreed to participate in the survey and provided their responses to our questions; we appreciate their willingness to participate.

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EXECUTIVE SUMMARY

This report provides the results of the eighth annual Energy Trust of Oregon (Energy Trust) Trade Ally Survey. The main goal of this study is to characterize trade allies and contractors working with Energy Trust and to gather feedback of various offerings trade allies receive from Energy Trust.

The web-based survey was distributed to over 1,400 trade allies through email invitations, banner ads on Energy Trust's website, and advertisements in other channels. A monetary incentive was offered. After a five-week fielding period, 194 unique trade ally firms responded (13.6% response rate). Although the survey was offered to the entire population of trade allies, the low response rate suggests the possibility of self-selection bias, and in fact, large firms were somewhat over-represented in the sample. We applied weights based on firm size to survey items that investigated market penetration of specific energy-efficient technologies to develop more realistic estimates of penetration.

The following are the highlighted findings, conclusions, and recommendations:

Economic Impact of Energy Trust Programs on Business

- A large majority of the trade ally firms (90%) said that Energy Trust programs had positive economic impacts on their business in 2011. Renewable trade allies reported experiencing slightly higher positive impacts than those in the residential and commercial and industrial (C&I) sectors.
- Half of the trade ally firms (50%) expect that Energy Trust projects will account for a greater proportion of their total project volume in 2012.

Paperwork

- Most of the trade ally firms (80%) reported completing Energy Trust paperwork for a majority of their customers. This finding was highest among trade allies in the renewable and C&I sectors; 68% and 50% of the trade allies in these sectors said they always complete all of their customers' paperwork.

Tax Credits

- Twelve percent of the residential trade allies and 8% of those in the C&I sector reported they were not aware of the Residential Energy Tax Credit (RETC) or Business Energy Tax Credit (BETC).

- More than half of the respondents were aware of some recent changes to the BETC, but 44% did not know specifics of the changes. Almost half of the trade allies in the C&I or renewable sectors who were aware of the change (47% and 45% respectively) said those changes had had a moderate to significant effect on their business.
- About three-quarters of the trade allies across all sectors reported that they "often" or "always" mention the tax credits to their customers. Only half of the C&I sector trade allies said they mention tax credits "often" or "always."

Financing

- Three-quarters of trade allies (73%) were aware of the financing programs, including Green Street, but a majority of them do not actively promote them.

Serving SW Washington

- Almost one-quarter of the trade allies (23%) indicated they actively offer Energy Trust services to customers in Southwest Washington, which is a slight increase from last year (19%). They identified two main barriers to increased participation in that area: their customers' lack of awareness of Energy Trust and the limited number of Energy Trust incentives available in Washington.

Relationship with Energy Trust

- Trade allies' overall satisfaction with Energy Trust has increased, from 77% last year to 82% this year. Their satisfaction with the time it takes Energy Trust to respond to requests for assistance increased more significantly, from 57% in 2011 to 77% in 2012.

Training and Support

- Trade allies rated cooperative advertising and measure-specific technical training as the support they most need from Energy Trust.
- In the area of training, trade allies expressed the greatest interest in savings calculation tools and energy modeling. A large percentage of residential trade allies (61%) reported they would like to receive training in savings calculation tools. C&I and renewable trade allies were most interested in energy modeling (54% and 67% respectively). One-half (50%) of renewable trade allies said that they would benefit from training about how to calculate customer incentives.

Roundtables

- Sixty-seven percent of the trade allies reported they participated in the roundtables in 2011. C&I trade allies' attendance was the highest (75%), while renewable trade allies'

attendance was the lowest (52%). More than half of the roundtable attendees rated the value of the roundtables as at least "somewhat useful."

Insider Newsletter

- More than three-fourths of trade allies (84%) receive the *Insider* newsletter. Most trade allies reported reading at least one article and following links to training information and areas of personal interest at least half the time. The majority of trade allies reading this publication find it at least "somewhat useful."

Website

- Almost all trade allies (91%) use the Energy Trust website at least monthly. Most of them are visiting pages that have program forms, information about program incentives, and general program information. Generally, trade allies are satisfied with the usefulness of the website.
- Three-quarters of trade allies indicated that they use a Smartphone (76%). A large proportion of them were interested in an Energy Trust app, particularly one that provides program information or requirements, or savings calculations tools.

Star Rating

- Three-quarters of all of the trade allies (74%) were aware of the Energy Trust Star rating system. Renewable trade allies were least aware of the rating system (50%).
- Opinions about the fairness of the Star rating are mixed: 63% said it is fair, while 37% said it is unfair. The most common suggestion for improvement was to base the rating on job quality, not quantity.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion 1:

A majority of the trade allies reported positive experiences working with Energy Trust, and that Energy Trust programs had positive economic impacts on their business. In addition, most of these trade ally firms expected that Energy Trust programs would continue to act as a reliable source of project leads. The Star rating system continues to be a concern, since many perceive that it does not properly incentivize high-quality work. It is important for Energy Trust to continue exploring better rating systems that can best leverage trade allies.

Conclusion 2:

It is important that Energy Trust tailor the types of support it provides to meet the unique needs of each trade ally sector. Trade allies in all sectors exhibited a need for training on Oregon's RETC and BETC tax credits. These tax credits make projects more affordable and it is important that trade allies actively promote them along with Energy Trust incentives.

Conclusion 3:

It is difficult to draw meaningful conclusions regarding the measure-specific market research component because an extremely low percentage of surveyed trade allies had installed many of the study's target equipment. Our attempt to reduce survey burden by reducing the number of questions per respondent limits our ability to increase these percentages. In addition, even with equipment types with higher incidences, possible self-selection bias may reduce the ability to generalize results accurately to a larger population.

Recommendation

Narrow the scope of this study by including questions that are applicable to most trade allies only and omitting the measure-specific market research component.

MEMO

Date: August 29, 2012
To: Board of Directors
From: Sarah Castor, Evaluation Sr. Project Manager,
Tom Beverly, Trade Ally Network Manager
Subject: Staff Response to the 2012 Trade Ally Survey

The 2012 Trade Ally survey was the eighth annual such survey Energy Trust has conducted. Initially a short survey to gather feedback about communications and incentive offerings in 2005, the survey has grown to include questions on tax credits, trade ally roundtables, the Energy Trust website, sector specific technologies, and other subjects of interest. The web-based survey was distributed to Energy Trust trade allies (with the exception of real estate allies) via email in late March 2012, and a link to the survey was also made available on the Trade Ally web pages.

In general, results from the 2012 survey were very similar to those in 2011. Over 190 unique firms were represented in the responses, offering energy efficiency and renewable energy services and serving all market sectors.

Trade ally satisfaction with Energy Trust is up about five percentage points over last year, to 82 percent giving a rating of “satisfied” or “very satisfied” with their overall experience with Energy Trust (on a 5 point scale). Most notably, satisfaction with response times to requests for information or assistance is up 20 percentage points, from 57 percent in 2011 to 77 percent in 2012. Trade ally interest in training opportunities and support remain at about the same level as 2011.

For future surveys, the evaluation contractor recommended that questions about specific measures or technologies be removed from this survey. The recommendation has several factors behind it, including the small sample sizes and unscientific nature of the survey, and the length that measure specific questions add to the survey overall. We agree with this recommendation, and for future surveys we plan to significantly shorten and simplify the survey, so that it yields more new and actionable findings for communications staff, and takes less time for respondents.

Trade ally staff use the general feedback and specific comments to plan trade ally training and events, improve communications, and aid in goal setting each year. Based on recommendations from the survey, trade ally staff will focus on:

- Providing more communications via email directly from program staff
- Further refining roundtable content, scheduling and locations to provide more value to attendees

- Providing continuing education credits for program or technical training
- Offering more question and answer sessions about Energy Trust programs and processes
- Developing webinars to expand the frequency and types of trainings offered to trade allies
- Continuing to migrate forms to an online format
- Reviewing customer feedback about residential contractor star-ratings and refining the rating system if necessary

Since the measure-specific questions are still of interest for tracking markets and planning programs, but a more scientific sample is desired, Energy Trust will contract with an evaluator to gather this information as a separate effort. This will likely involve phone surveys with a representative sample of trade allies for technologies of interest.

1 INTRODUCTION

In January 2012, Energy Trust of Oregon (Energy Trust) contracted with Research Into Action, Inc. to assist with the design, implementation, and analysis of its eighth annual web-based Trade Ally Survey.

Energy Trust originally conceived the Trade Ally Survey as a feedback tool for Energy Trust's Communications team to assess satisfaction with various offerings for trade allies. Since its first fielding in 2005, the survey has grown to include a program-/measure-specific market research component.

The survey has three goals:

- Characterizing trade allies and contractors working with Energy Trust;
- Gathering feedback to inform improvements to trade ally communications, agreements, program forms, and marketing initiatives; and
- Assessing the market penetration of measures or technologies of interest.

This report summarizes results of responses provided by nearly 200 unique trade ally firms across the residential, commercial, and industrial as well as the renewable sectors that install and service a wide array of energy-using equipment in the Energy Trust service territory. As part of Energy Trust's commitment to continuous improvement, these results will help Energy Trust identify successful ways to work with trade allies and improve on others that are less successful.

2 METHODOLOGY

For this project, Research Into Action performed the following activities:

- Reviewing and updating the survey design, and survey programming;
- Reviewing and improving the implementation methodology; and
- Analyzing the survey results and issuing a report on the survey.

In this chapter, we describe the detailed procedures that governed data collection and analysis, including survey instrument, sampling, distribution, and weighting.

SURVEY INSTRUMENT

To develop the 2012 Trade Ally Survey instrument, in collaboration with Energy Trust staff, the Research Into Action team prioritized the research issues and questions from the previous year's Trade Ally Survey. We kept most of the previous year's survey questions, but we eliminated several that did not provide meaningful information and added others intended to explore other research areas. We also employed a broad array of web-based technical options, such as inclusion of visual aids and questions that involved ranking exercises.

We shortened the survey instrument to increase the likelihood that trade allies would take the time to take the survey. We also designed the instrument to maximize the number of respondents who likely would answer measure-specific question blocks. In the previous year, we asked each respondent to provide responses to only one measure-specific question block, even if they dealt with several measure types. This year, we asked each respondent to answer questions about up to two renewable measure types and up to two energy efficiency measures.

We programmed and implemented the final instrument using *Qualtrics*, an online survey platform (The final instrument is included in Appendix B).

SAMPLING, DISTRIBUTION, AND WEIGHTING

For this survey, we used an online opt-in approach. To maximize participation in the online survey, the survey was distributed by sending email invitations to 1,426 trade allies that regularly receive Energy Trust's e-newsletters and by placing banner ads on Energy Trust's website and other channels asking the trade allies to take the time to complete the survey. Energy Trust offered an incentive to increase participation: entry in a lottery to win a $150 Visa gift card upon completion of the survey. Energy Trust implemented the survey, which was open for participation from March 23, 2012 through May 1, 2012.

We cannot determine the amount of self-selection bias and, therefore, we cannot remove any such bias from the survey results. However, we believe that by weighting survey items that investigated market penetration of energy efficiency technologies, we can characterize the results more realistically. It is reasonable to assume that large firms generally perform a greater number of installations and services than smaller firms and, as a result, individual large firms have a greater influence on the market than do individual smaller firms. For this reason, we weighted respondents' answers to the relevant market penetration related items. For other items, we did not apply weights.

We calculated weights based on the total number of employees in the Energy Trust service territory (all of Oregon and Southwest Washington). We captured the number of employees as a categorical rather than a continuous variable, with each category indicating a range; for each respondent, we took the midpoint of the selected range to represent the number of employees in that respondent's firm. Just by the population to sample difference, small firms (1-4 employees) were under-represented and medium-large firms (5-500 employees) were over-represented in the sample. However, the number of population employees represented by each sample unit among large firms (100 employees or more) were under-represented by market size, and vice versa for small-medium firms (1-99 employees). The final weight values account for these two concepts to adjust over- or under-representation of market size. In the end, the weight indicates the relative impact each respondent represents in the market (Table 1).

Table 1: Weight Calculation Method

		POPULATION		SAMPLE				
FIRM SIZE	MIDPOINT	COUNT	%	COUNT	%	POPULATION UNITS REPRESENT-ED BY EACH SAMPLE UNIT (PU) (POP#/SAM#)	POPULATION EMPLOYEES REPRESENT-ED BY EACH SAMPLE UNIT (PE) (PU*MID-POINT)	WEIGHT (PE/PE AVE.)
1 - 4	2.5	72,650	73%	67	35%	1084.3	2710.8	0.38
5 - 9	7	14,338	14%	40	21%	358.5	2509.2	0.35
10 - 19	14.5	7,233	7%	35	18%	206.7	2996.6	0.42
20 - 49	34.5	4,108	4%	31	16%	132.5	4571.9	0.65
50 - 99	74.5	1,175	1%	13	7%	90.4	6732.9	0.95
100 - 249	174.5	392	0.4%	4	2%	97.9	17084.6	2.42
250 - 499	374.5	80	0.1%	3	2%	26.6	9977.1	1.41
500 or more	500	20	0.02%	1	1%	20.0	10000.0	1.41

Throughout this report, we note the items on which we applied this weighting tactic; tables show both unweighted and weighted percentages, but the narrative reports weighted results only.

ANALYSIS

We analyzed the completed survey data using *SPSS Version 20*. The syntax file documents the procedures we used for data cleaning, data transformation, and statistical analysis.

During the data cleaning process, we excluded respondents who did not complete substantial parts of the qualified questions. We generally included "partial completes" – those respondents who answered at least the general question blocks in the first part of the questionnaire.

In addition, we found more than 20 duplicate records in the original dataset, which were identified by contact name, firm name, email address, and IP address. For each of these, we kept only the first completed case.

In the end, we had responses from a total of 194 unique trade ally firms, nine of which were partial completes. We explain the analytic approaches in more detail in Chapters 3, 4, and 5.

3 RESPONDENTS' CHARACTERISTICS

We included responses from a total of 194 unique trade ally firms in our analysis; nine of these were partial completes. Respondents hold a variety of job responsibilities at their firms: owner or principal (62%), project management (20%), administrative (14%), and other responsibilities (5%).

PARTICIPATION STATUS

Of the 194 firms, 165, or 85%, said that they had participated in an Energy Trust program or project in 2011, while 15% said they had not (Table 2). We focus this report on our analysis of the 2011 participants; we provide a short analysis of nonparticipants' data in Chapter 4.

Table 2: Status of Participation in Energy Trust Programs in 2011

	COUNT	PERCENT
2011 Participants	165	85%
2011 Nonparticipants	29	15%
Total	**194**	**100%**

SECTORS REPRESENTED

In order to classify the respondent firms, we first asked each respondent whether they do energy efficiency work, renewable work, or both. Within each of these categories, we asked them to select the primary and secondary sectors (or measure types for renewables) in which they work. Table 3 summarizes these responses. The categories provided in Table 3 are not *independent*: some firms work with multiple sectors and install multiple renewable measures. Therefore, the denominator of the percents is 165 – all of the firms we have included in this analysis.

The respondent firms represent all of the industry sectors of interest to Energy Trust. Respondents reported installing a wide range of measures (Table 3).

Table 3: Sectors Represented (n=165)

CATEGORY	SECTOR	COUNT	PERCENT
Energy Efficiency	Residential	103	62%
	Commercial	42	25%
	Industrial	25	15%
	Total	**140**	**85%**
Renewable	Solar PV	25	15%
	Solar Thermal	16	10%
	Wind	4	2%
	Total	**45**	**27%**
No measure selection		3	2%

Note: The residential sector includes firms that reported doing multifamily buildings, and the industrial sector includes firms that work with agricultural customers.

In Chapter 4, we report findings per the following three sector categories: energy efficiency residential (RESIDENTIAL), energy efficiency commercial and industrial (C&I), and renewable (RENEWABLES).

FIRM SIZE

The size of respondents' firms varied widely. A majority of them (89%) are small- to medium-size companies (1-49 employees). Firms with 10-24 employees were most common overall, but trade allies working in the residential sector more frequently reported having a smaller operation (5-9 employees) (Table 4).

Table 4: Number of Employees in Oregon and SW Washington by Sector

NUMBER OF EMPLOYEES	SECTOR			ALL RESPONDENTS (N =163)
	RESIDENTIAL (N = 103)	C & I (N = 51)	RENEWABLES (N =43)	
1	14%	8%	12%	12%
2 - 4	16%	12%	14%	15%
5 - 9	26%	16%	12%	23%
10 - 24	25%	29%	30%	26%
25 - 49	11%	24%	21%	13%
50 - 99	7%	4%	5%	6%
100 - 249	1%	4%	2%	2%
250 - 499	0%	4%	5%	2%
500 or more	1%	0%	0%	1%
Total	**100%**	**100%**	**100%**	**100%**

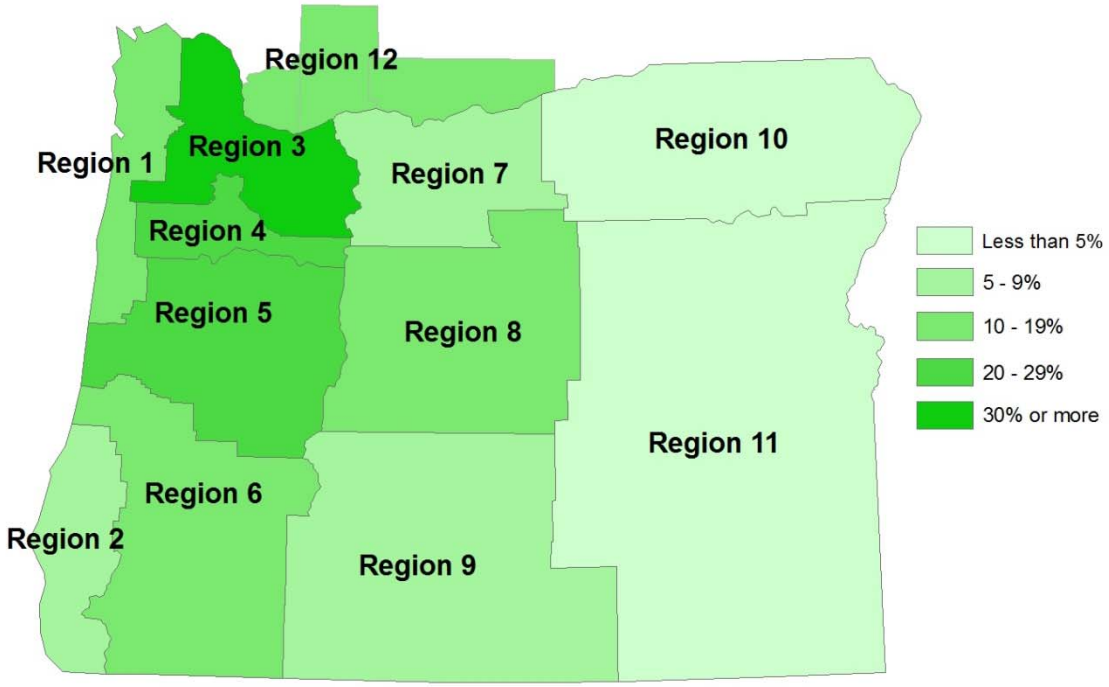
Note: We asked respondents to report the number of their employees working in each sector in each of five regions: SW Washington and four regions in Oregon (Portland Metropolitan, Willamette Valley and North Coast, Southern Oregon and South Coast, and East of the Cascades). To sum up the number of employees in the Energy Trust service area, we used the middle point for range options to estimate responses. We re-categorized these into the ranges. Two firms did not provide a response.

SERVICE GEOGRAPHY

Energy Trust uses 12 geographical regions in Oregon and Southwest Washington to characterize trade allies by location. We asked each respondent to identify the top three geographical regions in which their company works.

As shown in Figure 1, more than 30% of the firms selected Region 3 (44%). Respondent firms also commonly provide service in Region 4 and Region 5 (20-29% of the respondent firms), followed by Region 1, Region 6, Region 8, and Region 12 (10-19% of the respondent firms). Less than 10% of the respondents selected other regions as their top service regions.

Figure 1: Service Geography of Trade Ally Firms (n=165)



TENURE WITH ENERGY TRUST

Almost half of the respondent firms have worked with Energy Trust for five years or more. Firms in the C&I sector generally have had longer working relationships with Energy Trust. No C&I sector firm reported joining the Energy Trust Trade Ally Network within the last year, while seven percent of the firms that worked in the residential or renewable sectors did (Table 5).

Table 5: Tenure with Energy Trust (n=165)

	SECTOR			
TIME	RESIDENTIAL (N = 103)	C & I (N = 51)	RENEWABLES (N =43)	ALL RESPONDENTS (N =163)
Less than 1 year	5%	0%	9%	7%
1 - 2 years	19%	12%	14%	17%
3 - 4 years	29%	32%	34%	27%
5 years or more	47%	56%	43%	49%
Total	**100%**	**100%**	**100%**	**100%**

4 GENERAL QUESTIONS FINDINGS

In this section, we report trade allies' survey responses regarding Energy Trust services that support their delivery of programs to the market. It covers the following topics:

- Impacts of working with Energy Trust
- Program paperwork
- Familiarity with and use of tax credits
- Use of financing services
- Service in Southwest Washington
- Energy Trust trade ally interactions
- The degree of satisfaction that trade allies have with Energy Trust and its staff
- Changes in trade allies' relationship with Energy Trust
- Perceptions of Energy Trust

We asked all respondents questions regarding each of the above categories, regardless of the sector(s) in which their firm works. We present the results both by sector and by all respondents combined.

We present responses to sector-specific questions in Chapter 5.

IMPACTS OF WORKING WITH ENERGY TRUST

We used the following metrics to assess the impacts of trade ally involvement with Energy Trust:

- The percent of 2011 revenues from projects receiving Energy Trust incentives
- The economic impact of being a trade ally
- Expectations for change in the proportion of their projects that involve Energy Trust in 2012
- The influence of Energy Trust incentives on moving energy efficiency and renewable energy projects forward

2011 Revenue from Projects Receiving Energy Trust Incentives

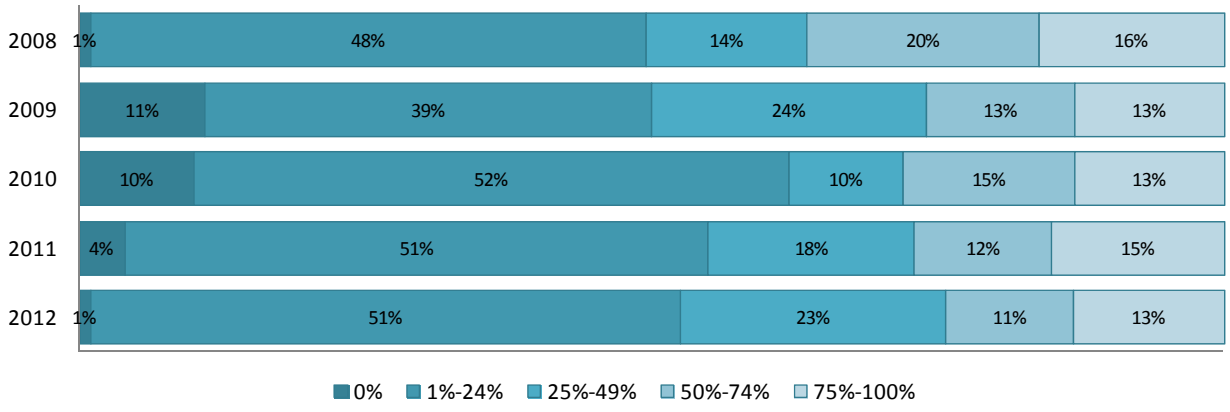
Overall, three-quarters of trade allies (75%) said that less than half their work comes from Energy Trust projects; almost half (52%) said that portion was one-quarter or less (Table 6). Residential and renewable trade allies indicated a larger proportion of their revenue coming from Energy Trust projects compared with C&I sector.

Table 6: Percent of 2011 Revenues from Projects Receiving Energy Trust Incentives

	SECTOR						ALL RESPONDENTS	
	RESIDENTIAL		C & I		RENEWABLES			
PERCENT OF INCOME	NO WT. (N = 97)	WT. (N = 47)	NO WT. (N = 48)	WT. (N = 29)	NO WT. (N = 41)	WT. (N = 23)	NO WT. (N = 157)	WT. (N = 81)
0%	1%	1%	2%	2%	0%	0%	1%	1%
1%-24%	50%	46%	65%	64%	42%	48%	52%	51%
25%-49%	19%	25%	23%	27%	17%	18%	18%	23%
50%-74%	14%	14%	8%	6%	15%	10%	13%	11%
75%-99%	13%	12%	2%	1%	22%	20%	13%	12%
100%	3%	3%	0%	0%	5%	5%	2%	1%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Figure 2 shows a comparison of the percent of their revenue trade allies reported from Energy Trust projects over the past four years. We found no significant differences across the past two surveys.

Figure 2: Percent of Revenues from Projects Receiving Energy Trust Incentives Since 2008



Economic Impact of Participation

In the 2012 survey, we sought to understand how trade allies viewed the economic impacts of their participation in Energy Trust projects in 2011. Overall, 90% of respondents rated their participation in Energy Trust as having a positive economic impact (a 1 or higher on a positive 5 to negative 5 scale). Renewables trade allies indicated a higher positive impact on their business than other trade allies.

Table 7: Economic Impacts of Participation in Energy Trust Projects in 2011

	SECTOR			
RATING	RESIDENTIAL (N = 94)	C & I (N = 44)	RENEWABLES (N = 41)	ALL RESPONDENTS (N = 146)
-5 - Negative impacts	0%	0%	2%	1%
-4	0%	0%	0%	0%
-3	2%	2%	0%	1%
-2	2%	0%	2%	2%
-1	2%	2%	2%	2%
0	5%	0%	2%	3%
1	16%	14%	15%	17%
2	23%	27%	10%	21%
3	24%	23%	20%	23%
4	17%	20%	24%	17%
5 - Positive impacts	7%	11%	22%	12%
Total	**100%**	**100%**	**100%**	**100%**

Anticipated Change in Proportion of Projects that Involve Energy Trust

We asked trade allies whether they anticipate a change in the proportion of projects involving Energy Trust in 2012 Table 8.

Table 8: Anticipated Change in Energy Trust Workload

ANTICIPATED CHANGE	SECTOR			ALL RESPONDENTS (N = 163)
	RESIDENTIAL (N = 103)	C & I (N = 51)	RENEWABLES (N = 44)	
Expect a decrease in proportion of projects	8%	12%	16%	11%
No change	34%	31%	34%	33%
Expect an increase in proportion of projects	50%	53%	48%	50%
Don't know	9%	4%	2%	6%
Total	**100%**	**100%**	**100%**	**100%**

Half of trade allies expect to do more work through Energy Trust in 2012. Additionally, fewer than ten percent of residential-sector trade allies expect to do less Energy Trust work this year. Overall, trade allies' expectations do not differ from what was reported in the 2011 survey.

The residential allies who expect to decrease the proportion of their projects that involve Energy Trust reported providing a variety of primary services (Table 9)[1]. The most frequent primary services they provided were HVAC installations and insulation, and air sealing (two respondents each).

Table 9: Primary Service of Residential Trade Allies Expecting Decrease in Energy Trust Participation

PRIMARY SERVICE	COUNT (N = 8)
HVAC systems (gas furnace, heat pumps, ductless heat pumps)	2
Insulation and air sealing	2
Water heaters	1
New construction (site-built or manufactured homes)	1

Influence of Energy Trust Incentives

We asked trade allies about the influence of Energy Trust incentives in moving both energy efficiency and renewable projects forward in 2011. More than half of energy efficiency trade allies (57%) rated the importance of Energy Trust incentives '7' or higher in moving efficiency projects forward, and 15% rated '3' or lower (Table 10).

[1] The commercial trade allies who reported expecting a decrease in Energy Trust work did not answer this question.

Table 10: Influence of Energy Trust Incentives in Moving Energy Efficiency Projects Forward

RATING	SECTOR				ALL EFFICIENCY SECTOR ALLIES	
	RESIDENTIAL		C & I			
	NO WT. (N = 96)	WT. (N = 47)	NO WT. (N = 47)	WT. (N = 29)	NO WT. (N = 130)	WT. (N = 69)
0 - No influence	2%	2%	0%	0%	2%	1%
1	3%	3%	2%	1%	3%	3%
2	7%	7%	9%	8%	8%	7%
3	4%	4%	6%	6%	4%	4%
4	7%	7%	4%	6%	5%	4%
5	13%	11%	6%	5%	11%	9%
6	12%	14%	13%	12%	12%	13%
7	16%	14%	9%	12%	14%	14%
8	13%	11%	15%	15%	14%	13%
9	17%	20%	23%	27%	18%	23%
10 - Critical	7%	6%	13%	10%	10%	7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Renewable trade allies perceived the importance of Energy Trust incentives in moving renewable projects forward very similarly as energy efficiency trade allies. More than half (54%) rated '7' or higher, and 22% rated '3' or lower (Table 11).

Table 11: Influence of Energy Trust Incentives in Moving Renewable Energy Projects Forward

RATING	RENEWABLES	
	NO WT. (N = 36)	WT. (N = 20)
0 - No influence	3%	2%
1	8%	8%
2	0%	0%
3	3%	12%
4	11%	10%
5	6%	9%
6	6%	4%
7	14%	14%
8	11%	8%
9	17%	13%
10 - Critical	22%	19%
Total	**100%**	**100%**

TRADE ALLY INSURANCE TRACKING PROCESS (EBIX)

Energy Trust uses the insurance tracking company EBIX to ensure that all trade allies have current liability insurance coverage.

For this survey, we asked respondents about specific experiences they had had with EBIX. Forty percent of respondents reported having no interactions with EBIX. Of those reporting any interactions, over half (53%) reported some complaint. The most common complaints were having to submit the same documentation multiple times (24%), unclear communication (13%), and difficulty reaching a contact at EBIX (9%).

Table 12: Interaction with EBIX (Multiple Responses Allowed)

	SECTOR			
EXPERIENCE	RESI-DENTIAL (N = 101)	C & I (N = 51)	RENEW-ABLES (N = 43)	ALL RESPONDENTS (N = 161)
I had to submit the same documentation multiple times	25%	24%	28%	24%
Communication from EBIX was not clear	13%	16%	12%	13%
It was difficult to contact someone at EBIX to get information	6%	14%	9%	9%
EBIX did not provide needed information in a timely manner	7%	8%	14%	7%
There were no problems with EBIX	33%	31%	28%	33%

PROGRAM PAPERWORK

In this survey of 2011 trade allies, we asked additional questions about how and why trade allies fill out program paperwork, and who is involved.

We found that a majority of trade allies (80%) reported completing most or all of their customers' paperwork more than 75% of the time (Table 13).

Trade allies most frequently completed most or all of customers' paperwork for renewables projects (64% always complete all paperwork), and residential projects (47% always complete all paperwork).

Table 13: Frequency of Completing Most or All Program Paperwork for Customers

	SECTOR						ALL RESPONDENTS	
	RESIDENTIAL		C & I		RENEWABLES			
PROPORTION	NO WT. (N = 99)	WT. (N = 49)	NO WT. (N = 51)	WT. (N = 31)	NO WT. (N = 41)	WT. (N = 24)	NO WT. (N = 160)	WT. (N = 85)
0%	2%	3%	4%	3%	5%	4%	3%	2%
1 to 24%	3%	4%	14%	12%	5%	4%	7%	6%
25 to 49%	4%	5%	2%	1%	2%	4%	4%	5%
50 to 74%	8%	9%	12%	9%	2%	3%	8%	7%
75 to 99%	28%	33%	31%	39%	15%	21%	27%	34%
100%	55%	47%	37%	36%	71%	64%	53%	46%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

The most common reason cited for not completing paperwork was that the customer prefers to complete the paperwork, followed by not having the necessary documentation (Table 14).

Table 14: Reasons for Not Completing Customer's Paperwork

REASON	COUNT	PERCENT
The customer prefers to complete the paperwork	**15**	**75%**
No access to the necessary documentation	9	45%
The amount of paperwork is excessive	5	25%
The paperwork is too complex or confusing	4	20%
No access to the application	3	15%

Five respondents also provided open-ended explanations, in particular, that it was difficult to keep up with the paperwork, and that someone other than they or the customer fills out the paperwork. All responses appear in Appendix A.

Respondents also indicated which staff members had a significant role in processing customer applications (Table 15). The most common staff member listed was the owner or top management.

Table 15: Staff Members with Significant Involvement in Processing Applications (Multiple Responses Allowed)

STAFF MEMBER	SECTOR			ALL RESPONDENTS (N = 151)
	RESIDENTIAL (N = 98)	C & I (N = 45)	RENEWABLES (N = 36)	
Owner or top management	52%	53%	56%	56%
Administrative staff	47%	38%	36%	39%
Sales staff	26%	42%	36%	29%
Technicians	20%	20%	28%	20%

FAMILIARITY WITH AND USE OF TAX CREDITS

Many projects that qualify for Energy Trust incentives also qualify for either the Residential Energy Tax Credit (RETC) or Business Energy Tax Credit (BETC). These additional incentives can make the difference in a customer's ability to afford a project, so it is important that trade allies be familiar with the credits and promote them. Table 16 shows the trade allies' familiarity with the Oregon tax credits. Overall familiarity was high - only 8%-12% of energy efficiency trade allies and no renewable trade allies reported being unfamiliar with either tax credit.

Table 16: Familiarity with ODOE Tax Credits

FAMILIARITY	SECTOR			ALL RESPONDENTS (N = 153)
	RESIDENTIAL (N = 94)	C & I (N = 48)	RENEWABLES (N = 44)	
Not familiar with either	12%	8%	0%	10%
Familiar with BETC and RETC	48%	35%	68%	48%
Familiar with BETC	12%	48%	23%	23%
Familiar with RETC	29%	8%	9%	20%
Total	**100%**	**100%**	**100%**	**100%**

We asked those who reported being familiar with BETC if they were aware of the changes that had been made to the tax credit during the last year. Table 17 shows that over half of respondents were familiar with those changes, while just 10% were not aware of them. About one-third of all trade allies were aware of the changes but did not know the specifics.

Table 17: Familiarity with Changes to BETC Tax Credits

FAMILIARITY	SECTOR			ALL RESPONDENTS (N = 104)
	RESIDENTIAL (N = 53)	C & I (N = 40)	RENEWABLES (N = 39)	
I am familiar with the changes.	45%	60%	74%	57%
I know changes were made but do not know what kinds of changes.	40%	33%	18%	34%
I am not aware of any changes.	15%	8%	8%	10%
Total	**100%**	**100%**	**100%**	**100%**

We also asked those who were familiar with the changes to the BETC what, if any, effect they had had on their business. Overall, almost half (47%) of respondents reported seeing a small effect on their business (a 1 to 4 on a 0-to-10 scale), while 17% indicated that there had been no effect on their business (Table 18). Far more residential trade allies (81%) than those working in the C&I and renewables areas (39% each) said that the changes in the BETC had had very little to no effect on their business. Conversely, about half of the C&I and renewables contractors said the changes had had some, and up to a significant, effect on their business (a 5 to 10 on the 0-to-10 scale).

Table 18: Effects of Changes to BETC Tax Credits on Business

RATING	SECTOR			ALL EFFICIENCY SECTOR ALLIES (N = 78)
	RESIDENTIAL (N = 36)	C & I (N = 30)	RENEWABLES (N = 33)	
0 - No Effect	31%	3%	6%	17%
1	14%	10%	9%	10%
2	14%	10%	6%	10%
3	14%	3%	15%	12%
4	8%	13%	3%	6%
5	6%	10%	12%	9%
6	0%	3%	3%	1%
7	0%	20%	12%	10%
8	3%	7%	9%	6%
9	3%	3%	9%	5%
10 - Significant effect	8%	17%	15%	13%
Total	**100%**	**100%**	**100%**	**100%**

We also asked respondents who reported being familiar with either tax credit to rate how often they mention them to customers. Table 19 shows that over three-quarters (77%) of respondents reported that they "often" or "always" mention them to customers.

Table 19: Frequency of Mentioning ODOE Tax Credits to Customers

	SECTOR			ALL RESPONDENTS (N = 103)
	RESIDENTIAL (N = 72)	C & I (N = 21)	RENEWABLES (N = 34)	
Often or always mention*	78%	57%	76%	77%

USE OF FINANCING SERVICES

Energy Trust has worked with Umpqua Bank to provide financing services, such as the Green Street Lending, to Energy Trust customers for nearly three years. As in the previous surveys, we asked trade allies about their awareness and promotion of the Green Street Lending product. In addition, we asked trade allies about the types of features they would prefer in an Energy Trust financing product.

We asked trade allies about their awareness of Green Street and if they actively promote the product. Overall, more than two-thirds of respondents (67%) were aware of Green Street (Table 20). Less than one-fifth of respondents (15%) reported actively promoting Green Street.

Table 20: Promotion of Green Street Financing and Other Financing Services

	SECTOR			ALL RESPONDENTS (N = 161)
STATUS	RESIDENTIAL (N = 103)	C & I (N = 38)	RENEWABLES (N = 18)	
Actively promote Green Street	15%	12%	21%	15%
Actively promote financing program(s) other than Green Street	8%	2%	7%	6%
Used in past, but not now	4%	2%	0%	2%
Aware of such services, but do not actively promote them	41%	47%	51%	44%
Don't know if we actively promote such services	6%	6%	2%	5%
Not familiar with such services	27%	31%	19%	27%
Total	**100%**	**100%**	**100%**	**100%**

This year, we asked trade allies if they promote other financing products. Eleven percent of respondents reported promoting other financing products (First Security, Banner Bank, Craft3, and Wells Fargo), either in addition to or in lieu of Green Street.

We also asked respondents about the features they would like to see in an Energy Trust product to finance energy efficiency and renewable projects. As shown in Table 21, over half of the 160 respondents wanted simpler paperwork (59%) and online applications (57%).

Table 21: Features Desired in an Energy Trust Financing Product (Multiple Responses Allowed)

	SECTOR			
FEATURE	RESIDENTIAL (N = 102)	C & I (N = 50)	RENEWABLES (N = 42)	ALL RESPONDENTS (N = 160)
Simplified paperwork	63%	48%	60%	59%
Online applications	58%	60%	57%	57%
Allow contractors to submit paperwork for customers	37%	42%	43%	42%
Broader range of possible loan amounts	41%	40%	33%	38%
Telephone assistance with applications	26%	30%	31%	28%
Longer financing terms	30%	32%	33%	28%
Clearer application instructions	20%	34%	31%	26%
Not interested in offering financing	13%	10%	7%	13%

Ten respondents also provided various comments about financing options, with a variety of opinions. These responses are presented in Appendix A.

SERVING IN SOUTHWEST WASHINGTON

Almost one-fourth of respondents (23%) indicated that they actively offer Energy Trust services to NW Natural customers in Southwest Washington (Table 22). This is up from 19% in 2010.

Table 22: Offer Energy Trust Services in SW Washington in 2011

	SECTOR			
RESPONSE	RESIDENTIAL (N = 103)	C & I (N = 48)	RENEWABLES (N = 43)	ALL RESPONDENTS (N = 159)
Yes	24%	23%	19%	23%
No	71%	71%	74%	72%
Don't know	5%	6%	7%	5%
Total	**100%**	**100%**	**100%**	**100%**

In 2011, among the respondents who reported promoting Energy Trust, the majority of those trade allies who reported working in Washington (88%) indicated that less than a quarter of their total work was in Washington (Table 23).

Table 23: Percent of Energy Trust Work in Washington

	SECTOR						ALL RESPONDENTS	
	RESIDENTIAL		C & I		RENEWABLES			
PERCENT OF WORK	NO WT. (N = 25)	WT. (N = 16)	NO WT. (N = 11)	WT. (N = 11)	NO WT. (N = 7)	WT. (N = 6)	NO WT. (N = 36)	WT. (N = 26)
0%	20%	12%	9%	3%	43%	27%	25%	15%
1%-24%	68%	80%	73%	80%	29%	44%	61%	73%
25%-49%	0%	0%	18%	17%	29%	29%	6%	8%
50%-74%	4%	2%	0%	0%	0%	0%	3%	0%
75%-99%	8%	5%	0%	0%	0%	0%	6%	4%
100%	0%	0%	0%	0%	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Of those respondents who reported working in Washington, over two-thirds (68%) reported working in Vancouver, and 15% work in Camas (Table 24).

Table 24: Distribution of Work across Cities and Counties in SW WA

	MEAN PERCENT	
LOCATION	NO WT. (N = 37)	WT. (N = 26)
Vancouver	65%	68%
Camas	14%	15%
Other parts of Clark County	11%	10%
Klickitat or Skamania County	10%	7%

All 37 respondents who reported offering services in Southwest Washington also commented on the main barriers to serving these areas (Table 25). The most common barrier identified was lack of customer awareness of Energy Trust (19 mentions), followed by the limited number of Energy Trust incentives available (14 mentions).

Table 25: Main Barriers to Serving SW Washington (Multiple Responses Allowed)

BARRIER	SECTOR			TOTAL MENTIONS (N = 37)
	RESI-DENTIAL (N = 25)	C & I (N = 11)	RENEW-ABLES (N = 8)	
Lack of customer awareness of Energy Trust	14	5	2	19
The limited number of Energy Trust incentives available in SW WA	7	7	4	14
The Oregon in "Energy Trust of Oregon"	9	4	0	12
No barriers exist at this time	4	0	2	5
Customer perception that newer homes do not need energy efficiency improvements	4	1	0	4
Income barriers	4	2	1	6
Lack of customer interest in energy efficiency or renewables	4	2	1	7

RELATIONSHIP WITH ENERGY TRUST

Satisfaction

We asked trade allies to rate their satisfaction with a series of categories on a scale from "very dissatisfied" to "very satisfied." Table 26 shows the percentage of respondents by sector who indicated being either "satisfied" or "very satisfied" with each element.

Table 26: Satisfaction with Energy Trust and Staff by Sector

STATEMENT	PERCENTAGE OF RESPONDENTS WHO SAID SATISFIED OR VERY SATISFIED			
	SECTOR			ALL RESPONDENTS (N = 156)
	RESI-DENTIAL (N = 98)	C & I (N = 48)	RENEW-ABLES (N = 42)	
Overall satisfaction with Energy Trust	82%	85%	83%	82%
Interactions with Energy Trust staff	81%	88%	86%	82%
Quality of responses to your requests	81%	83%	90%	81%
Quality of responses to your requests	78%	77%	83%	78%
Response times to requests for information or assistance	74%	81%	86%	77%
Turnaround time for incentive application/approval of paperwork	61%	79%	76%	65%
Incentive payment processing time	60%	65%	67%	60%

As we found last year, trade allies are quite satisfied with Energy Trust. In fact, overall satisfaction with Energy Trust increased from 77% in 2011 to 82% in 2012. The areas with which trade allies were least satisfied continued to be the time it took Energy Trust to process incentive applications/approve paperwork and process incentive payments. Satisfaction with response times to requests for assistance on forms increased from 57% last year to 77% this year.

Changes in Relationship with Energy Trust

Almost half of all respondents (44%) said their working relationship with Energy Trust is improving, while only 7% said it is deteriorating (Table 27).

Table 27: Change in Working Relationship with Energy Trust since Last Year

	PERCENTAGE OF RESPONDENTS			
	SECTOR			
STATEMENT	RESIDENTIAL (N = 95)	C & I (N = 48)	RENEWABLES (N = 40)	ALL RESPONDENTS (N = 153)
Improved a lot	9%	17%	18%	12%
Improved	37%	31%	33%	32%
Stayed the same	47%	46%	43%	48%
Gotten a little worse	4%	4%	3%	4%
Gotten a lot worse	2%	2%	5%	3%

The 11 residential trade allies who indicated that their Energy Trust relationship was deteriorating provided varied responses. The most common (each receiving 2 responses) were that Energy Trust staff seemed unresponsive to questions and requests, and that application, data, or documentation requirements became onerous. Two others mentioned the lack of support in the Portland and Eugene areas. See Appendix A for verbatim responses.

Trade allies also explained why they felt their relationship with Energy Trust had improved over the past year (Table 28). The most common explanation was their development of a good working relationship with specific program staff (64%). The table shows additional comments four trade allies provided about why their relationship had improved. See Appendix A for verbatim responses.

Table 28: Explanation of Improvement in Energy Trust Relationship

STATEMENT	PERCENTAGE OF RESPONDENTS			
	SECTOR			
	RESI-DENTIAL (N = 35)	C & I (N = 25)	RENEW-ABLES (N = 40)	ALL RESPONDENTS (N = 62)
I (we) developed a good working relationship with specific Energy Trust program staff	54%	77%	78%	64%
I became more familiar with Energy Trust programs	24%	9%	11%	19%
Energy Trust program staff became more responsive to my questions	7%	9%	0%	6%
Application, data or documentation requirements became easier	7%	5%	11%	6%
Incentive applications were processed quickly	7%	0%	0%	5%
Total	**100%**	**100%**	**100%**	**100%**

NONPARTICIPATING TRADE ALLIES

Twenty-nine trade allies said they did not work with Energy Trust in 2011. These are the *nonparticipants*. These nonparticipants were not asked questions that would allow us to determine what sector they were in, thus they were unable to be included in the above sections. In this section, we present findings from our surveys with only these trade allies. Since they had no contact with Energy Trust in 2011, we did not ask them many of the questions in the survey in Appendix B.

Table 29 provides a break of the number of employees for those companies that did not work with Energy Trust in 2011. Most respondents indicated that they have 2 to 4 employees (43%).

Table 29: Number of Employees in Each Region. (Multiple Selections Permitted)

RANGE OF EMPLOYEES	COUNT	PERCENT
1	7	25%
2 to 4	12	43%
5 to 9	3	11%
10 to 24	1	4%
25 to 49	1	4%
50 to 99	3	11%
100 to 249	1	4%
250 to 499	0	0%
500 or more	0	0%
Total	**28**	**100%**

The majority of those who did not work with Energy Trust in 2011expected that the proportion of their total projects with Energy Trust would increase in 2012 (Table 30).

Table 30: Anticipate a Change in the Proportion of Your Projects Involving Energy Trust in 2012 (n=28)

RESPONSE	COUNT	PERCENT
Expect to increase proportion of projects	13	46%
Expect to decrease proportion of projects	5	18%
Don't project a change in proportion of projects	5	18%
Don't know	5	18%
Total	**28**	**100%**

Financial Suggestions

We asked nonparticipants what features they would like to see in a financing offer for energy efficiency and renewable energy projects (Table 31). Half of them said they would like to submit financing applications online, and 40% would like simplified paperwork. Ten respondents (37%) indicated that they were not interested in offering financing.

Table 31: Features in Financing Offers for Energy Efficiency and Renewable Energy (n= 27)

FEATURES	COUNT	PERCENT
Online applications	14	52%
Simplified paperwork	11	41%
Broader range of possible loan amounts	7	26%
Allow contractors to submit paperwork for customers	5	19%
Longer financing terms	4	15%
Telephone assistance with applications	4	15%
Clearer application instructions	3	11%
Not interested in offering financing	10	37%

Relationship with Energy Trust

We asked nonparticipants questions about their relationship with Energy Trust.

Overall, the majority of respondents indicated that they were either “satisfied” or “very satisfied” with Energy Trust (Table 32).

Table 32: Satisfaction with Energy Trust (n=29)

	PERCENTAGE OF RESPONDENTS WHO SAID SATISFIED OR VERY SATISFIED
Incentive payment processing time	38%
Turnaround time for incentive application/approval	45%
Interactions with Energy Trust program staff	48%
Response time to requests for information or assistance	45%
Quality of responses to requests	45%
Quality assurance/quality control process	35%
Overall satisfaction with Energy Trust	52%

Over two-thirds of respondents (69%) indicated that their relationship with Energy Trust had stayed the same over the past year (Table 33). Five respondents, who said their relationship with Energy Trust had improved, offered several explanations for this change, including developing a good working relationship with Energy Trust and becoming more familiar with Energy Trust programs. Two respondents said their relationship with Energy Trust had deteriorated. Their explanations for this included Energy Trust did not have enough presence in South Central Oregon and their company's general business activity had declined.

Table 33: Change in Relationship with Energy Trust (n=29)

CHANGE IN RELATIONSHIP	COUNT	PERCENT
Improved a lot	4	14%
Improved a little	1	3%
Stayed the same	20	69%
Gotten a little worse	1	3%
Gotten a lot worse	1	3%
Don't know	2	7%
Total	**29**	**100%**

FINAL COMMENTS

At the end of the survey, participating and nonparticipating trade allies had the opportunity to provide additional comments or suggestions for Energy Trust. Seventy trade allies – over half of all respondents – provided comments or suggestions. Of those, 24 were explicitly positive and 23 explicitly negative.

The comments often related to very specific topics, so they are difficult to summarize. Table 34 displays the most frequent topics. Comments related to incentives typically involved requests for larger incentives, clearer information, or simpler application processes. Comments about staff and communications primarily were positive. Comments regarding the processes mainly

addressed simplifying the paperwork. Comments classified as "other" spanned a range of topics, none of which was mentioned by more than two respondents. The verbatim responses appear in Appendix A.

Table 34: Topics Covered by Final Comments (Multiple Responses Allowed) (n = 70)

TOPIC	COUNT	PERCENT
Incentives	14	20%
Staff and communication	10	14%
Simplification of processes	5	7%
Advertising	3	4%
Other	45	64%

In order to reduce the overall survey burden for each interviewee, we discussed three of the five following topics, selected randomly. Therefore, the total number of respondents answering each question is approximately three-fifths of the total sample size.

- Training and Support
- Roundtables
- Communications and *The Insider* newsletters
- Energy Trust website
- Marketing channels and rating system

Training and Support

We assessed trade ally interest in receiving training and support from Energy Trust. We also looked at the level of trade ally participation in Energy Trust trainings and asked those who participate in them to identify ways to improve them.

Interest in Support from Energy Trust

Generally, allies seemed to be quite interested in cooperative advertising and in receiving training about Energy Trust programs and technical training on specific measures. Table 35 shows the percent of respondents, by sector, who were interested[2] in these types of support.

[2] "Interested" refers to answers of 3 or a 4 on a 4-point scale, where 1 is "not at all interested" and 4 is "extremely interested.

Table 35: Percent "Interested" in Types of Energy Trust Support by Sector

SUPPORT	SECTOR			
	RESI-DENTIAL (N = 64)	C & I (N = 29)	RENEW-ABLES (N = 27)	ALL RESPONDENTS (N = 99)
Cooperative advertising support (Energy Trust co-brands on your ads and pays a portion of costs)	83%	76%	78%	81%
Training about Energy Trust programs and technical training on specific measures	78%	86%	81%	79%
Scholarships to energy conferences or workshops	72%	59%	85%	70%
Publicizing a Trade Ally of the Month in the newsletter	48%	59%	56%	55%

Nine respondents offered additional comments about trainings (see Appendix A).

Interest in Training in Various Program Areas

We presented a list of program areas and asked the trade allies to rank the top three areas in which they would like to receive training. Table 36 shows their responses. Overall, over half of trade allies indicated interest in training on savings calculation tools, while less than a quarter of the trade allies were interested in training on program paperwork. Of the renewables trade allies, more than two-thirds expressed interest in energy modeling and half in calculating customer incentives. Six trade allies indicated being interested in other types of training, such as lighting, outreach, marketing, and better understanding of program processes. See Appendix A for verbatim responses.

Table 36: Program Areas in which Allies Would *Most* Like to Receive Training (Multiple Responses Allowed)

SUPPORT	SECTOR			
	RESI-DENTIAL (N = 61)	C & I (N = 26)	RENEW-ABLES (N = 24)	ALL RESPONDENTS (N = 91)
Savings calculation tools	61%	46%	50%	56%
Energy modeling	38%	54%	67%	44%
Communicating the value of energy efficiency to customers	39%	42%	25%	38%
Code changes	33%	35%	46%	36%
Calculating customer incentives	31%	38%	50%	36%
Air quality and related diagnostics	38%	15%	8%	27%
Program paperwork	21%	15%	29%	22%
Other	3%	15%	4%	5%

Training Participation and Value Received

We also asked trade allies about when they (or a member of their staff) had last attended an Energy Trust training. A majority of the trade allies surveyed (74%) had either attended or had a staff member attend an Energy Trust-sponsored training after January 2011 (Table 37). There were no significant changes from the 2011 survey.

Table 37: Last Time You or Staff Member Attended Training Provided by Energy Trust

	SECTOR			
DATE OF LAST TRAINING	RESIDENTIAL (N = 64)	C & I (N = 29)	RENEWABLES (N = 27)	ALL RESPONDENTS (N = 98)
Sometime in 2011 or 2012	70%	83%	78%	74%
Before 2010	13%	10%	4%	11%
Never	9%	3%	11%	8%
Don't know	8%	3%	7%	6%
Total	**100%**	**100%**	**100%**	**100%**

Trade allies typically indicated they are getting value from Energy Trust trainings (Table 38). Over one-third of the respondents said the trainings were "very valuable" or "extremely valuable," while just 14% gave a rating of "slightly valuable" or "not at all valuable."

Table 38: Value of Your Most Recent Energy Trust Training

	SECTOR			
VALUE OF TRAINING	RESIDENTIAL (N = 53)	C & I (N = 27)	RENEWABLES (N = 22)	ALL RESPONDENTS (N = 84)
Not at all valuable	0%	0%	0%	1%
Slightly valuable	11%	19%	9%	13%
Somewhat valuable	51%	52%	55%	49%
Very valuable	30%	15%	27%	29%
Extremely valuable	8%	15%	9%	8%
Total	**100%**	**100%**	**100%**	**100%**

In this year's survey, we also asked trade allies how important it is to them that the training that they take qualifies for continuing education credits. Eighty percent of respondents indicated that it was at least "somewhat important"; half of respondents said it was "very important." Only 20 percent of respondents felt that receiving continuing education credits was "not important."

Table 39: Importance of Training Qualifying for Continuing Education Credits

IMPORTANCE	SECTOR			ALL RESPONDENTS (N = 84)
	RESIDENTIAL (N = 53)	C & I (N = 27)	RENEWABLES (N = 22)	
Very important	54%	34%	44%	50%
Somewhat important	32%	28%	37%	30%
Not important	14%	38%	19%	20%
Total	**100%**	**100%**	**100%**	**100%**

Location as a Barrier to Training

We asked trade allies whether the location of the trainings was a barrier to their participation in them. As we found last year, most respondents said that the location was not a barrier, although almost a quarter of them (22%) said that location made it "very difficult" or "impossible" to attend trainings (Table 40).

Table 40: Ratings of Location as a Barrier to Trainings

IMPORTANCE	SECTOR			ALL RESPONDENTS (N = 91)
	RESIDENTIAL (N = 58)	C & I (N = 228)	RENEWABLES (N = 24)	
Completely - I have never been able to because of my location	2%	0%	0%	1%
My location makes it very difficult but not impossible to attend	19%	7%	33%	21%
My location makes it inconvenient but not overly difficult to attend	19%	14%	17%	16%
My location does not prevent me from attending	60%	79%	50%	62%
Total	**100%**	**100%**	**100%**	**100%**

Interest in Webinar Trainings

We also asked respondents about the likelihood that they would attend an hour-long webinar training on a topic that interested them. Over two-thirds of respondents in each sector (73% overall) reported that they would be likely to attend a webinar training (Table 41). This is similar to last year's survey results.

Table 41: Likelihood of Attending Webinar Training

RATING	SECTOR			ALL RESPONDENTS (N = 97)
	RESIDENTIAL (N = 64)	C & I (N = 28)	RENEWABLES (N = 27)	
Unlikely	19%	19%	7%	16%
Undecided	7%	8%	11%	10%
Likely	74%	73%	82%	73%
Total	**100%**	**100%**	**100%**	**100%**

ROUNDTABLES

Attendance

As we found in the 2011 survey, two-thirds of trade allies in each sector reported having attended a roundtable discussion (Table 42). Additionally, renewable trade allies were less likely (52%) than commercial and industrial allies (75%) to attend roundtable discussions.

Table 42: Roundtable Attendance

	SECTOR			ALL RESPONDENTS (N = 88)
	RESIDENTIAL (N = 55)	C & I (N =28)	RENEWABLES (N = 25)	
Yes	64%	75%	52%	67%
No	36%	25%	48%	33%
Total	**100%**	**100%**	**100%**	**100%**

As shown in Table 43, 48% of trade allies reported having attended a roundtable in the past three months, a significant increase from the 14% of those who did so in 2010.

Table 43: Most Recent Roundtable Attendance Timeframe

DATE OF LAST ATTENDANCE	SECTOR			ALL RESPONDENTS (N = 64)
	RESIDENTIAL (N = 39)	C & I (N = 21)	RENEWABLES (N = 13)	
1 month ago or less	10%	0%	0%	6%
1-3 months ago	38%	43%	69%	42%
3-6 months ago	21%	24%	0%	19%
6-12 months ago	10%	5%	15%	8%
More than 1 year ago	21%	29%	15%	25%
Total	**100%**	**100%**	**100%**	**100%**

Value of Roundtable Discussions

Many of the trade allies who attend the roundtable discussions see at least some value in them. Less than a fifth of respondents said that the roundtables are "not at all useful." Over three-quarters of trade allies indicated that roundtables were at least "somewhat useful."

Table 44: Usefulness of Roundtables

RATING	SECTOR			ALL RESPONDENTS (N = 75)
	RESIDENTIAL (N = 44)	C & I (N = 25)	RENEWABLES (N = 18)	
Not at all useful	9%	16%	17%	12%
Slightly useful	23%	28%	11%	24%
Somewhat useful	45%	44%	44%	45%
Very useful	18%	12%	28%	16%
Extremely useful	5%	0%	0%	3%
Total	**100%**	**100%**	**100%**	**100%**

Suggested Roundtable Improvements

The trade allies who attended roundtable discussions were asked to indicate which topics they would like to see covered at these meetings (Table 45).

Table 45: Suggested Roundtable Topics

TOPIC	MENTIONS (N = 22)
Marketing	6
Recent and expected program changes	4
Information specific to your field	3
Forum for general trade ally feedback	3
Program processes and paperwork	2
Review of training opportunities	1
Other	3

Note: The question was open-ended.

We present a sample of specific comments below. All comments appear in Appendix A.

- "How to make it easier for contractors to promote ET incentives."
- "New program rules and processes. Opportunity to ask questions to a captive audience. Opportunity to voice suggestions."

- "I'd really rather not hear again how I should be selling projects or how I should be implementing certain technologies over others. I thought the goal of the ETO was to save kilowatt-hours. The incentives should follow raw energy savings, not type of technology or whether or 'retrofit by design' is utilized."
- "Tips on identifying least cost energy measures for those outside of the building performance field. Also, window and door installation specification review."
- "Successful marketing of energy-efficient projects."

COMMUNICATIONS

Preferred Methods

Trade allies were asked to choose the top one or two methods of communication by which they prefer to receive information about Energy Trust programs. Table 46 shows that across all sectors, trade allies prefer to receive updates via email.

Table 46: Preferred Methods for Receiving Information about Energy Trust Programs (Multiple Responses Allowed)

METHOD	SECTOR			ALL RESPONDENTS (N = 92)
	RESIDENTIAL (N = 57)	C & I (N = 27)	RENEWABLES (N = 24)	
Emails from program staff	86%	93%	83%	87%
Insider newsletter	51%	33%	54%	50%
Energy Trust website	49%	48%	50%	49%
Training sessions	44%	56%	50%	46%
Roundtable meetings	33%	26%	42%	33%
Outlook or Google calendar invitation	18%	37%	38%	25%
Social media	7%	11%	17%	10%

INSIDER NEWSLETTER

Receipt and Use of Insider Newsletter

A majority of trade allies (84%) reported receiving the *Insider* at their firm (Table 47). Only two percent of trade allies were unfamiliar with the *Insider*.

Table 47: Receiving *Insider* Newsletter

	SECTOR			ALL RESPONDENTS (N = 86)
	RESIDENTIAL (N = 52)	C & I (N = 26)	RENEWABLES (N = 21)	
Yes	85%	85%	81%	84%
No	13%	12%	19%	14%
Unfamiliar with the Insider	2%	4%	0%	2%
Total	**100%**	**100%**	**100%**	**100%**

Trade allies also reported on how often they followed links in the *Insider* to two separate destinations: trade allies' personal areas of interest (Table 48) and training information (Table 49). Patterns of use of the links were generally similar across the two link destinations.

Table 48: Follow Links to Personal Area of Interest

	SECTOR			ALL RESPONDENTS (N = 72)
	RESIDENTIAL (N = 44)	C & I (N = 22)	RENEWABLES (N = 17)	
In every or nearly every newsletter	20%	9%	24%	18%
About three-quarters of the time	16%	18%	6%	15%
About half the time	27%	36%	24%	28%
About one-quarter of the time	27%	23%	41%	28%
Infrequently or never	9%	14%	6%	11%
Total	**100%**	**100%**	**100%**	**100%**

Table 49: Follow Links to Training Information

	SECTOR			ALL RESPONDENTS (N = 67)
	RESIDENTIAL (N = 40)	C & I (N = 21)	RENEWABLES (N = 16)	
In every or nearly every newsletter	13%	5%	13%	10%
About three-quarters of the time	13%	5%	19%	13%
About half the time	40%	24%	13%	30%
About one-quarter of the time	20%	52%	50%	31%
Infrequently or never	15%	14%	6%	15%
Total	**100%**	**100%**	**100%**	**100%**

Usefulness of the Insider

Similar to last year's results, virtually all (97%) of the trade allies who receive the newsletter find it at least "somewhat useful" or "very useful" (Table 50).

Table 50: Usefulness of the Insider Newsletter

	SECTOR			ALL RESPONDENTS (N = 71)
	RESIDENTIAL (N = 44)	C & I (N = 22)	RENEWABLES (N = 16)	
Very useful	23%	23%	19%	25%
Somewhat useful	75%	73%	81%	72%
Not at all useful	2%	5%	0%	3%
Total	**100%**	**100%**	**100%**	**100%**

In this year's survey, we asked trade allies what would make the *Insider* more useful to them. As shown in Table 51, the largest percent – 49% – said that they would like the *Insider* to "include different types of articles" in the newsletter.

Table 51: Making the *Insider* More Useful (Multiple Responses Allowed)

	SECTOR			ALL RESPONDENTS (N = 68)
TOPIC	RESIDENTIAL (N = 42)	C & I (N = 18)	RENEWABLES (N = 15)	
Improve the searchability of the Insider	17%	17%	7%	16%
Make the Insider easier to navigate	29%	17%	20%	26%
Include different types of articles	45%	67%	47%	49%
Other	19%	17%	33%	21%

We asked the 14 trade allies (21% of the overall sample) who responded "other" to what would make the *Insider* more useful to describe what would most interest them (Table 52). Most said that "common problems and solutions"; many also identified technical assistance or resources, tax credits, and emerging technologies. Respondents were allowed to select multiple responses for this question.

Table 52: Useful Article Types for Future Newsletters (Multiple Responses Allowed)

TOPIC	SECTOR			ALL RESPONDENTS (N = 14)
	RESIDENTIAL (N = 8)	C & I (N = 3)	RENEWABLES (N = 5)	
Common problems/solutions	6	3	5	12
Technical assistance or resources	4	3	4	10
Tax credits	5	1	4	9
Emerging Technologies	3	2	5	8
Other	1	0	2	3

A large majority of trade allies (86% overall) agreed that the length of articles in the *Insider* is about right (Table 53).

Table 53: Length of Articles

	SECTOR			ALL RESPONDENTS (N = 71)
	RESIDENTIAL (N = 43)	C & I (N = 22)	RENEWABLES (N = 17)	
Much too long	2%	0%	0%	1%
A little too long	14%	9%	0%	11%
About right	81%	91%	100%	86%
A little too short	2%	0%	0%	1%
Much too short	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**

Notice of Program Changes in Insider

Respondents provided a variety of responses about the minimum advance notice of important program changes that they require (Table 54). Overall, about two-thirds of respondents considered one month or two months sufficient.

Table 54: Minimum Advance Notice of Important Program Changes

	SECTOR			ALL RESPONDENTS (N = 93)
	RESIDENTIAL (N = 57)	C & I (N = 28)	RENEWABLES (N = 24)	
Two weeks	19%	18%	17%	17%
One month	42%	29%	42%	38%
Two months	26%	36%	17%	29%
Six months	11%	14%	21%	14%
More than six months	2%	4%	4%	2%
Total	**100%**	**100%**	**100%**	**100%**

Energy Trust Website

We asked trade allies a series of questions about the Energy Trust website. The answers to these questions give us information on their patterns of use of the website as well as feedback about the trade ally pages and the overall website design.

Patterns of Use

We asked the trade allies how frequently they use the Energy Trust website. Two-thirds of trade allies reported using the website one to three times a month (Table 55).

Table 55: Frequency of Energy Trust Website Use

	SECTOR			ALL RESPONDENTS (N = 87)
FREQUENCY	RESIDENTIAL (N = 54)	C & I (N = 30)	RENEWABLES (N = 25)	
Never	6%	17%	12%	9%
1 to 3 times a month	65%	70%	64%	66%
1 to 2 times a week	28%	13%	16%	22%
3 to 4 times a week	2%	0%	4%	2%
5 or more times a week	0%	0%	4%	1%
Total	**100%**	**100%**	**100%**	**100%**

We also asked those who use the website which pages they visit. Most of them reported typically visiting the pages with program forms (70%) and incentive information (62%) (Table 56).

Table 56: Typical Website Pages Visited (Multiple Responses Allowed)

PAGE	SECTOR			ALL RESPONDENTS (N = 83)
	RESIDENTIAL (N = 53)	C & I (N = 27)	RENEWABLES (N = 23)	
Program forms	70%	63%	74%	70%
Program incentives	70%	59%	65%	67%
General program information	62%	67%	48%	57%
Calendar/meetings	38%	33%	26%	33%
Contractor search	11%	11%	9%	11%
Other	4%	4%	0%	4%
Consumer pages	4%	0%	4%	2%

Trade Ally Web Pages

We asked the trade allies who use the Energy Trust website to rate the usefulness of the trade ally pages on a 5-point scale, where 1 is "not at all useful" and 5 is "extremely useful." Over three-quarters of trade allies that use the Energy Trust website (76%) indicated that it was at least "somewhat useful" (Table 57).

Table 57: Usefulness of Trade Ally Web Pages

	SECTOR			ALL RESPONDENTS (N = 85)
	RESIDENTIAL (N = 54)	C & I (N = 28)	RENEWABLES (N = 25)	
Not at all useful	7%	7%	4%	7%
Slightly useful	11%	25%	28%	16%
Somewhat useful	30%	21%	36%	29%
Very useful	30%	21%	36%	29%
Extremely useful	4%	4%	12%	6%
Total	**100%**	**100%**	**100%**	**100%**

Website Navigation

We asked trade allies about the ease of navigation of the website. On a scale from "extremely difficult" to "very easy," overall just over ten percent (13%) of trade allies indicated that the website navigation was "difficult," and almost half of allies (42%) said that it "was easy" or "very easy" (Table 58).

Table 58: Ease of Energy Trust Website Navigation

	SECTOR			ALL RESPONDENTS (N = 84)
	RESIDENTIAL (N = 53)	C & I (N = 28)	RENEWABLES (N = 25)	
Extremely difficult	0%	0%	0%	0%
Difficult	15%	11%	8%	13%
Neither difficult nor easy	40%	46%	40%	40%
Easy	40%	46%	40%	40%
Very easy	4%	0%	0%	2%
Total	**100%**	**100%**	**100%**	**100%**

This year, we asked trade allies how useful it would be if Energy Trust provided website navigation aid to assist them in finding the information they were seeking. Over a third of trade allies said that this feature would be "very" or "extremely" helpful; but a quarter (25%) indicated it would be either "not at all" or "slightly" helpful (Table 59).

Table 59: Helpfulness of a Website Navigation Aid

	SECTOR			ALL RESPONDENTS (N = 50)
	RESIDENTIAL (N = 22)	C & I (N = 14)	RENEWABLES (N = 11)	
Not at all helpful	11%	10%	14%	11%
Slightly helpful	12%	15%	14%	14%
Somewhat helpful	62%	45%	23%	43%
Very helpful	12%	27%	42%	29%
Extremely helpful	3%	2%	7%	3%
Total	**100%**	**100%**	**100%**	**100%**

In addition, this year we asked trade allies if they use a Smartphone (e.g., iPhone, Android, Blackberry, Galaxy, etc.) or a tablet. Out of 88 respondents who received the website questions, over three-quarters said they use Smartphones, and less than ten percent said they use tablets (Table 60).

Table 60: Use of a Smartphone or Tablet

	SECTOR			ALL RESPONDENTS (N = 87)
	RESIDENTIAL (N = 54)	C & I (N = 30)	RENEWABLES (N = 25)	
Yes - Smartphone	78%	80%	69%	76%
Yes - Tablet	6%	10%	8%	7%
No	17%	10%	23%	17%
Total	**100%**	**100%**	**100%**	**100%**

Those trade allies who indicated that they use a Smartphone or a tablet were asked if they would download an app that gives them links to Energy Trust program information (Table 61). Almost two-thirds of respondents said they "definitely" or "probably" *would* download the Energy Trust app, and no one said they definitely *would not* download the app.

Table 61: Likelihood of Using an Energy Trust App

	SECTOR			ALL RESPONDENTS (N = 73)
	RESIDENTIAL (N = 45)	C & I (N = 27)	RENEWABLES (N = 20)	
Definitely	36%	22%	50%	34%
Probably	27%	33%	25%	26%
Maybe	16%	22%	20%	18%
Probably not	22%	22%	5%	22%
Definitely not	0%	0%	0%	0%
Total	**100%**	**100%**	**100%**	**100%**

In addition, we asked a follow-up question about what kind of Energy Trust app would be useful to them. Approximately two-thirds of respondents indicated that an app offering program information or requirements (61%) and savings calculation tools (62%) would be most useful (Table 62).

Table 62: Type of App That Would Be Useful (Multiple Responses Allowed)

	SECTOR			ALL RESPONDENTS (N = 69)
	RESIDENTIAL (N = 35)	C & I (N = 21)	RENEWABLES (N = 19)	
Savings calculation tools	74%	86%	74%	62%
Program information or requirements	77%	62%	84%	61%
Incentive application/web form	49%	52%	79%	48%
Financing application	29%	14%	26%	22%
Other	3%	0%	0%	1%

Star Rating System

We presented the Star rating system question block only for residential trade allies.

Familiarity

Familiarity with the Star rating system was high among the residential trade allies (74%), an almost 25% increase from the 52% response rate from the 2011 survey (Table 63).

Table 63: Familiarity with "Star" Rating System

	RESIDENTIAL (N = 93)
Yes	74%
No	26%
Total	**100%**

Opinions of Star Rating System

We asked trade allies who indicated familiarity with the Star rating system about its clarity, fairness, and usefulness.

A majority of residential trade allies (82%) thought the rating system was either "very clear" or "somewhat clear" with only 18% saying that it was not clear (Table 64).

Table 64: Overall Clarity of Rating System

	RESIDENTIAL (N = 66)
Very clear	35%
Somewhat clear	47%
Not clear	18%
Total	**100%**

Overall, 63% of respondents thought the rating system was "fair," but 38% indicated they think the rating system was unfair ("slightly" or "not at all" combined) (Table 65).

Table 65: Fairness of Rating System

	RESIDENTIAL (N = 59)
Fair	63%
Slightly unfair	19%
Not at all fair	19%
Total	**100%**

More than a third of respondents (47%) thought that the Star rating system was "useful," with 17% indicating that the rating system was "very useless" or "useless" (Table 66).

Table 66: Usefulness of Rating System

	RESIDENTIAL (N = 69)
Very Useless	7%
Useless	10%
Neutral	36%
Useful	28%
Very useful	19%
Total	**100%**

This year, we also asked trade allies who indicated familiarity with the Star rating system if they knew how to check their rating and if they had received any feedback from customers about their rating. Of those who were familiar with the Star rating system, almost two-thirds (63%) knew how to check Star ratings (Table 67).

Table 67: Knowledge of How to Check Star Rating

	RESIDENTIAL (N = 68)
Yes	63%
No	37%
Total	**100%**

Less than a fifth of trade allies (16%) indicated that they have received feedback on the Star rating system from customers (Table 68). Trade allies who had received customer feedback on their Star rating most commonly mentioned that their customers had been influenced by their company's "three-star" rating.

Table 68: Customer Feedback on Star Rating

	RESIDENTIAL (N = 69)
Yes	16%
No	84%
Total	**100%**

Finally, we asked trade allies for suggestions about how the Star rating system could be improved. Twenty-four allies offered various comments, with various opinions (Table 69).

Table 69: Star Rating System Improvement Suggestions (Multiple Responses Allowed)

TOPIC	MENTIONS
Should rate quality, not quantity of jobs - hard for new and smaller trade allies to compete	6
More information on the Star ratings for customers	6
Allow customer comments to appear	2
Feedback before changing Star rating	2
Include territory/ location considerations	1
Other	7

All verbatim comments appear in Appendix A. A sample of specific comments appears below:

- "The Star system only benefits the larger companies and makes it difficult for small companies to be fairly represented by comparison. It doesn't help to grow the industry, only to push the jobs towards certain companies. Bigger is not always better."
- "More customer awareness of what the rating system is."
- "Customer satisfaction and remarks made public in a blog or trade ally contractor page."

- "Send an email every year to let us know what our rating is or changes, etc."
- "What the customer sees is still a bit vague and can leave the impression that a lower rating indicates quality issues, when a lower rating may actually be the result of a lower volume of projects. Making the criteria more obvious to the customer would reduce the possibility of misperception about the quality of a contractor's work."

Marketing Channels

We asked trade allies about the effectiveness of various marketing channels for generating leads. Ratings were very similar. Overall, trade allies gave the highest ratings to Energy Trust mentions in the media, and the lowest rating to the "Star rating for Trade Allies" page on the Energy Trust website. Table 70 shows the respondents' ratings for each channel, by sector.

Table 70: Percent Rating Marketing Channel "Effective"

CHANNEL	SECTOR			ALL RESPONDENTS (N = 97)
	RESIDENTIAL (N = 63)	C & I (N = 31)	RENEWABLES (N = 23)	
Energy Trust in the media	54%	35%	43%	45%
Energy Trust website (in general)	51%	39%	39%	43%
Energy Trust advertising	52%	26%	43%	42%
Co-op advertising	48%	23%	39%	39%
Find a Contractor page	44%	35%	39%	39%
Co-op advertising	48%	23%	39%	39%
Star rating for Trade Allies	46%	32%	30%	37%

*Percentages refer to the percent of respondents who rated a channel as a 4 or a 5 on a five-point scale, where 1 is "not at all effective" and 5 is "very effective."

This year, trade allies were asked if an ID showing Energy Trust affiliation would help in their marketing to customers (Table 71). Results were mixed, with almost half of respondents indicating that they were unsure if an ID would help, and over one-third indicating that it would help.

Table 71: Energy Trust Affiliation ID in Helping with Marketing

RESPONSE	SECTOR			ALL RESPONDENTS (N = 98)
	RESIDENTIAL (N = 64)	C & I (N = 31)	RENEWABLES (N = 24)	
Yes	30%	39%	50%	35%
No	20%	19%	17%	19%
Unsure	50%	42%	33%	46%
Total	**100%**	**100%**	**100%**	**100%**

Twenty-one respondents who said "yes" made various comments about what they would like the ID to be. These verbatim responses are presented in Appendix A.

This year, we also asked trade allies who market free or discounted measures if they encountered skepticism or suspicion (Table 72). Over half of these respondents (59%) reported that they did not encounter any skepticism or suspicion when they offered free or discounted measures. Of the 40% who said they encountered skepticism or suspicion, more than half (64%) said they were able to overcome that response, while 36% said that response is a barrier to direct installations and other work with Energy Trust.

Table 72: Encounter Skepticism or Suspicion

SKEPTICISM OR SUSPICION	SECTOR			ALL RESPONDENTS (N = 69)
	RESIDENTIAL (N = 46)	C & I (N = 22)	RENEWABLES (N = 16)	
Yes, but it is quickly overcome	24%	36%	38%	26%
Yes, it is a barrier to direct installs and other work with Energy Trust	15%	18%	6%	14%
No	61%	45%	56%	59%
Total	**100%**	**100%**	**100%**	**100%**

5 MEASURE-SPECIFIC FINDINGS

RESIDENTIAL TRADE ALLIES

In the 2012 Trade Ally Survey, 103 trade allies reported that they worked mainly in the residential sector (as a primary or secondary sector). We asked questions about the primary equipment or service they provide.

These residential trade allies said they installed many kinds of equipment or provided a wide variety of services in 2011 (Table 73). The most frequent responses were HVAC systems (41%), insulation and air sealing (27%), new construction (10%), and windows (8%).

Table 73: Primary Equipment or Service Provided in 2011

SERVICE PROVIDED	COUNT	PERCENT
HVAC systems (gas furnace, heat pumps, ductless heat pumps)	39	41%
Insulation and air sealing	26	27%
New construction (site-built or manufactured homes)	9	10%
Windows	8	8%
Duct sealing and/or duct insulation	6	6%
Water heaters	4	4%
None of the above	3	3%
Total	**95**	**100%**

Note: Eight trade allies did not answer this question.

We asked the 39 trade allies who indicated that the primary service they provided was HVAC systems a follow-up question to determine the type of HVAC service they provided. Multiple responses were allowed. In order, the most common were heat pump ductless heat pump (DHP), and gas furnace (Table 74). Respondents who said "other" mentioned performing duct sealing and geothermal services.

Table 74: Type of HVAC Service Provided in 2011 (Multiple Responses Allowed) (n=39)

SERVICE PROVIDED	COUNT	PERCENT
Heat pump	35	90%
Ductless heat pump	32	82%
Gas furnace	29	74%
Gas fireplace	15	38%
Other	6	15%

Heat Pumps

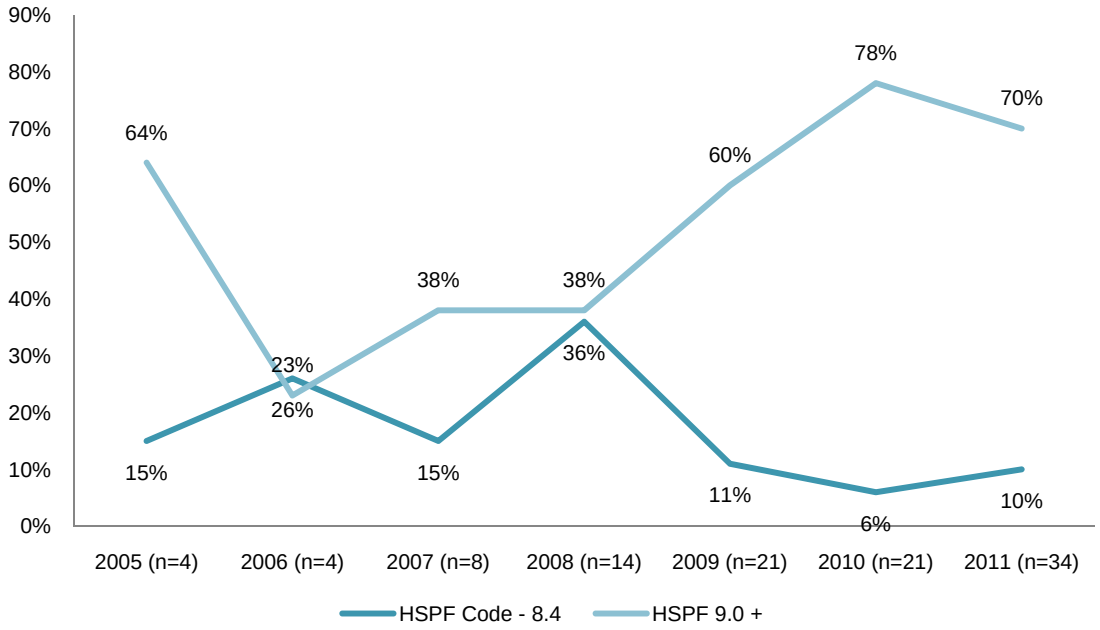
We asked respondents who reported installing primarily heat pumps in their work with Energy Trust to estimate the percentage of the types of heat pumps they installed. In 2011, as in 2010, a large majority of the installations were 9.0 HSPF or higher (Table 75).

Table 75: Percent of 2011 Heat Pump Sales by Efficiency

	MEAN PERCENT	
EFFICIENCY	NO WT. (N=34)	WT. BY FIRM SIZE (N=20)
HSPF 9.5 or better	22%	19%
HSPF 9.0 to 9.4	47%	51%
HSPF 8.5 to 8.9	19%	20%
HSPF 8.2 to 8.4	6%	5%
Code HSPF	6%	5%
Total	**100%**	**100%**

Figure 3 plots the percentage of respondents' heat pump sales by HSPF level, as reported in the last seven trade ally surveys. Higher efficiency models (HSPF 9 or more) appear to have reduced their market share slightly over the past year, whereas the lowest-efficiency models (HSPF code through 8.4) saw a slight uptick during the past year.

Figure 3 : Heat Pump by Efficiency over Time



The cost differential between a heat pump (8.5 HSPF) and a high-efficiency heat pump (9 HSPF) has been relatively stable over the last several years (over $1,250), with the exception of this past year with most respondents indicating that the differential is now between $501 to $1,000 (Table 76).

Table 76: Estimated Cost Differential (Equipment and Installation) between a 8.5 HSPF Heat Pump and a High-Efficiency Heat Pump (9 HSPF)

	PERCENT OF RESPONDENTS	
ADDITIONAL COST OF HIGH-EFFICIENCY HEAT PUMP	**NO WT. (N=27)**	**WT. (N=12)**
Less than $200	0%	0%
$200 - $500	30%	17%
$501 to $750	33%	25%
$751 to $1,000	19%	33%
$1,000 to $1,250	11%	17%
Over $1,250	7%	8%
Total	**100%**	**100%**

Over a quarter of residential trade allies (28%) indicated that less that 24% of their jobs use commissioning (Table 77). Commissioning has fallen since last year with less than one-quarter

of respondents reporting that they commissioned 75% or more of their heat pumps (compared to 75% in 2010).

Table 77: Percent of Jobs that Use Commissioning

	PERCENT OF RESPONDENTS	
PERCENT OF JOBS	NO WT. (N=30)	WT. (N=18)
0%	10%	6%
1 to 24%	23%	22%
25% to 49%	7%	6%
50% to 74%	17%	11%
75% to 100%	43%	56%
Total	**100%**	**100%**

The three most common reasons given for not using commissioning were: 1) there was no need for it because the standard diagnostics are adequate; 2) there was no customer demand; and 3) it was too expensive (Table 78). Six respondents also provided other reasons, including: they did not know what commissioning is, there was no incentive, they were out of state, it was part of start-up testing, and they use the factory settings.

Table 78: Reasons for Not Using Commissioning (Multiple Responses Allowed) (n=35)

REASON	COUNT	PERCENT
Do not need commissioning, standard diagnostic adequate	15	43%
No customer demand	12	34%
Too expensive	5	14%
Takes too much time	3	9%
Do not trust results	2	6%
Other	6	17%

We again asked trade allies about how often they install temperature cutout controls. The majority reported installing cutout switches on 75% or more of projects (Table 79). When the results were weighted by firm size, 31% of respondents indicated that less than three-fourths of their jobs included a temperature cutout switch.

Table 79: Percent of Jobs that Install a Temperature Cutout Switch

	PERCENT OF RESPONDENTS	
PERCENT OF JOBS	NO WT. (N=28)	WT. (N=16)
0%	4%	0%
1% to 24%	11%	6%
25% to 49%	4%	6%
50% to 74%	18%	19%
75% to 99%	25%	19%
100%	39%	50%
Total	**100%**	**100%**

Gas Furnaces

Twenty-nine trade allies reported that they primarily installed gas furnaces for Energy Trust, of which the vast majority installed furnaces in existing homes (97%) with just over half (52%) indicating that they installed them in new homes. Just over two-thirds of trade allies (64%) who installed gas furnaces indicated that they installed "95% or more efficient" furnaces in existing homes (Table 80).

Table 80: Percent of Energy Efficient Gas Furnaces Installed in Existing Homes

	MEAN PERCENT	
	NO WT. (N=28)	WT. (N=16)
95% or more efficient	66%	64%
90% - 94% efficient	21%	26%
Code efficient furnaces	13%	10%
Total	**100%**	**100%**

Of those trade allies who indicated they install gas furnaces in new homes, over half (59%) indicated that they install "95% or more efficient" furnaces (Table 81).

Table 81: Percent of Energy Efficient Gas Furnaces Installed in New Homes

	MEAN PERCENT	
	NO WT. (N=15)	WT. (N=10)
95% or more efficient	62%	59%
90% - 94% efficient	22%	21%
Code efficient furnaces	15%	20%
Total	**100%**	**100%**

Ductless Heat Pumps

Thirty-two residential sector respondents reported that in their work with Energy Trust they mainly installed ductless heat pumps (DHPs). Of these respondents, 12 reported installing fewer than 10 DHPs in 2011, 8 reported installing between 10 and 20, and 12 reported installing more than 20.

Table 82 shows the percentage of DHPs they sell at different efficiency levels. Almost half of respondents (47%) indicated that the DHPs they install are below 20 SEER, while 3% indicated that the DHPs they install are 25 SEER or above.

Table 82: Percent of DHP Installations across Efficiency Levels

	MEAN PERCENT	
SEER	**NO WT. (N=31)**	**WT. (N=15)**
Less than 20 SEER	49%	47%
20 to 24 SEER	47%	50%
25 SEER or higher	4%	3%
Total	**100%**	**100%**

We also asked respondents about the sizes of DHPs they typically install (Table 83). Respondents reported installing multiple sizes of DHPs; small- to mid-size units were the most common.

Table 83: Size of DHP Installations

	MEAN PERCENT	
BTU	**NO WT. (N=31)**	**WT. (N=15)**
9,000 BTU	4%	5%
12,000 BTU	11%	11%
18,000 BTU	56%	58%
24,000 BTU	20%	16%
30,000 BTU	8%	10%
Other	2%	1%
Total	**100%**	**100%**

Respondents also described the types of DHP systems they typically install (Table 84). More than three-fifths reported installing at least one "single-zone" DHP per residence. "Single-zone" units consist of a single inside unit and a single outside unit.

Table 84: Type of DHP Installation

DHP TYPE	MEAN PERCENT	
	NO WT. (N=31)	WT.(N=15)
A "single-zone" DHP, with a single inside unit and a single outside unit	47%	52%
Multiple "single-zone" DHPs at one residence	5%	11%
A DHP with a single outside unit and two inside units	37%	28%
A "multi-zone" DHP, with a single outside unit and more than two inside units	12%	9%
Total	**100%**	**100%**

We asked trade allies who installed primarily DHPs in 2011 to estimate the average percent of those DHP jobs that displaced or replaced electric heat, displaced or replaced central heat, or added to a previously unheated space (Table 85). On average, two-thirds of their jobs involved displacing or replacing existing zonal electric heat with a DHP. We asked an additional question about the percentage of jobs that were inverter driven, and learned that those projects represented 88% of those trade allies' total jobs.

Table 85: Percent of 2011 DHP Jobs for the Following Purposes

PERCENT OF JOBS	MEAN PERCENT	
	NO WT. (N=31)	WT.(N=15)
Displace or replace existing zonal electric heat (baseboards or wall heaters)	66%	66%
Displace or replace a central heating system	13%	8%
Add heat to a previously unheated space	20%	26%
Total	**100%**	**100%**

Finally, respondents also provided estimates of the cost of a typical single-zone, 18,000-BTU DHP installation (Table 86). Eighty-six percent of respondents indicated that the installation would cost between $3,000 and $5,000, which is consistent with last year's findings.

Table 86: Typical Cost of Single-Zone, 18,000-BTU DHP

COST RANGE	MEAN PERCENT	
	NO WT. (N=30)	WT. (N=14)
Less than $2,000	0%	0%
$2,000 to $2,999	13%	7%
$3,000 to $3,999	40%	43%
$4,000 to $4,999	37%	43%
$5,000 or more	10%	7%
Total	**100%**	**100%**

Gas Fireplace

This year, the gas fireplace section of the survey did not function properly due to a technical issue with the survey software. Trade allies who work primarily with gas fireplaces were unable to access this section.

Insulation

Twenty-four residential sector trade allies indicated that insulation was the main service they provided in association with Energy Trust in 2011.

Air sealing continues to be a significant component of insulation services. Almost half of these trade allies (49%) reported that 50% or more of their jobs also had air sealing performed (Table 87). When weighted by firm size, no trade allies reported not performing air sealing on any 2011 insulation jobs.

Table 87: Percentage of 2011 Insulation Jobs that Had Air Sealing Performed

	MEAN PERCENT	
PERCENT OF JOBS	NO WT. (N=23)	WT. BY FIRM SIZE (N=14)
0%	4%	0%
1% to 24%	13%	29%
25% to 49%	9%	21%
50% to 74%	17%	7%
75% to 99%	22%	21%
100%	35%	21%
Total	**100%**	**100%**

Twenty of the 24 respondents who installed insulation also specified which areas of the house they typically check for air leaks. The most common were the attic hatch, crawlspaces, and doors, followed by recessed lights, windows, and top plates (Table 88).

Table 88: Locations of House Checked for Air Leaks (Multiple Responses Allowed) (n = 20)

PART OF HOUSE	COUNT	PERCENT
Attic hatch	20	100%
Crawlspace	20	100%
Doors	20	100%
Recessed lights	19	95%
Windows	19	95%
Top plate	18	90%
Duct registers	17	85%
Dropped soffit	15	75%
Dryer vent	15	75%
Pluming vent stack	15	75%
Sill plate	15	75%
Outdoor faucets	9	45%
Other	2	10%

Duct Sealing and Duct Insulation

In the 2012 survey, six respondents indicated that the main service they performed in association with Energy Trust was duct sealing and insulation. A majority of the respondents focus on existing homes. Five of the six respondents work exclusively in existing homes, and one occasionally works in new homes. Most of these trade allies reported performing duct sealing and insulation in all existing home jobs (Table 89). This sample is too small to draw reliable conclusions. It is possible, however, that these results reflect the fact that DHPs are becoming more popular in new home construction; therefore, there is less need to seal and insulate ducts.

Table 89: Number of Duct Sealing and Insulation Jobs Done by Type of Construction

	NUMBER OF RESPONDENTS	
PERCENT OF JOBS	EXISTING HOMES (N = 6)	NEW HOMES (N = 6)
0%	0	5
1% to 24%	0	1
25% to 49%	0	0
50% to 74%	0	0
75% to 99%	1	0
100%	5	0
Total	**6**	**6**

Of the responding trade allies who performed duct sealing in 2011, none of them also insulated ducts on more than 50% of their jobs (Table 90). These percentages are largely unchanged from the 2010 findings.

Table 90: Number of 2011 Duct Sealing Jobs That Also Had Duct Insulation Installed

	NUMBER OF RESPONDENTS	
PERCENT OF JOBS	NO WT. (N=6)	WT. BY FIRM SIZE (N=6)
0%	2	1
1% to 24%	2	4
25% to 49%	2	1
50% to 74%	0	0
75% to 99%	0	0
100%	0	0
Total	**6**	**6**

Air Sealing

Twenty-two residential sector trade allies reported that the main service they provided through Energy Trust was air sealing. All of them identified the locations they typically check for air leaks (Table 91). Seventeen of the 22 respondents reported looking in nine or more locations, most frequently attic hatches, crawlspaces, recessed lights, windows, top plates, and duct registers.

Table 91: Parts of the House Checked for Air Leaks (Multiple Responses Allowed) (n = 22)

LOCATION	COUNT	PERCENT
Attic hatch	21	95%
Crawlspace	21	95%
Recessed lights	20	91%
Windows	20	91%
Top plate	19	86%
Duct registers	18	82%
Dropped soffit	16	73%
Dryer vent	16	73%
Pluming vent stack	16	73%
Sill plate	16	73%
Outdoor faucets	10	45%
Other	2	9%

Water Heaters

As noted earlier, the water heating section of this year's survey did not function properly due to a technical issue with the survey software. Trade allies who work primarily with water heaters were unable to access this section.

Windows

The window section of the survey did not function properly due to a technical issue with the survey software. Those trade allies who work primarily with windows were unable to access this section.

New Construction – Site-Built Homes

The new construction – site-built home section of the survey did not function properly due to a technical issue with the survey software. Trade allies who work primarily on new site-built homes were unable to access this section.

New Construction – Manufactured Homes

The new construction – manufactured home section of the survey did not function properly due to a technical issue with the survey software. Those trade allies who work primarily on new manufactured homes were unable to access this section.

COMMERCIAL TRADE ALLIES

We identified 42 respondent firms that mainly did energy efficiency work for commercial buildings (as a primary or secondary sector) in the 2012 Trade Ally Survey. We then asked questions about the primary equipment or service provided by these trade allies.

Commercial HVAC and Boilers

Twelve trade allies indicated that commercial HVAC and boiler projects make up a portion of their Energy Trust work. On average, commercial HVAC trade allies spend 80% of their work on existing buildings and 20% on new construction (Table 92).

Table 92: Construction Type for Commercial Trade Allies

	MEAN PERCENT	
CONSTRUCTION TYPE	NO WT. (N=12)	WT. (N=7)
Existing buildings	82%	80%
New construction	18%	20%

Note: We asked respondents to provide numeric responses for each item and the total adds up to 100%. Mean percent was calculated by averaging given responses for each item. Total column percent does not necessarily add to 100%.

The most common type of HVAC equipment trade allies reported installing included packaged units, gas furnaces, and built-up systems. Typical "other" responses included heat pumps, electric furnaces, radiant heat, economizers, gas fireplaces, and duct systems (Table 93).

Table 93: Number of HVAC Installs (Multiple Responses Allowed)

	NUMBER OF TRADE ALLIES INSTALLING EACH ITEM (N=12)	
TYPES OF HVAC EQUIPMENT INSTALLED	COUNT	PERCENT
Packaged units	10	83%
Gas furnaces	9	75%
Built-up systems	7	58%
Heat recovery devices	5	42%
Variable refrigerant flow	4	33%
Boilers	4	33%
Chillers	2	17%
Other	4	33%

The 12 responding commercial trade allies reported installing an average of 27 HVAC units in 2011. The number of installations ranged from 0 to 100; the median was 15.

Packaged HVAC Units

Trade allies installing packaged HVAC units reported that 44% of installed units in 2011 were gas heating standard units, 37% were heat pump units, and 19% were gas heating condensing units (Table 94).

Table 94: Type of Package Unit Installed

	MEAN PERCENT	
TYPE OF INSTALLED UNIT	NO WT. (N=12)	WT. (N=7)
Gas heating standard	39%	44%
Heat pump	44%	37%
Gas heating condensing	17%	19%
Other	0%	0%

Trade allies reported that most (74%) of their package HVAC installs involved units of less than 9.5 tons. About one-quarter (26%) of trade ally package HVAC installs involved units of more than 10 tons (Table 95).

Table 95: Capacity of HVAC Units Installed

	MEAN PERCENT	
CAPACITY OF HVACS INSTALLED	NO WT. (N=12)	WT. (N=7)
Less than 5 tons	66%	50%
5 to 9.5 tons	16%	24%
10 to 19.5 tons	13%	16%
20 or more tons	6%	10%

Of the packaged unit jobs, the most common features included service agreements (60%) and CO^2 controls (52%). About one-quarter of installations had fan VFDs, and 14% had Energy Management Systems (Table 96).

Table 96: HVAC and Features

	MEAN PERCENT	
ADD-ONS	NO WT. (N=9)	WT. (N=6)
Service agreement	46%	60%
CO2 control	41%	52%
Fan VFDs	9%	19%
Energy management system	7%	12%

Trade allies reported that the package units installed in 2011 had a mean SEER rating of 13.67 (n=9).

Built-up Systems

Seven trade allies reported installing built-up systems, but when we asked these respondents how many systems they installed in 2011, three said they did not install any that year. The four respondents who reported installing built-up systems in 2011 installed an average of 49 units. Reported number of installs ranged from 1 to 150 units.

Three responding trade allies indicated that an average of 42% of built-up units had service agreements, 36% had variable speed controls, 31% had CO^2 controls, and 18% had Energy Management Systems.

Boilers

Commercial trade allies reported that an average of 42% of their total projects involved gas furnaces, while 12% of their projects involved boilers (Table 97).

Table 97: Equipment Involved in Projects

	MEAN PERCENT	
TYPE OF EQUIPMENT	NO WT. (N=10)	WT. (N=7)
Gas furnaces	50%	42%
Boilers	5%	12%

Note: We asked respondents to provide numeric responses for each item and the total adds up to 100%. Mean percent was calculated by averaging given responses for each item. Total column percent does not necessarily add to 100%.

The average boiler size for all 2011 projects was 52,250 Btus (n=4).

The three trade allies who installed boilers said that an average of one-quarter (26%) of these installations had steam features. Table 98 displays each of these trade allies' estimates of the percentage of their boiler projects that featured each of several features.

Table 98: Percent of Boiler Projects Including Each Feature by Respondent

BOILER FEATURE	RESPONDENT 1	RESPONDENT 2	RESPONDENT 3	FEATURE MEAN
Steam	39	20	20	26%
Condensing	59	0	20	26%
Multiple boilers	40	20	5	22%
Linkageless burner controls	41	0	10	17%
Manual controls	28	4	10	14%
Oxygen trim controls	13	0	5	6%
Atmospheric	0	6	10	5%
Respondent Mean	31%	7%	11%	-

Food Service

No firm reported any commercial food service sales or installation in 2011.

Refrigeration

No firm reported any commercial refrigeration installation in 2011.

Building Controls

We asked trade allies questions about building control projects and commissioning work in 2011, but the sample was too small to extract any significant findings.

Building Operations and Maintenance

No firm reported on commercial building and maintenance in 2011.

Windows

We asked trade allies questions about the most common U-value of windows installed and the most common SHGC ratio of windows installed in 2011, but the sample was too small to extract any significant findings.

Building Construction, Engineering, and Architecture

Three trade allies reported that 18% of their 2011 projects were LEED certified. All three respondents indicated that they try to exceed standard energy efficiency code by 10% to 25%.

One trade ally indicated that 50% to 74% of their 2011 projects exceeded 2007 energy code, one trade ally indicated 75% to 99% of their projects exceeded energy code, and one respondent did not know the proportion of total projects exceeding energy code.

INDUSTRIAL TRADE ALLIES

We identified 25 respondent firms that mainly did energy efficiency work for the industrial or agricultural sectors (as a primary or secondary sector) in the 2012 Trade Ally Survey. We then asked questions about the primary equipment or service provided by these trade allies.

Motors

No industrial trade allies reported on industrial motors in 2011.

HVAC

Seven trade allies reported installing industrial HVAC equipment. Three of seven trade allies reported that chillers were the main HVAC equipment installed in 2011 (Table 99).

Table 99: Main Industrial HVAC Equipment Installed

HVAC EQUIPMENT	COUNT
Chillers	**3**
DHP	1
Radiant Heat	1
VFD	1
Other	1
Total	**7**

Trade allies' percent of HVAC installations ranged from low to high for all features with the exception of the energy-monitoring feature. Five out of six trade allies indicated that 50% or less of their installed HVAC equipment had energy monitoring systems (Table 100).

Table 100: Equipment Type and Percentage of HVAC Installations

	HVAC INSTALLATION EQUIPMENT			
PERCENT OF INSTALLATION	ENERGY MANAGEMENT SYSTEM	VARIABLE SPEED DRIVE	ENERGY MONITORING	OUTSIDE AIR
0%	0	0	1	0
1%-24%	2	2	2	1
25%-49%	1	1	2	1
50%-74%	1	1	1	1
75%-99%	1	1	0	2
100%	2	2	0	2
Total	**7**	**7**	**6**	**7**

Compressed Air

No industrial trade allies reported on compressed air in 2011.

Refrigeration

No industrial trade allies reported on refrigeration in 2011.

Pumps and Fans

We asked trade allies questions about 2011 pump and fan projects but the sample was too small to extract any significant findings.

Irrigation

No industrial trade allies reported on irrigation in 2011.

Process Controls

No industrial trade allies reported on process controls in 2011.

Commercial and Industrial Lighting

Twenty-one trade allies indicated that commercial or industrial lighting projects make up a portion of their Energy Trust work, and 20 of them provided responses. Of all the lighting jobs done by the respondent firms, almost three quarters (73%) were in the commercial sector and about a quarter of the jobs (27%) were in the industrial sector (Table 101).

Table 101: Mean Percentage of Industrial vs. Commercial Lighting Projects

	MEAN PERCENT	
SECTOR	NO WT. (N=20)	WT. (N=11)
Commercial	74%	73%
Industrial	26%	27%

Trade allies used high-performance T-8 lighting in 40% of their 2011 lighting projects. Trade allies indicated that 17% of their jobs used T-5 and 11% of their jobs involved LED lighting (Table 102). One trade ally noted that LED fixtures constituted 100% of their firm's lighting jobs.

Table 102: Mean Percent of Lighting Type Installation

	MEAN PERCENT	
LIGHT FIXTURE TYPE	NO WT. (N=20)	WT. (N=11)
High Performance T-8	44%	40%
T-5	13%	17%
LED	11%	11%
Standard 32W T-8	11%	11%
T-12	8%	7%
HID	6%	6%
Low-watt T-8	3%	4%
CFLs	3%	3%
Incandescent	2%	1%
Other	0%	0%

Note: We asked respondents to provide numeric responses for each item and the total adds up to 100%. Mean percent was calculated by averaging given responses for each item. Total column percent does not necessarily add to 100%.

Commercial and industrial lighting trade allies reported on the percentage of installed watts that have lighting controls or sensors. Occupancy sensors have the highest percentage of connected watts (63%). Trade allies reported 8% or less of connected watts for other controls, suggesting a lower market penetration for these controls/sensors (Table 103).

Table 103: Mean Percentage: Connected Watts of Lighting Control Sensors

	MEAN PERCENT	
TYPE OF LIGHTING CONTROL	NO WT. (N=16)	WT. (N=10)
Occupancy sensors	56%	63%
Daylighting/dimming	10%	8%
Multi-level switching	7%	7%
Energy management system	8%	6%
Dimming only	6%	5%
Sweep	1%	1%

Note: We asked respondents to provide numeric responses for each item and the total adds up to 100%. Mean percent was calculated by averaging given responses for each item. Total column percent does not necessarily add to 100%.

Over three-quarters (78%) of commercial-industrial lighting trade allies reported they have not had difficult lighting installs or installs that required return visits (n=18).

Four respondents provided descriptions of difficult lighting installation (full verbatim is in Appendix A):

- "Daylight harvesting/dimming, LED dimming, work in occupied spaces"
- "Energy management systems and large control systems . . ."
- "Sensors, anything involving LED dimming"
- ". . . wineries, manufacturing. Wireless occupancy sensors . . ."

RENEWABLE TRADE ALLIES

Renewable Market Participation

A total of 45 responding trade allies worked within the renewables sector, but only 38 of them completed renewable measure-specific questions. Two-third of the respondents in the renewable sector (66%) indicated that they did installations and services of solar electric, less than half of the renewable sector trade allies (42%) indicated that they installed or serviced solar thermal equipment. Eleven percent of the respondent firms in the renewable sector reported wind equipment installations and services (Table 104).

Table 104: Renewables Sector Market (Multiple Responses Allowed) (n=38)

MARKET	COUNT	PERCENT
Solar electric (photovoltaics)	25	66%
Solar thermal (water heating)	16	42%
Wind	4	11%
Biopower	0	0%
Hydro	0	0%

Solar Electric

Twenty-three trade allies installed solar electric systems in 2011. We asked these trade allies about the size, type, and frequency of their solar electric projects.

Sixty percent of firms reported that less than 25% of their total revenue came from solar electric jobs in 2011, while nine percent of firms reported that 100% of their total revenue came from solar electric jobs (Table 105).

Table 105: Percent of 2011 Total Revenue from Solar Electric Jobs

	NO WT.		WT.	
PERCENT OF REVENUE	COUNT	PERCENT	COUNT	PERCENT
0%	1	4%	1	5%
1%-24%	10	44%	8	55%
25%-49%	2	9%	1	6%
50%-74%	4	17%	2	11%
75%-99%	4	17%	2	14%
100%	2	9%	1	9%
Total	**23**	**100%**	**15**	**100%**

Almost half (48%) of firms reported that less than 25% of their solar electric revenue came from commercial jobs. Thirty-two percent of firms said that 50% or more of their solar electric revenue came from commercial jobs. Twenty percent of firms said that 100% of their solar electric revenue was from commercial jobs (Table 106).

Table 106: Percent of 2011 Solar Electric Revenue from Commercial Jobs

	NO WT.		WT.	
PERCENT OF REVENUE	COUNT	PERCENT	COUNT	PERCENT
0%	4	17%	2	15%
1%-24%	9	39%	5	34%
25%-49%	2	9%	1	8%
50%-74%	3	13%	1	8%
75%-99%	3	13%	2	16%
100%	2	9%	3	20%
Total	**23**	**100%**	**14**	**100%**

Over one-quarter (28%) of firms said they had enough work to sustain themselves for the next three months or longer, while over one-third (36%) of firms had enough work to cover the next month. Over one-quarter (28%) had no projects planned at the time of the survey (Table 107).

Table 107: Current Solar Electric Backlog

BACKLOG STATUS	COUNT	PERCENT
Have no projects planned	7	28%
Have projects to cover work for next month	9	36%
Have projects to cover work for next 3 months	3	12%
Have projects to cover work for next 6 months	3	12%
Have projects to cover work beyond the next 6 months	1	4%
Don't know	2	8%
Total	**25**	**100%**

This year, a majority of solar electric trade allies (53%) continued to experience an increase in customer inquiries concerning solar electric projects as compared to the previous year (Table 108). Over one-third (35%) of this year's respondents indicated that there was no change, while almost twelve percent reported a decrease in inquiries, indicating that firms continue to have different experiences in the marketplace.

Table 108: Observed Change in Customer Inquiries: 2011 Compared to 2010

	NO WT.		WT.	
PERCENT CHANGE	COUNT	PERCENT	COUNT	PERCENT
Decreased	4	16%	2	12%
No change	9	36%	5	35%
Increased by				
1%-24%	4	16%	4	25%
25%-49%	5	20%	2	15%
50%-74%	2	8%	1	9%
75%-100%	1	4%	1	4%
Total	**25**	**100%**	**15**	**100%**

As with last year, a majority of responding solar electric trade allies (86%) responded to at least 75% of their customer inquiries. Twelve percent of trade allies responded to less than 50% of customer inquiries (Table 109).

Table 109: Response Percent of Customer Inquiries (2011)

	NO WT.		WT.	
RESPONSE PERCENT	COUNT	PERCENT	COUNT	PERCENT
100%, and was able to serve all qualified leads	17	68%	8	56%
100%, but selectively served only the highest qualified leads	1	4%	0	3%
75%-99%	4	16%	4	27%
50%-74%	1	4%	0	3%
Less than 50%	2	8%	2	12%
Total	**25**	**100%**	**14**	**100%**

Barriers and Suggestions

Respondents also rated the influence of the Oregon Energy Tax Credit on customers' decision to install solar electric systems (Table 110). Almost two-thirds (65%) of responding trade allies rated the tax credits as having a "critical" influence on their decision to install solar electric systems.

Table 110: Influence of Energy Tax Credit on Customer's Decision to Install

AMOUNT OF INFLUENCE	COUNT	PERCENT
1-No Influence	0	0%
2	3	13%
3	3	13%
4	2	9%
5-Critical Influence	15	65%
Total	**23**	**100%**

Average Solar Electric Project Size

The average kW size of 2011 solar electric installations in 2011 was 168 kW for commercial projects and 6 kW for residential projects (Table 111).

Table 111: Average Solar Electric Project Size

	SIZE (KW)	
SECTOR	NO WT. (N=25)	WT. (N=15)
Commercial	54 kW	168 kW
Residential	8 kW	6 kW

Solar Water Heating

This year, 16 trade allies reported that solar thermal was a primary or secondary renewable market for their firm. More than three-quarters (85%) of trade allies reported that 25% or less of their revenue came from solar water heating jobs.

Almost half of all firms (49%) reported that no revenue from solar water heating came from commercial jobs. However, eighteen percent of trade allies reported that all of their revenue came from commercial jobs (Table 112).

Table 112: Percentage of Solar Water Heating Revenue from Commercial Jobs

	NO WT.		WT.	
PERCENTAGES	COUNT	PERCENT	COUNT	PERCENT
0%	7	47%	4	49%
1%-24%	4	27%	2	23%
25%-49%	2	13%	1	10%
50%-74%	0	0%	0	0%
75%-99%	0	0%	0	0%
100%	2	13%	1	18%
Total	**15**	**100%**	**8**	**100%**

The size of solar water heating systems (in square feet of collectors) installed varied widely. Residential systems ranged from 30 to 3,000 square feet, with a mean of 346 square feet (Table 113). Commercial-sector systems ranged from 64 to 6,000 square feet, with a mean of 1,623 square feet.[3]

Table 113: Mean and Median of Average Square Feet of Solar Water Heating Systems Installed in 2011

SECTOR	MEAN	MEDIAN
Commercial (n=8)	1,623 sq ft	240 sq ft
Residential (n=10)	346 sq ft	50 sq ft

Note: We did not apply weight for this variable because sample sizes within each sector was too small and variability in responses were too large.

[3] Eight trade allies replied that their average commercial solar water heating installations were 0 square feet. Similarly, six trade allies gave an average of 0 square feet for residential installations. We excluded these responses to calculate the mean and median.

Wind, Hydro, Biopower, and Other Renewables

We asked 11 qualifying trade allies to estimate the total and average installed capacity (kW) for various renewable energy sources other than solar, including wind, hydro, and biopower. Most responding trade allies did not claim any installed capacity for any market. Only two respondents gave total and average installed capacity for small community wind projects in 2011. The mean total capacity for small community wind was 8.18 kW; the average per job was 2.72 kW average. One respondent claimed 60 kW total, with an average of 20kW per job. Another claimed 30 kW total, with an average of 10 kW per job. These results suggest that each of the two responding trade allies had a total of three small community wind jobs in 2011, with an average total installed capacity of 45 kW and an average of 20kW installed capacity per job. None of the responding trade allies installed biopower or hydro systems in 2011.

6 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

GENERAL QUESTIONS FINDINGS

Economic Impact of Energy Trust Programs on Business

- A large majority of the trade ally firms (90%) said that Energy Trust programs had positive economic impacts on their business in 2011. Renewable trade allies reported experiencing slightly higher positive impacts than those in the residential and commercial and industrial (C&I) sectors.
- Half of the trade ally firms (50%) expect that Energy Trust projects will account for a greater proportion of their total project volume in 2012.

Paperwork

- Most of the trade ally firms (80%) reported completing Energy Trust paperwork for a majority of their customers. This finding was highest among trade allies in the renewable and C&I sectors; 68% and 50% of the trade allies in these sectors said they always complete all of their customers' paperwork.

Tax Credits

- Twelve percent of the residential trade allies and 8% of those in the C&I sector reported they were not aware of the Residential Energy Tax Credit (RETC) or Business Energy Tax Credit (BETC).
- More than half of the respondents were aware of some recent changes to the BETC, but 44% did not know specifics of the changes. Almost half of the trade allies in the C&I or renewable sectors who were aware of the change (47% and 45% respectively) said those changes had had a moderate to significant effect on their business.
- About three-quarters of the trade allies across all sectors reported that they "often" or "always" mention the tax credits to their customers. Only half of the C&I sector trade allies said they mention tax credits "often" or "always."

Financing

- Three-quarters of trade allies (73%) were aware of the financing programs, including Green Street, but a majority of them do not actively promote them.

Serving SW Washington

- Almost one-quarter of the trade allies (23%) indicated they actively offer Energy Trust services to customers in Southwest Washington, which is a slight increase from last year (19%). They identified two main barriers to increased participation in that area: their customers' lack of awareness of Energy Trust and the limited number of Energy Trust incentives available in Washington.

Relationship with Energy Trust

- Trade allies' overall satisfaction with Energy Trust has increased, from 77% last year to 82% this year. Their satisfaction with the time it takes Energy Trust to respond to requests for assistance increased more significantly, from 57% in 2011 to 77% in 2012.

Training and Support

- Trade allies rated cooperative advertising and measure-specific technical training as the support they most need from Energy Trust.
- In the area of training, trade allies expressed the greatest interest in savings calculation tools and energy modeling. A large percentage of residential trade allies (61%) reported they would like to receive training in savings calculation tools. C&I and renewable trade allies were most interested in energy modeling (54% and 67% respectively). One-half (50%) of renewable trade allies said that they would benefit from training about how to calculate customer incentives.

Roundtables

- Sixty-seven percent of the trade allies reported they participated in the roundtables in 2011. C&I trade allies' attendance was the highest (75%), while renewable trade allies' attendance was the lowest (52%). More than half of the roundtable attendees rated the value of the roundtables as at least "somewhat useful."

Insider Newsletter

- More than three-fourths of trade allies (84%) receive the *Insider* newsletter. Most trade allies reported reading at least one article and following links to training information and areas of personal interest at least half the time. The majority of trade allies reading this publication find it at least "somewhat useful."

Website

- Almost all trade allies (91%) use the Energy Trust website at least monthly. Most of them are visiting pages that have program forms, information about program incentives,

and general program information. Generally, trade allies are satisfied with the usefulness of the website.

- Three-quarters of trade allies indicated that they use a Smartphone (76%). A large proportion of them were interested in an Energy Trust app, particularly one that provides program information or requirements, or savings calculations tools.

Star Rating

- Three-quarters of all of the trade allies (74%) were aware of the Energy Trust Star rating system. Renewable trade allies were least aware of the rating system (50%).
- Opinions about the fairness of the Star rating are mixed: 63% said it is fair, while 37% said it is unfair. The most common suggestion for improvement was to base the rating on job quality, not quantity.

MEASURE-SPECIFIC QUESTIONS FINDINGS

These are located in Chapter 5.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion 1:

A majority of the trade allies reported positive experiences working with Energy Trust, and that Energy Trust programs had positive economic impacts on their business. In addition, most of these trade ally firms expected that Energy Trust programs would continue to act as a reliable source of project leads. The Star rating system continues to be a concern, since many perceive that it does not properly incentivize high-quality work. It is important for Energy Trust to continue exploring better rating systems that can best leverage trade allies.

Conclusion 2:

It is important that Energy Trust tailor the types of support it provides to meet the unique needs of each trade ally sector. Trade allies in all sectors exhibited a need for training on Oregon's RETC and BETC tax credits. These tax credits make projects more affordable and it is important that trade allies actively promote them along with Energy Trust incentives.

Conclusion 3:

It is difficult to draw meaningful conclusions regarding the measure-specific market research component because an extremely low percentage of surveyed trade allies had installed many of the study's target equipment. Our attempt to reduce survey burden by reducing the number of

questions per respondent limits our ability to increase these percentages. In addition, even with equipment types with higher incidences, possible self-selection bias may reduce the ability to generalize results accurately to a larger population.

Recommendation

Narrow the scope of this study by including questions that are applicable to most trade allies only and omitting the measure-specific market research component.

A APPENDIX A: VERBATIM RESPONSES

Q8. Please select and rank the three most common reasons you did not complete most or all of the paperwork for a customer. Other

Renewables	Contractor usually fill this paper work out
Residential	A small 3 man shop only has so many hours in a day. There are so many programs its getting hard to keep up.
Residential	Earth Advantage took care of all paperwork.
Residential	I Completed all paper work
C & I	Contractor usually fill this paper work out

Q9. Which staff member(s) of your firm have a significant role in processing applications for your customers? Other

Renewables	Energy analysts
Renewables	me – [NAME REMOVED] - Energy Conservation Mgr
Renewables	Multi-family and Green Program Assitant
Renewables	Project Manager
Renewables	project managers
Renewables	Self
Renewables	The paper work is usually fill out by the contractor or end users
Residential	Also our field foreman
Residential	I provide info to Earth Advantage and they do the paperwork.
Residential	Multi-family and Green Program Assitant
Residential	Our sales staff and technicians are the same people. We are changing how we do ETO paperwork starting 5/1, so hopefully it will go more smoothly
Residential	project lead (me)
Residential	Project Manager & office Manager complete all
Residential	Project Managers

Residential	There are only 2 of us - the two principal owners
C & I	Cx Contracts Manager
C & I	Energy analysts
C & I	Lighting Specialist
C & I	me – [NAME REMOVED] - Energy Conservation Mgr
C & I	project lead (me)
C & I	project managers
C & I	The paper work is usually fill out by the contractor or end users

Q11. What features would you like to see in a financing offer for energy efficiency and renewable energy projects. Other

Renewables	EnerBank loans
Renewables	Green Street doesn't offer a good loan package for small wind. We've negotiated special financing from various local lenders for our small wind customers.
Renewables	s o f c u wells fargo
Renewables	TRANE/BANK OF AMERICA FINANCING PROGRAM
Residential	0% utility loans
Residential	Banner Bank
Residential	banner bank ,sometimes mnf. finance offers.
Residential	Banner Banks low interest loans
Residential	CEWO/Craft3
Residential	Craft3
Residential	First Security (on-line application - 5min response)
Residential	first security as our primary & GE as our 2nd
Residential	First Security of Washington
Residential	s o f c u wells fargo

Residential	TRANE/BANK OF AMERICA FINANCING PROGRAM
Residential	we promote these items but find that we have little need for them. most customers of ours pay cash.
Residential	Wells Fargo for Carrier products
C & I	First Security (on-line application - 5min response)

Q15. Energy Trust currently uses the insurance tracking company EBIX to track insurance status for all trade allies and verify that policies are up to date. In your interactions with EBIX over the past year, which, if any, of the following have occurred? Other

Renewables	They sent update information to the wrong person in our organization and they didn't know what it was for.
Residential	i only receive the last "nasty" threat of the renewal required. I received no initial renewal notices.
Residential	I would not be EBIX contact
Residential	My insurance agent automatically files Certificates of Insurance with each organization that I work with. EBIX required me to then resubmit the paperswork manually. Waste of my time and paper!
Residential	NOT SURE
C & I	I would not be EBIX contact
C & I	Their emails go directly to my junk-email folder and we almost got removed as a Trade Ally because I was not aware of the program. Now that I do, I have not had a problem.

Q19. What are the main barriers to serving areas in Southwest Washington?

Renewables	not sure
Residential	Electrically heated homes do not qualify for ETO
Residential	More Targeted WA ADVT
Residential	Natural Gas Customers Only Restriction
Residential	We closed down our Washington license Jan 2012
C & I	8 BTU per Sq. Ft limit on retro fit of UH
C & I	not sure

Q26. In which renewable energy market do you primarily work? Other

Renewables	Geo thermal
Renewables	None
Renewables	solar pv
Renewables	Solar Thermal - Water Heating and pool heating
Residential	Geo thermal
C & I	None

Q282. Are there any lighting measures that are particularly difficult to install, or that require return visits more frequently than others?

Residential	energy management systems and large control systems sometimes require more work
C & I	Building Type and Installation Area Due to Area Access and/or when we can access the areas. Examples: Wineries, Manufacturing. Wireless Occupancy Sensors based on the existing circuiting and wiring method/voltage - They also take more visits to narrow own the zone cut off's especially along walking paths.
C & I	Daylight harvesting/dimming, LED dimming, work in occupied spaces
C & I	energy management systems and large control systems sometimes require more work
C & I	Sensors, Anything involving LED Dimming

Q76. What types of HVAC equipment do you install? Other

Renewables	Energy analysis/CX no install
Residential	heat pumps, AC, Electric Furnaces,
Residential	Tankless Water Heaters , Water Heaters, Economizers, Heat Pumps, Ductless Mini Splits, Gas Fireplaces, Range Hoods, Duct Systems
C & I	Energy analysis/CX no install
C & I	heat pumps, AC, Electric Furnaces,
C & I	Radiant Heat
C & I	Tankless Water Heaters , Water Heaters, Economizers, Heat Pumps, Ductless Mini Splits, Gas Fireplaces, Range Hoods, Duct Systems

Q223. What types of residential HVAC systems or services did your firm perform in 2011? Other

Renewables	DUCT SEALING
Renewables	Geo thermal
Residential	Duct Sealing
Residential	DUCT SEALING
Residential	Geo thermal
Residential	Geothermal
Residential	HWH

Q125. What are the reasons for not using commissioning? Other

Renewables	part of start-up testing
Residential	No Idea what it is.
Residential	no incentive
Residential	out of state
Residential	part of start-up testing
Residential	Two friends in program both fake numbers. I use the factory settings and charging charts.

Q154. What is the many reason for the deterioration of your working relationship with Energy Trust? Other

Renewables	Energy Trust only supports approx. 6 businesses in the greater Portland area.
Residential	Do not offer much in Eugene/Springfield residence
Residential	less communication
Residential	Massive change between PECI, ET, and Earth Advantage
C & I	Incentive amounts have not kept pace with labor/material costs resulting in significantly higher paybacks

Q155. What is the main reason for the improvement in your working relationship with Energy Trust? Other

Renewables	INCREASED PARTICIPATION IN OUR REGION
Renewables	We have a direct contact person for all our lighting requests. [STAFF MEMBER] and he is very responsive and offers his expertise to us when called upon.
Residential	Became an ET Ally
Residential	ETO policies in place currently meet our needs. ETO is running smoothly and efficiently. Your staff are very knowledgable and professional.
Residential	INCREASED PARTICIPATION IN OUR REGION
C & I	We have a direct contact person for all our lighting requests. [STAFF MEMBER] and he is very responsive and offers his expertise to us when called upon.

Q157. As a trade professional, how interested would you be in the following types of support from Energy Trust? Other

Renewables	Funding as much as possible to subsidize the solar industry residential sector
Renewables	shorter survey
Renewables	We would like to do more cooperative advertising but the ETO has too heavy a hand in the content
Residential	help
Residential	Rebates
Residential	shorter survey

Residential	This is not related to this page, however, on the first page where it asks the % of work we did through ETO in 2011, I did not include CEWO projects. If you are including them, I would say 99 to 100%
Residential	would like to see mor training for air sealing and insulation installers
C & I	Quicker Pay
C & I	Reinstall of the Kick Start Program
C & I	would like to see more training for air sealing and insulation installers

Q156. Please rank the top three program areas in which you'd like to receive training. Other

Renewables	Geographic outreach
Residential	controls training
Residential	program marketing
C & I	controls training
C & I	Egress Lighting
C & I	program marketing
C & I	Undrstanding pay processes & why it takes so long

Q165. What discussion topics for roundtable meetings would interest you?

Renewables	CHANGES, NEW PROGRAMS, MARKETING
Renewables	discussions on installs with trouble shooting themes, pictures of good installs, and bad installs. wiring delemmas and fixes. The importance of being able to re-roof under a commercial pv array without removing the solar pv modules or racking. Should e a requirement. This will be the biggest hurdle to overcome for the future of Solar PV!!
	I like the customer service classes, info on marketing renewables would be great, anything solar thermal related is good
Renewables	incentive amounts and future stability
Renewables	Solar Thermal
Renewables	Successfull marketing of energy efficient projects

Residential	Adding Eugene/Springfield (EWEB particularly) customers to the program. This is our main concern.
Residential	CHANGES, NEW PROGRAMS, MARKETING
Residential	Energy Trust "requiring" submission of a copy of a municiple permit for a given project to accompany the ETO rebate application. If the ETO is promoting the professionalism and quality workmanship of the Trade Ally's then we should insure that all Trade Aly's are protecting the customer's best interest. Requiring project permits is another way of the Trade Ally's affirming the professional reputation of thier own company and the ETO simultainously.
Residential	engery trust marketing pre year to know what is being offered.
Residential	Generally, what is new w/ ET
Residential	How to make it easier for contractors to promote ET incentives. Once the furnace incentive was taken away it drastically cut down our incentive apps with ET. Many consumers just cant spend the money needed to get 2 qualifying appliances as required norwill they spend a great deal more to get the small amount of credit needed for the HP. Also small contractors were greatly affected as co-op was taken away for those not having alot of stars making it harder to try and promote ET programs and were mae to feel like less of a contributing factor to the overall program.
Residential	i like the varity of topics, mostly the networking and marketing stuff
Residential	I work 12 to 16 hour days Im having a hard time to add more time to sit down for a class. With all the new regulations its getting hard to run our companies. Were not the United states of America Were getting to be the United States of over Goverment Regultions, Please help to lower the paper work and regulations Call me for more input [NUMBER REMOVED]
Residential	more dialogue on what measures coming up are being phased out or changes in measures to come. Like what type of gas DHW heaters are going to replace the tankless incentive etc.

Residential	new program rules and processes. opertunity to ask questions to a captive audience. opertunity to voice sugestions.
Residential	nothing comes to mind at this time
Residential	Problems with BPI and recertification. How to improve technical skills rather than marketing skills. Ways that EnergyTrust can effectively educate customers rather than trying to turn technicians into sleazy upsellers and misleading customers to expect ree services and large incentives.
Residential	Successfull marketing of energy efficient projects
Residential	The Roundtables always loose me waiting for the breakout sessions to begin. It seems to take so long from end of speakers to when the breakouts begin. I know this is valuable networking time, but it's also valuable time wasted if one is just waiting. Also - don't know if I get another opportunity to make a comment or not, but we are very small and find it difficult to float the money necessary for the Savings Within Reach, especially since every job we've done there has been a paperwork issues, somehing has glitched somewhere causing even further delay. Always our fault, but all the same, we don't have the mark-up or the overhead to float several clients for 8-10 weeks. It kind of breaks my heart because I know we are very competitive in our pricig and these are the very type of individuals we are out to help.
Residential	Tips on Identifying least cost energy measures for those outside of the Building performance field. Also, Window and Door Installation specification review.
Residential	Training, paperwork etc.
C & I	Can't really say. But I'd really rather not hear again how I should be selling projects or how I should be implementing certain technologies over others. I thought the goal of the ETO was to save kilowatt-hours. The incentives should follow raw energy avings, not type of technology or whether or "retrofit by design" is utilized.

C & I	Energy Trust "requiring" submission of a copy of a municiple permit for a given project to accompany the ETO rebate application. If the ETO is promoting the professionalism and quality workmanship of the Trade Ally's then we should insure that all Trade Aly's are protecting the customer's best interest. Requiring project permits is another way of the Trade Ally's affirming the professional reputation of thier own company and the ETO simultainously.

Q225. Which of the following would make the Insider more useful to you? Other

Renewables	create a 30 hr. day
Renewables	Include pictures of good installs and bad installs
Renewables	N/a
Renewables	Small Wind Information
Residential	don't know
Residential	dont get it
Residential	dont know
Residential	no change
Residential	Not sure. Doesn't really apply to us since we're in Eugene/Springfield
C & I	create a 30 hr. day
C & I	Good As Is
C & I	Start including information about how Trade Ally's brought value to the project. Stop self-agrandizing.

Q179. Which of the following types of articles would be most useful in future newsletters? Other

Renewables	good and bad practices, more efficient installs or the parts the inspectors like to see, examples of a filled out form
Renewables	Small Wind Updates and Information
Residential	new programs

Q279. Would an ID showing Energy Trust affiliation help you in marketing programs to customers? (If YES was selected)

Renewables	A logo or verbiage we can use on proposals
Renewables	badge
Renewables	ET MATERIAL
Renewables	ETO Eligible Wind Turbine
Renewables	Logo
Renewables	something short that could be placed under a signature line
Renewables	Trade ally Logo on truck perhaps, t-shirts maybe
Renewables	Truck logo
Residential	badge
Residential	Badge with picture
Residential	badge/name tag/uniform
Residential	Certificate
Residential	don't know
Residential	Energy Trust logo on all business cards & logo on consumer paperwork.
Residential	ET MATERIAL
Residential	ETO Eligible Wind Turbine
Residential	logo patches for clothing
Residential	photo tag
Residential	Trade Partner ID number with customer satisfaction rating
Residential	Truck logo
C & I	A logo or verbiage we can use on proposals
C & I	badge
C & I	Badget to show potential customers
C & I	General Member IDs

C & I	Registered/Approved Trade Ally #
C & I	something short that could be placed under a signature line

Q188. How effective are the following channels for creating leads? Other

Renewables	The website is very difficult to navigate
Renewables	word of mouth
Residential	CEWOL participation/restrictions
Residential	direct marketing
Residential	HERs generate good leads for us.
Residential	note on star rating. This is based on hopping thru hoops and nothing about the quality of the firm. I have great examples of shady contractors with 3 stars
C & I	direct marketing
C & I	We typically find leads via word of mouth

Q230. Have you received any feedback from your customers about your star rating?

Residential	"Saw your name as a 3 star trade ally" when lead comes in.
Residential	Customers sometimes say they see we're a good Energy Trust affiliate when calling.
Residential	I lost a job because my competitor (shady indoor air guy) had more stars than me. After he ripped her off she called to tell me her regret.
Residential	They have told me that we were selected to bid on a project based on our star rating
Residential	To have less than a 3 star rating deters customers from choosing that contractor. Customers have stated that they have chosen me because I have a 3 Star rating.
Residential	Today I had someone call and say they saw us on the ETO website and saw we were 3 stars, so they called as that was "good enough for them"
Residential	Yes, that they only choose 3 Tier Contractors
C & I	Customers sometimes say they see we're a good Energy Trust affiliate when calling.

C & I	They have told me that we were selected to bid on a project based on our star rating

Q193. How could the star rating system be improved?

Renewables	more customer awareness of what the rating system is
Residential	Needs more marketing, so consumers understand program.
Residential	Base it on multiple variables. 1) Cost paid per improvement and savings to investment ratio calculated on energy savings. 2) Customer satisfaction and remarks made public in a blog or trade ally contractor page. 3) Variables should be considered like s this a free market rating with customers paying money for the service. It is unfair to rank competing contractors higher when they have exclusive markets (like the mobile home program) which I have been excluded from. Even CEWO jobs should not be considred because there is no competitive bid. (Exclusive) which is actually an unfair advantage. I am a CEWO contractor.
Residential	both a quality and a separate quantity rating
Residential	diffierent inbetween contractors more significantly
Residential	dont require a manditory class for 3 star rating. There are already too many meetings to attend I need my time for selling and customer service.
Residential	Have someone tell me how to get back to 3 stars and why we went to 2 stars. I have called twice and was told someone would contact me to explain both times, well lets just say "I'm still waiting!"
Residential	I was not aware of needed updating of my webinar training and lost a star rating recently. It would have been better if I had been sent an e-mail reminder that training requirements have not been met to maintain our 3 star rating. I only found out by ranomly checking your site for our rating and found we had been dropped to a 2 star rating. It was disturbing to find that out!!

Residential	In order to recieve rating QC must be done. This process takes to long for payment. I have had payment delayed +8 weeks and the customer never responded to request for QC. So I did not get paid and it did not count for QC. Payment should NOT be heldup..If corrections are needed the contractor will complete..
Residential	Many of the jobs we completed in 2011 and 2012 were allocated through heating and aircondtioning companys (savings within reach program) possiabley not helping our star rating.
Residential	meeting on edu helpfull
Residential	more customer awareness of what the rating system is
Residential	Not sure. It is hard to earn stars in this economy
Residential	Our company has a 3-star rating, but I have never heard from anyone on how we are doing on Quality Control checks. It would be nice to receive some kind of notice when ETO has done a QC check on a job of ours to know what we are doing right and what we ned to improve on.
Residential	Possibly an informational pamplet for us to hand out to the consumer
Residential	send an email every year to let us know what our rating is or changes, etc.
Residential	Should be based on install quality not quantity. When furnace program was removed it in effect removed alot of business from many contractors thereby reducing applications. Small companies were the ones really hurt by this and since we have been an ETcontractor for over 10 years I feel we were thrown to the curb for the larger companies.
Residential	The ? link could have more detailed info on the criteria for the different ratings. What the customer sees is still a bit vague and can leave the impression that a lower rating indicates quality issues, when a lower rating my actually be the result of a ower volume of projects. Making the criteria more obvious to the customer would reduce the possibility of misperception about the quality of a contractor's work.

Residential	The only thing I think is slightly unfair is if a contractor has not completed many jobs, but they have gotten 100% QC rate on the jobs they have completed, they still might have one or two stars. I do think clients see the stars and assume it's based on uality and don't really comprehend the minimal/average amount of jobs completed since when you click on the stars it says it could be about both. I like the idea of this system, but if thinking as a client I wouldn't mind choosing someone who hasn't complted a ton of jobs if I knew the quality was excellent. Just a thought, although I realize as a 3 star contractor stating this I am advocating for the competition.
Residential	The rating only shows up for some types of search. It is not always shown. Why does it only show up for some search types? Very confusing
Residential	The star systems only benefits the larger companies and makes it difficult for small companies to be fairly represented by comparison. It doesn't help to grow the industry, only to push the jobs towards certain companies. Bigger is not always better. Tose larger companies take advantage to mislead the customers with irrelevant ratings, lost leads and inflated final costs. The best way to improve the system is to eliminate it. EnergyTrust should end the favoritism and allow consumers to make their on choices. Consumers can express their level of satisfaction through a number of already established and fair consumer organizations.
Residential	There should be a much greater commitment by Trade Allies to perform the work according to best practices and to include contractors's adherence to employment practices. It's sad to see some contractors highly rated or featured by Energy Trust of Oregon hen you know they are not following best work practices and employee/employer laws.
Residential	We are fortunate that we have been with Energy Trust before the rating and after. Before the rating system went into effect, 75% of our business came from the Energy Trust of Oregon. After the rating system went into place, we dropped down to 0. Our cals totally dried up. It took us 6-12 months to earn the 3 stars again. And again, our phone is ringing. I have verbally voiced our concerns over the rating system as a small business during the Round-table meetings. Now that we have finally reached ou 3 Star rating, we are receiving calls again. But please do not be delusional, this definitely impacts the barrier to entry for new contractors. It does not support them, it does not help make them successful. It just gives them a lower rating, which dspite you reiterating over and over that it is not performance-based, but that is exactly how it is perceived by clients - we know, our clients tell us so. They say, "Why would we pick anyone other than a 3 Star contractor?" And you know what? I agree. If I was looking, that's the only one's I would choose too.

Residential	We have experience a few program glitches in which we were downgraded to two stars in error. We do not monitor our star rating as we have no reason to think our rating would be reduced. Thus the system should have a "draft" change in which participants ar warned if they are facing any changes and given a short time frame (maybe two to five days) in which we have an opportunity to rectify any bugs and/or glitches within the Energy Trust star rating system. I believe we have learned of our error-ed downgrad from a customer and/or potential employee approximately three times. Not knowing how long we had been incorrectly classified.
C & I	Have someone tell me how to get back to 3 stars and why we went to 2 stars. I have called twice and was told someone would contact me to explain both times, well lets just say "I'm still waiting!"
C & I	I was not aware of needed updating of my webinar training and lost a star rating recently. It would have been better if I had been sent an e-mail reminder that training requirements have not been met to maintain our 3 star rating. I only found out by ranomly checking your site for our rating and found we had been dropped to a 2 star rating. It was disturbing to find that out!!

Q195. Do you have any final comments or suggestions for Energy Trust?

Renewables	ETO was a huge resource to building our business over the past 5 years. It is still vital to create sales and jobs. Thank you!!
Renewables	Great work this year. We are proud to be a Trade Ally. Note on Survey: The sliders did not work.
	I feel the incentive amount the ET is willing to pay is not high enough due to the number of items that are required to get the incentives. In the past couple years the requirements have gone up and the incentives have stayed the same. I feel we are looing work to non ETO contractors who are perfoming less but able to charge less. When you add in the amount of paper work and system requirements like water pipe insulation, air sealing and ground cover it is easy for non ETO contractors to out bid those f us working to ETO standards. The incentives do not level the playing field and each time the ETO adds a requirement it gets harder to complete. Let me be clear that I feel the requirements from the ETO are all good things to do and we appreciate thm being required. But with out better incentives we are loosing work. I also feel strongly that the ETO is doing a terribel job of processing paper work and letting us know when there is a problem so we can fix it.

Renewables	I work for a non-profit and most of the work we do with Energy Trust is for our Multi-family housing projects. However, I also teach a segment on "green" for our housing rehab clients. When I tell them about Energy Trust, they seem mildly interested; howver, I believe if they were more informed, they might get more excited about it. I think that somehow educating the general population of Oregon about Energy Trust would be very beneficial. Right now, it seems only a handful of people know about Energy rust (such as trade ally contractors) and It is up to them to inform others about it.
Renewables	It would be great if Power Clerk had a status of "completed/funds sent" for tracking actual payments. It would be even better if a customer could go online and input a digital signature to eliminate paper use, printing, mailing and scanning of forms. Clases on marketing solar/winning bids on solar installations would be great. Really any information related to solar business that isn't currently being filled in the marketplace. There are not many options for business development related directly to runnin a solar installation business in Oregon. Thank you all, I appreciate everything you do!
	Offer your webinars some oher time rather than the middle of the day.. Morning or evening.. Also I miss the subsidizing of EA
	Please give us more notice when the incentive changes
Renewables	Raise the RETC incentive maximum, that is a real job stopper
Renewables	thank you for helping renewable energy grow
Renewables	thanks THANKS WE APPRECIATE THE ETO !!! [NAME REMOVED]

Renewables	The changes to the small wind program is costing us too much $$$ to participate with Wind Analynics. We will probably stop offering small wind and energy efficient improvements due to these changes. We have invested tens of thousands of dollars develop ur small wind processes, develop financing programs, dealing with the ODO changes, working with counties to develop permitting processes and the wind speed and production process will add weeks of work to even determine if a proposed site is possible. Th small wind group needs to focus on existing customers to improve the gather of information. Additionally, the new program does not take in to consideration of the placement of the tower and turbine on the farming activities. Again, we are finding it to costly and time consuming to participate with no incentives for the trade allies to recoup their out of pocket costs.
Renewables	Trade allies sections is hard to find and navigate to find program documents, if you could improve that it would help me a lot
Renewables	your all doing a great job, keep it up
Residential	I appreciate everythjing ET is doing for our planet.
Residential	Allocate more progams for Douglas Country.
Residential	Bring back furnace 95 option ,selling 80% havent done that in years
Residential	Bring back furnace incentives for PDX. Why penalize the PDX metro area for installing high efficiency furnaces by removing the incentive?
Residential	Customer service is how we are able to develop long term relationships with our clients I would like to see continued improvement in Energy Trusts contractor service
Residential	Do not lie about incentive checks going in the mail. You need Quick turnaround on incentives not 4 months+
Residential	ET is doing a great job... Staff is great!!! Would like to see ET sponsor more "Creative" one of kind energy efficiency solutions.. Ex; maybe some small scale water wheels, small scale wind generators (small 3ft wind generatotrs can be mounted on residntial roofs, some can be desguised as metal art etc) .. New solar micro-technology !!! Etc
Residential	Faster process times.
Residential	Have had difficulty receiving return phone calls when I have left messages on a few occasions. It can be very frustrating when information is needed.
Residential	I enjoy working with ETO and CSG, thank you for such a great program!!

Residential	I feel the incentive amount the ET is willing to pay is not high enough due to the number of items that are required to get the incentives. In the past couple years the requirements have gone up and the incentives have stayed the same. I feel we are looing work to non ETO contractors who are perfoming less but able to charge less. When you add in the amount of paper work and system requirements like water pipe insulation, air sealing and ground cover it is easy for non ETO contractors to out bid those f us working to ETO standards. The incentives do not level the playing field and each time the ETO adds a requirement it gets harder to complete. Let me be clear that I feel the requirements from the ETO are all good things to do and we appreciate thm being required. But with out better incentives we are loosing work. I also feel strongly that the ETO is doing a terribel job of processing paper work and letting us know when there is a problem so we can fix it.
Residential	I have found the changes made to Earth Advantage funding and support earlier this year to have disasterous impacts on building more energy efficient homes. It no longer makes business sense to continue builing an Energy Star/Earth Advantage home due to te increased cost of certification, the increased cost of the new energy code requirements and the decrease in rebate benefits for new residential construction. As one of the largest new home builders in Oregon Polygon has the ability to put more Energy Sar new homes on the market than almost anyone else, yet we will not be able to continue to do so in 2012. As an Oregonian I myself find this incredibly disappointing that Energy Trust has not found a way to support higher volumes of high efficient new hmes.
Residential	I know Energy Trust is all about supporting companies who wish to grow, the larger companies who can give back, but there are a few of us where the goal is not about growing and bigger profits, but enjoying the work-life balance of being a small mom & popbusiness, who is more soul-based, people before profit driven, and quite content working on smaller projects. It's very hard to participate in the programs where we are carrying the cost for our clients (Savings Within Reach & CEWO). If ETO has the fund, why not just allow us to deduct it from the invoice and you all fund it until paperwork is completed.
Residential	i like being a Trade Alliy, very benificial in our industry
Residential	I wish we could be more active in Energy Trust. We will make the effect this year! Thank you

Residential	I work for a non-profit and most of the work we do with Energy Trust is for our Multi-family housing projects. However, I also teach a segment on "green" for our housing rehab clients. When I tell them about Energy Trust, they seem mildly interested; howver, I believe if they were more informed, they might get more excited about it. I think that somehow educating the general population of Oregon about Energy Trust would be very beneficial. Right now, it seems only a handful of people know about Energy rust (such as trade ally contractors) and It is up to them to inform others about it.
Residential	I would hope that the ET program would look at all quality contractors and not discriminate. The removal of the co-op program for the lesser star was really discouraging especially in the current economy where people really could not spend the money onthe extras. Hopefully this year will be better.
Residential	I'm disappointed in Energy Trust. The organization is obviously more interested in their own final deduction numbers than customer concerns. ETO is out of touch with the customers wants, needs and limitations. My customers are often trying to maintain tight budget. Suggesting that they take out a loan and embark on a major renovation is unrealistic and irresponsible. ETO should spend their money helping to educate the consumer about conservation efforts and encouraging everyone to make reasonable prgressive changes within their limits. Instead, customers are misled to think they must make major changes immediately and emphasis is put on getting technicians to up-sell services rather than working within the customer's means to provide the most effecive and affordable solutions. I'm tired of answering calls only to find that someone expects free services based on marketing communication that they have had with ETO. It costs money to operate a business and provide a service. Large companies offer fee services because they inflate their prices and the customer pays for it on the back end. I develop honest, long-term relationships with my clients and they trust me to do what is right for them. As I continue to maintain high standards for my companyand the services that I provide to my customers, I find myself moving further out of alignment with Energy Trust and BPI motivations. I will say that I have been fortunate to work with ETO representatives [ENERGY TRUSE STAFF] who are sincere in thir conservation efforts and respect my values for serving my customers.
Residential	I'm very impressed with the Energy Trust and am proud to be a Trade Ally. Their staff is very professional, their systems are organized and they proceed with thoughtful decision making.

Residential	it would be nice if more incentives that qualified for energy trust incentives that also qualified for weatherization or duct sealing were available
Residential	Just that I am transitioning out of work on existing homes and concentrating on new homes as a NW Energy Star verifier, at least in part because of the cash flow bottlenecks I have encountered in the past with the SWR incentives
Residential	Keep up the good work!!
Residential	Let contractor know which jobs are scheduled for QC
Residential	Much of our work is done in Columbia County. Often incentives are not available through Energy Trust of Oregon as few of them have Gas available.
Residential	No
Residential	No free programs - decreases the value of the work we do All programs to be on at least a two year cycle- continous change confusses everyone involved-mistakes are made
Residential	nope
Residential	Offer your webinars some oher time rather than the middle of the day.. Morning or evening.. Also I miss the subsidizing of EA
Residential	Our rep does a great job.
Residential	Please find a good way to improve the air sealing program. The suggestions I have heard would make this hard to sell to customers measure even more difficult to sell. Find the bad contractors and kick them out instead of making the program more difficultfor ALL contractors. Thank you.
Residential	Require a AHRI certified matched hvac systems for incentive. To many times contractors mis-match systems that has no varifiable effiency ratings, enter a outdoor model number in the incentive application, and get the customer an incentive. There is no proen facts about mis-matched system performance to justify energy savings. This also creates an unlevel playing field for contractors doing the right systems. ODE and the feds requires AHRI certified systems on there forms to qualify for tax credits. ETO shuld as well. Thanks
Residential	Thank you for helping to improve us. Lets lower down paper work and more cash back to the home owner's

Residential	Thank you for your support. We have enjoyed working with all the great folks at Energy Trust of Oregon, Conservation Services Group and Lockheed Martin!
Residential	thanks THANKS WE APPRECIATE THE ETO !!! [ENERGY TRUST STAFF]
Residential	The CEWO program is a joke for smaller companies to get involved. Tried to apply during both requests for contractors and have been snubbed although they say they are shorthanded.
Residential	too damm much paper work.....
Residential	Try to get EWEB customers on your list, please! And/or any other electric company in Lane County/NW Natural in Oregon also. Customers loved having that extra incentive with Energy Trust of Oregon and I love (LOVE) your website. It's so informative! I was o disappointed when it changed to where we hardly get to use your company at all. See what you can do!
Residential	Very dissatisfied with the implementation of the Clean Energy Works program and it's negative effect on the non-participating Trade Allies.
Residential	Way to long of a survey.
Residential	We enjoy working with [ENERGY TRUST STAFF], she is an asset to Energy Trust.
Residential	We really appriciated the help with our advertising last year. Thank you so much. We thought the round tabel meeting in Bend was today and when we got there we realized it was last month. We were very disappointed in our mistake.
Residential	We very much appreciate the work that the Energy Trust does on our behalf. it is a relationship we value and look forward to for many years to come.
Residential	With as many heat pumps we install under your program I would think that responding to our questions would mean more to you than to simply ignore us. We install more heat pumps than just about anyone on PGE's list and have since 1982. We are the only orignal dealer left from the programs inception in 1985. We would like to use your programs more if we can get the help when requested, this includes the co-op program.

Residential	You guys are great! Also, please note what I said about the % of jobs completed through ETO, I didn't count CEWO jobs in there, so if you count those then 99% were ETO related.
Residential	You people do an excellent job with complex issues & topics. Navigating your way between the utilities, with customer interaction and contractor interaction, and trying to please all parties concerned. It seems to be getting more complex all the time,with various groups within groups. E-Trust, CSG, PECI, applied proactive tech, earth advantage, new homes, existing homes, multi-family, commercial buildings, and so on. Some times I don't know who works for E.Trust or what. It would be nice to show anubrella type approach and show all trade allies all of the groups are under that umbrella, so that we know where exactly what services are offered, and where we should put our time. Thank you.
C & I	-The lighting incentives have become irrelevant, contradictory, time-wasting, and confusing, and are actually impeding business growth. It's time for the ETO to take a leadership position and move to a cents-per-kWh-saved program and eliminate all of thecomplexity. -Turn-around time has gotten out of hand and needs significant improvement. -The ETO and its program contractors are starting to compete with their own trade allies. This is likely unintentional but needs to be addressed. Suggest talking tokey trade allies for clarification on this issue.
C & I	ATTA BOY
C & I	Better phone answering people, some don't know what they are doing when you call.
C & I	ETO was a huge resource to building our business over the past 5 years. It is still vital to create sales and jobs. Thank you!!

C & I	Having been a registered trade Ally for many years, I do not see the Energy Trust making Commissioning or Retro Commissioning a mandatory pre-requisite for receiving Energy Trust Grants except SB1149 & some BETC incentives. I would like to see Cx or RetrCx utilized on all commercial and industrial projects. ETO Grants should be linked to at least a 1 year independent M&V Measurement & Verification on Energy Trust Projects to validate the actual performance measured against the "Predicted Savings in Enegy Reduction". I think this would add credability to the incentive programs and verify that Energy was truly being saved throughout a full calendar year.
C & I	Hire [NAME REMOVED]. He has the expertise you need to train & motive contractors.
C & I	I enjoy working with ETO and CSG, thank you for such a great program!!
C & I	I have enjoyed working with Energy Trust of Oregon. The electricty and money saved by our customers is huge. Thank you for all your help [NAME REMOVED] [COMPANY NAME REMOVED] "Service you can look up to"
C & I	I wish we could be more active in Energy Trust. We will make the effect this year! Thank you
C & I	I work with Cascade Energy Engineering for greenhouse conservationi programs and have been very happy with the service, follow-through, customer interactions, and support. I would suggest that this firm be made responsible for SW Washington also... just t keep the process and contactgs the same as we have in Oregon.
C & I	I would like to see my company show-cased by Energy Trust, especially in the local newspapers. I have seen competitors show-cased, but never us.
C & I	Improve payment times
C & I	It is still confusing to the average homeowner.

C & I	[ENERGY TRUST STAFF] are very helpful & are grat to work with.
C & I	Much of our work is done in Columbia County. Often incentives are not available through Energy Trust of Oregon as few of them have Gas available.
C & I	My company has appreciated the work we have performed with our Energy Trust Program Managers. Our relationships with [ENERGY TRUST STAFF] have increased the number of projects that we have had approved by ustomers and increased our company's profitability in from 2010 to 2011. We look forward to growing our relationship with the Energy Trust. The Energy Trust Kick Start Bonus program was a complete success and benefit to my company and our clients that prticipated. We hope that this program will return as soon as possible. Thank you for all of your patience and assistance with assisting in having my projects approved.
C & I	Paper work needs to be simpler
C & I	The Energy Trust should always refer the Contractor list to a customer who wants info and not make calls to customers and give ballpark cost predictions.
C & I	The incentive amounts simply must increase. It really feels like the Public Purpose Charge has become an Energy Trust Overhead Purpose Charge. How fancy does the ETO office need to be? How many staff are really needed? How many consultants are really eeded? I would really appreciate NOT having a consultant make alternate suggestions to my clients when making a pre- or post-inspection. That sort of technical involvement should not happen in front of my client, especially since the suggestions are lrgely items that my client has already asked me to avoid (Some folks really don't want sensors!) or that I've already suggested and/or ruled out (Daylight harvesting isn't for everyone!) or simply don't think will add value (In the grand scheme of things,does it really matter if the table lamps in the lobby still have a 40W incandescent A19? Should I really push a $25 light bulb on a non-profit that has 4-lamp T12 troffers?) or flat won't work (Not everyone is in love with 25W lamps powered by a low ballst factor). The whole concept of prescriptive vs. custom should be scrapped. As long as CEE qualifications are met, incentives should be based solely on raw kilowatt-hour savings. And the turn-around time for incentive checks MUST be shortened. The Evrgreen staff does a great job of getting paperwork out, scheduling inspections, getting paperwork back, etc., but once the final paperwork falls into the ETO black hole time seems to stand still. And with $30k on the hook, that makes me much less incline to take an incentive on assignment and it makes me look really bad to my client.

C & I	The time it takes for a Contractor assinged rebate take TOO long, 6 to 8 weeks and sometimes longer just does not work.
C & I	With as many heat pumps we install under your program I would think that responding to our questions would mean more to you than to simply ignore us. We install more heat pumps than just about anyone on PGE's list and have since 1982. We are the only orignal dealer left from the programs inception in 1985. We would like to use your programs more if we can get the help when requested, this includes the co-op program.

APPENDIX B: 2012 TRADE ALLY SURVEY

CONTACT INFORMATION BLOCK

Q1. Thank you for taking our annual trade ally and contractor survey! Your feedback is very important to us and will help improve our services to you. This survey asks general and specific questions about your business. If you don't have an exact answer, please give us your best guess. Your responses will be kept confidential and only reported in aggregate so no one respondent can be identified. As a token of thanks for completing this survey, you can enter a drawing for one of two $150 Visa Gift Cards.* To enter the drawing, please provide the following information (contact information will not be used to identify your responses on the survey):

Name: (1)

Company: (2)

Email address: (3)

Q2. Role Please select a job category that best describes your job responsibility.

- ○ Administrative / Office Staff (1)
- ○ Technician / Installer (2)
- ○ Project Manager / Estimator (3)
- ○ Owner / Principal (4)
- ○ Other (Please Specify) (5) _____

Drawing

* The VISA Gift Card drawing is open to Energy Trust trade allies or other contractors who participated in Energy Trust programs in 2011 and who have completed this participant survey. Limit of one entry per person. Upon receipt of this survey, Energy Trust will enter your name in the drawing. Two winners will be selected through a random drawing from all entries received by 11:59 p.m. on April 30, 2012. Drawing will be conducted no later than May 4, 2012. Odds of winning will depend on the number of surveys completed. Winners will receive a $150 Visa Gift Card. Drawing is sponsored by Energy Trust of Oregon, Inc., 421 SW Oak St, Suite 300, Portland, Oregon 97204. Energy Trust reserves the right in its sole discretion to revise, terminate, or discontinue this drawing at any time.

GENERAL QUESTIONS BLOCK

Q3_rev. How many people work at your company in each region in Oregon, SW Washington, and the USA?

	0 (1)	1 (2)	2-4 (3)	5-9 (4)	10-24 (5)	25-49 (6)	50-99 (7)	100-249 (8)	250-499 (9)	500-999 (10)	MORE THAN 1,000 (11)
Portland Metropolitan (1)											
Willamette Valley / North Coast (2)											
Southern Oregon / South Coast (3)											
East of the Cascades (4)											
SW Washington (5)											
USA (total) (6)											

Q3a. Which regions does your company do the most work in? Drag up to three regions into the box, and order them from most to least jobs.

REGIONS WITH THE MOST WORK (PICK UP TO THREE AND RANK)
Region 1 (1)
Region 2 (2)
Region 3 (3)
Region 4 (4)
Region 5 (5)
Region 6 (6)
Region 7 (7)
Region 8 (8)
Region 9 (9)
Region 10 (10)
Region 11 (11)
Region 12 (12)

Q4. Approximately what percentage of your company's 2011 revenues in Oregon came from jobs participating in Energy Trust programs?

- ○ 0% (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q5. Thinking of projects in 2011, how influential were Energy Trust programs, on average, in moving energy efficiency or renewable energy projects forward?

_____ Energy efficiency (1)

_____ Renewable energy (2)

Q6. In 2011, what economic impacts, if any, did your firm experience from participating in Energy Trust projects?

_____ Economic impact of participating in Energy Trust projects (1)

PROGRAM PAPERWORK BLOCK

Q7. For what percent of your Energy Trust projects does your firm complete all or most of your customers' program paper work?

- ○ 0% (1)
- ○ 1-24% (2)
- ○ 25-49% (3)
- ○ 50-74% (4)
- ○ 75-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Answer If For what percent of your Energy Trust projects does your ... 0% is selected; or For what percent of your Energy Trust projects does your ... 1-24% is selected; or For what percent of your Energy Trust projects does your ... 25-49% is selected.

Q8. Please select and rank the three most common reasons you did not complete most or all of the paperwork for a customer by dragging the items into each box.

TOP REASON	SECOND REASON	THIRD REASON
_____ The paperwork is too complex or confusing (1)	_____ The paperwork is too complex or confusing (1)	_____ The paperwork is too complex or confusing (1)
_____ The amount of paperwork is excessive (2)	_____ The amount of paperwork is excessive (2)	_____ The amount of paperwork is excessive (2)
_____ You do not have access to the necessary information (3)	_____ You do not have access to the necessary information (3)	_____ You do not have access to the necessary information (3)
_____ The customer prefers to complete the paperwork (4)	_____ The customer prefers to complete the paperwork (4)	_____ The customer prefers to complete the paperwork (4)
_____ You don't have access to the application (5)	_____ You don't have access to the application (5)	_____ You don't have access to the application (5)
_____ Other: (6)	_____ Other: (6)	_____ Other: (6)
_____ The paperwork is too complex or confusing (1)	_____ The paperwork is too complex or confusing (1)	_____ The paperwork is too complex or confusing (1)

Q9. Which staff member(s) of your firm have a significant role in processing applications for your customers? Select all that apply.

- ☐ Owner or top management (1)
- ☐ Sales staff (2)
- ☐ Technicians (3)
- ☐ Administrative staff (4)
- ☐ Other: (5) _____

FINANCIAL SUGGESTIONS BLOCK

Q11. What features would you like to see in a financing offer for energy efficiency and renewable energy projects? Select all that apply.

- ☐ Longer financing terms (1)
- ☐ Allow contractors to submit paperwork for customers (2)
- ☐ Online applications (3)
- ☐ Telephone assistance with applications (4)
- ☐ Simplified paperwork (5)
- ☐ Clearer application instructions (6)
- ☐ Broader range of possible loan amounts (7)
- ☐ Other: (8) _____
- ☐ Not interested in offering financing (9)

Q12. Which of the following best describes your firm's experience with financing offers, such as Green Street through Umpqua Bank?

- ○ Not familiar with such services (1)
- ○ Used in past, but not now (2)
- ○ Aware of such services, but do not actively promote them (3)
- ○ Actively promote Green Street (4)
- ○ Actively promote Green Street and other financing offers (Please Specify others) (5) _____
- ○ Actively promote financing offer(s) other than Green Street (Please Specify): (6) _____
- ○ Don't know if we actively promote such services (7)

GENERAL BLOCK

Q13. How long have you been working with Energy Trust of Oregon?

- ○ Less than 1 year (1)
- ○ 1-2 years (2)
- ○ 3-4 years (3)
- ○ 5 years or more (4)
- ○ Don't know (5)

Q14. Compared to 2011, do you anticipate a change in the proportion of your projects involving Energy Trust in 2012?

- ○ Expect to increase proportion of projects (1)
- ○ Expect to decrease proportion of projects (2)
- ○ Don't project a change in proportion of projects (3)
- ○ Don't know (4)

Q15. Energy Trust currently uses the insurance tracking company EBIX to track insurance status for all trade allies and verify that policies are up to date. In your interactions with EBIX over the past year, which, if any, of the following have occurred? Select all that apply.

- □ EBIX did not provide needed information in a timely manner (1)
- □ I had to submit the same documentation multiple times (2)
- □ It was difficult to contact someone at EBIX to get information (3)

- ☐ Communication from EBIX was not clear (4)
- ☐ EBIX decisions were not consistent with Oregon law or regulations (5)
- ☐ There were no problems with EBIX (6)
- ☐ I had no interactions with EBIX (7)
- ☐ Other: (8) _____

Q16. Does your firm actively offer Energy Trust services to NW Natural's gas customers in Southwest Washington?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

SW WASHINGTON BLOCK [DISPLAY IF Q16=YES]

Q17. What percent of your firm's Energy Trust work during 2011 was in Washington?

- ○ 0% (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q18. Thinking of all the projects you have done in Washington - whether or not they received Energy Trust incentives - how were they distributed among the following locations? The total should sum up to 100%.

_____ Vancouver (1)

_____ Camas (2)

_____ Other parts of Clark County (3)

_____ Klickitat or Skamania County (4)

Q19. What are the main barriers to serving areas in Southwest Washington? Select all that apply.

- ☐ The Oregon in "Energy Trust of Oregon" (1)
- ☐ The limited number of Energy Trust incentives available in Washington (2)
- ☐ Lack of customer awareness of Energy Trust (3)
- ☐ Lack of customer interest in energy efficiency or renewables (4)
- ☐ Customer perception that newer homes do not need energy efficiency improvements (5)
- ☐ Income barriers (6)
- ☐ No barriers exist at this time (7)
- ☐ Other: (8) _____

TAX CREDIT FAMILIARITY BLOCK

Q20_rev. How familiar are you with Oregon's energy tax credits for business (BETC) and residential (RETC)?

- ○ Not familiar with either (1)
- ○ Familiar with BETC and RETC (2)
- ○ Familiar with BETC (3)
- ○ Familiar with RETC (4)
- ○ Don't know (5)

Answer If How familiar are you with Oregon's energy tax credits for... Familiar with BETC and RETC is selected; or How familiar are you with Oregon's energy tax credits for... Familiar with BETC is selected.

Q20a. Are you aware of the changes that have been made to the Business Energy Tax Credit (BETC) in the last year?

- ○ I am familiar with the changes (1)
- ○ I know changes were made but do not know what kinds of changes (2)
- ○ I am not aware of any changes (3)

Answer If Are you aware of the changes that have been made to the B... I am familiar with the changes is selected; or Are you aware of the changes that have been made to the B... I know changes were made, but do not know what kinds of changes is selected.

Q20b. How much, if at all, have the changes in the BETC affected your business?

_____ Changes in Business Energy Tax Credit (1)

TAX CREDIT BLOCK [DISPLAY IF Q20_REV=2 OR Q20_REV=3]

Q21. How often do you mention RETC to customers?

- ○ Always (1)
- ○ Sometimes (2)
- ○ Rarely (3)
- ○ Never (4)
- ○ Don't know (5)

Q23 old. How important is RETC in helping you sell energy efficiency or renewable upgrades to your customers?

_____ Importance of RETC (1)

PROGRAM PARTICIPATION GENERAL BLOCK

Q23. Did your firm do work with Energy Trust in 2011?

- ○ Yes (1)
- ○ No (2)

If No is selected, Then Skip To End of Block

Answer if Did your firm do work with Energy Trust in 2011? Yes is selected

Q24. In 2011, what type of work did your firm do with Energy Trust?

- ○ Energy efficiency work only (1)
- ○ Renewable energy work only (2)
- ○ BOTH efficiency and renewable work (3)

RENEWABLE MARKET PARTICIPATION BLOCK [DISPLAY IF Q24=2 OR Q24=3]

Q26Ren. In which renewable energy market(s) did your firm do its 2011 Energy Trust renewable energy work?

PRIMARY MARKET	SECONDARY MARKET
_____ Solar electric (photovoltaics-PV) (1)	_____ Solar electric (photovoltaics-PV) (1)
_____ Solar thermal (water heating) (2)	_____ Solar thermal (water heating) (2)
_____ Wind (3)	_____ Wind (3)
_____ Biopower (4)	_____ Biopower (4)
_____ Hydro (5)	_____ Hydro (5)
_____ No secondary market (6)	_____ No secondary market (6)
_____ None of the above (7)	_____ None of the above (7)

RENEWABLE – SOLAR ELECTRIC BLOCK [DISPLAY IF Q26REN_1=1]

Renewables: Solar PV

Q54. What percent of your 2011 revenue came from solar electric jobs?

- ○ 0% (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q55. What percent of your 2011 solar electric revenue came from commercial jobs?

- ○ 0% (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q56. What is your current solar electric project backlog?

- ○ Have no projects currently planned (1)
- ○ Have projects to cover work for next month (2)
- ○ Have projects to cover work for next 3 months (3)
- ○ Have projects to cover work for next 6 months (4)
- ○ Have projects to cover work beyond the next 6 months (5)
- ○ Don't know (6)

Q57. Did you observe an increase in customer inquiries about solar electric in 2011 compared to 2010? If so, by what amount?

- ○ No change (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-100% (5)
- ○ Decreased (6)

Q59. What percent of customer inquiries were you able to respond to in 2011?

- ○ 100% and was able to serve all qualified leads (1)
- ○ 100%, but selectively served only the highest qualified leads (2)
- ○ 75%-99% (3)
- ○ 50%-74% (4)
- ○ Less than 50% (5)

Q60. What was the average kW of your 2011 solar electric installations?

_____ Commercial (average kW) (1)

_____ Residential (average kW) (2)

Q62. How much has the Oregon Energy tax credit influenced your customers to install solar electric systems?

_____ Influence of Oregon state tax credits (1)

RENEWABLE – SOLAR THERMAL BLOCK [DISPLAY IF Q26REN_2=1]

Renewables: Solar Thermal

Q63. What percent of your 2011 revenue came from solar water heating jobs?

- ○ 0% (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q64. What percent of your 2011 solar water heating revenue came from commercial jobs?

- ○ 0% (1)
- ○ 1%-24% (2)
- ○ 25%-49% (3)
- ○ 50%-74% (4)
- ○ 75%-99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q69. What was the average size in square feet of your 2011 solar water heating system installations?

_____ Commercial (average square feet of collectors) (1)

_____ Residential (average square feet of collectors) (2)

RENEWABLE – WIND/OTHER RENEWABLES BLOCK [DISPLAY IF Q26REN_3=1 OR Q26REN_4=1 OR Q26REN_5=1 OR Q26REN_7=1 OR]

Renewables: Wind, Hydro, Biopower, Other

Answer if In which renewable energy market did your firm do its 201... None of the above Is Equal to 1.

Q72. In which renewable energy market do you primarily work? _____

Q73. For the renewable projects that you worked on in 2011, what was the TOTAL installed capacity (kW)?

_____ Small community wind (installed kW) (1)

_____ Biopower (installed kW) (2)

_____ Hydro (installed kW) (3)

_____ Other (installed kW) (4)

Q74. For the renewable projects that you worked on in 2011, what was the AVERAGE installed capacity (kW)?

_____ Small community wind (average kW) (1)

_____ Biopower (average kW) (2)

_____ Hydro (average kW) (3)

_____ Other (average kW) (4)

EFFICIENCY SECTOR AND MARKET PARTICIPATION BLOCK [DISPLAY IF Q24=1 OR Q24=3]

Efficiency Work

Q25. In which sectors did your firm do its 2011 Energy Trust efficiency work?

	PRIMARY SECTOR (1)	SECONDARY SECTOR (2)
Residential		
Multifamily		
Commercial		
Industrial		
Agricultural/irrigation		
No		
None		

Answer if In which sectors did your firm do its 2011 Energy Trust e... Residential - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Residential - Secondary Sector is selected.

Residential Equipment

Answer if In which sectors did your firm do its 2011 Energy Trust e... Residential - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Residential - Secondary Sector is selected.

Q27. What was the main type of residential equipment your firm installed in 2011 that received Energy Trust incentives?

- ○ HVAC systems (gas furnace, heat pumps, ductless heat pumps) (1)
- ○ Duct sealing and/or duct insulation (2)
- ○ Insulation and/or air sealing (3)
- ○ Water heaters (4)
- ○ Windows (5)
- ○ New construction (site-built or manufactured homes) (6)
- ○ None of the above (7)

Answer if In which sectors did your firm do its 2011 Energy Trust e... Commercial buildings - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Commercial buildings - Secondary Sector is selected.

Commercial Equipment

Answer if In which sectors did your firm do its 2011 Energy Trust e... Commercial buildings - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Commercial buildings - Secondary Sector is selected.

Q28. What was the main type of commercial equipment or service your firm provided in 2011 that received Energy Trust incentives?

- ○ Commissioning services (1)
- ○ HVAC or boiler systems and installation (2)
- ○ Food service equipment (3)
- ○ Lighting equipment and installation (4)
- ○ Refrigeration equipment and installation (5)
- ○ Building controls (6)
- ○ Building operations and maintenance (7)
- ○ Windows (8)
- ○ Building construction, engineering, or architectural services (9)
- ○ None of the above (10)

Answer if In which sectors did your firm do its 2011 Energy Trust e... Industrial - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Industrial - Secondary Sector is selected.

Industrial Equipment

Answer if In which sectors did your firm do its 2011 Energy Trust e... Industrial - Primary Sector is selected; or in which sectors did your firm do its 2011 Energy Trust e... Industrial - Secondary Sector is selected.

Q32. What was the main type of industrial equipment or service your firm provided in 2011 that received Energy Trust incentives?

- ○ Lighting (1)
- ○ Industrial motors (2)
- ○ HVAC equipment (3)
- ○ Compressed air systems (4)
- ○ Refrigeration systems (5)
- ○ Pump and fan systems (6)
- ○ Irrigation systems (7)
- ○ Process controls and improvements (8)
- ○ None of the above (9)

Answer if In which sectors did your firm do its 2011 Energy Trust e... Agricultural/irrigation - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Agricultural/irrigation - Secondary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Industrial - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Industrial - Secondary Sector is selected.

Industrial, Water and Wastewater Irrigation and Agricultural Work

Answer if In which sectors did your firm do its 2011 Energy Trust e... Agricultural/irrigation - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Agricultural/irrigation - Secondary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Industrial - Primary Sector is selected; or In which sectors did your firm do its 2011 Energy Trust e... Industrial - Secondary Sector is selected.

Q30. How often do you perform energy studies/evaluations for your customers as a part of your sales process? Please answer separately for Energy Trust-funded studies and all other studies.

	NEVER (1)	FOR SOME OF MY CUSTOMERS (2)	FOR ABOUT HALF OF MY CUSTOMERS (3)	FOR MOST OF MY CUSTOMERS (4)	FOR ALL OF MY CUSTOMERS (5)
Energy Trust-funded studies (1)					
All other studies (2)					

IND – MOTORS BLOCK [DISPLAY IF Q32=2]

Industrial Motors

Q33. Approximately what percent of the motors you sold last year was "NEMA-Premium?"

_____ NEMA - premium (1)

Q34. Did you provide Green Rewind services in 2011?

- ○ Yes (1)
- ○ No (2)
- ○ Not familiar with Green Rewind services (3)

Answer if Did you provide Green Rewind services in 2011? Yes is selected.

Q35. Do you have any suggestions for improving or changing Green Rewind services?

IND – HVAC BLOCK [DISPLAY IF Q32=3]

Industrial HVAC

Q36. What was the MAIN industrial HVAC equipment you installed in 2011?

- ○ Chillers (1)
- ○ Industrial process cooling (2)
- ○ Other: (3) _____

Q37. For systems installed in 2011, what was the average system size?

_____ Chiller (average tons) (1)

_____ Industrial process cooling (average tons) (2)

_____ Other system (average tons) (3)

Q38. What percent of your HVAC equipment installations included the following?

	0% (1)	1%-24% (2)	25%-49% (3)	50%-74% (4)	75%-99% (5)	100% (6)
Energy management system (1)						
Variable speed drives (2)						
Energy monitoring (3)						
Outside air (4)						

IND – COMPRESSED AIR BLOCK [DISPLAY IF Q32=4]

Industrial Compressed Air

Q40. Have you ever used Energy Trust's compressed air tool to calculate savings for a customer?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

If Yes is not selected, Then Skip To Roughly how many new compressors did you install...

Q41. How easy or difficult do you find the tool to use?

_____ Very Difficult (1)

Q42. Do you have any suggestions to improve the tool?

Q43. Roughly how many new compressors did you install in 2011?

_____ Compressors (1)

If Compressors Is Less Than 1, Then Skip To End of Block.

Q44. Approximately what percent of your compressor installations in 2011 fell into the following categories?

_____ 1 - 50 HP (1)

_____ 51-100 HP (2)

_____ 101-200 HP (3)

_____ 201-500 HP (4)

_____ >500 HP (5)

Q45. Approximately what percent of systems you installed in 2011 had the following features?

	0% (1)	1%-25% (2)	26%-50% (3)	51%-75% (4)	76%-99% (5)	100% (6)	NA/ DON'T KNOW (7)
Variables speeds (1)							
Multiple compressors (2)							
Advanced control systems (3)							
Sequencer (4)							
Cycling refrigerated dryers (5)							
Receiver/storage (6)							

IND – REFRIGERATION BLOCK [DISPLAY IF Q32=5]

Industrial Refrigeration

Q197. What is your typical energy efficiency goal when designing projects?

- ○ Design to standard practice (1)
- ○ Exceed standard practice energy efficiency (specify: about what percent?) (2) _____

Q47. What percent of the industrial refrigeration systems that you designed or specified in 2011 had the following features?

	0% (1)	1%-25% (2)	26%-50% (3)	51%-75% (4)	76%-99% (5)	100% (6)	NA/ DON'T KNOW (7)
Compressor VFD (1)							
Evaporator fan VFDs (2)							
Condenser fan VFDs (3)							
Multiplexed compressors (4)							
Energy management system/computer based controls (5)							
Floating suction pressure control (6)							
Floating head pressure control (7)							
Refrigerant waste heat recovery (water) (8)							

	0% (1)	1%-25% (2)	26%-50% (3)	51%-75% (4)	76%-99% (5)	100% (6)	NA/ DON'T KNOW (7)
Refrigerant waste heat recovery (space) (9)							

IND – PUMPS AND FANS BLOCK [DISPLAY IF Q32=6]

Industrial Pumps and Fans

Q219. What is your typical energy efficiency goal when designing projects?

- ○ Design to standard practice (1)
- ○ Exceed standard practice energy efficiency (Specify: by what percent?) (2)

_____

Q48. In 2011, what percent of the pumps and fans that you installed or specified had a variable-speed drive and/or an energy management system?

	0% (1)	1%-24% (2)	25%-49% (3)	50%-74% (4)	75%-99% (5)	100% (6)	NA/ DON'T KNOW (7)
Variable speed pumps (1)							
Variable speed fans (2)							
Energy management system (3)							

IND – IRRIGATION BLOCK [DISPLAY IF Q32=7]

Industrial Irrigation

Q50. Have you ever used the irrigation system tool provided on the Energy Trust website?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

If Yes is not selected, Then Skip To End of Block.

Q51. How easy or difficult did you find the tool to use?

_____ Using the irrigation system tool (1)

Q52. Do you have any suggestions to improve the tool?

IND – PROCESS CONTROLS BLOCK [DISPLAY IF Q32=8]

Industrial Process Controls

Q220. What is your typical energy efficiency goal when designing projects?

- ○ Design to standard practice (1)
- ○ Exceed standard practice energy efficiency (Specify: by what percent?) (2)

_____

IND AND COMM – LIGHTING BLOCK [DISPLAY IF Q28=4 OR Q32=1]

Commercial and Industrial Lighting

Q92. What percent of your 2011 lighting projects fell in the following market segments? (Should add to 100%)

_____ Industrial (1)

_____ Commercial (2)

Q93. Of your firm's 2011 lighting projects, what percent of installed fixtures was represented by the following technologies? (Should add to 100%)

_____ T-12 (1)

_____ Standard 32W T-8 (2)

_____ Low-watt T-8 (3)

_____ High Performance T-8 (4)

_____ T-5 (5)

_____ CFLs (6)

_____ HID (7)

_____ LED (8)

_____ Incandescent (9)

_____ Other (10)

Q94. Of your firm's 2011 lighting projects, what percent of the connected watts had the following controls?

_____ Daylighting/dimming (1)

_____ Dimming only (2)

_____ Multi-level switching (3)

_____ Occupancy sensors (4)

_____ Energy management system (5)

_____ Sweep (6)

Q282. Are there any lighting measures that are particularly difficult to install or that require return visits more frequently than others?

○ No (1)

○ Yes (please explain) (2) _____

COMM – HVAC AND BOILER BLOCK [DISPLAY IF Q28=2]

Commercial HVAC and Boilers

Q75. What percent of your work in 2011 was in new construction (includes major renovations and additions) versus existing buildings? Should add to 100%.

_____ New construction (1)

_____ Existing Buildings (2)

Q76. What types of HVAC equipment do you install?

□ Packaged units (1)

□ Chillers (2)

□ Built-up systems (3)

□ Variable refrigerant flow (4)

□ Heat recovery devices (5)

□ Boilers (6)

□ Gas furnaces (7)

□ Other: (8) _____

Answer if What types of HVAC equipment you install? Packaged units is selected.

Q77. About how many packaged HVAC units did you install in 2011?

_____ Packaged HVAC units (1)

Answer if What types of HVAC equipment you install? Packaged units is selected.

Q78. What percent of your package units were the following? (Should add to 100%)

_____ Gas heating standard (1)

_____ Gas heating condensing (2)

_____ Heat pump (3)

_____ Other: (4)

Answer if What types of HVAC equipment you install? Packaged units is selected.

Q80. In 2011, about what percent of your package HVAC installations fell in the following categories? (Should add to 100%)

_____ Less than 5 tons (1)

_____ 5 - 9.5 tons (2)

_____ 10 - 19.5 tons (3)

_____ 20 or more tons (4)

Answer If What types of HVAC equipment do you install? Packaged units is selected.

Q81. About what percent of the units that you installed in 2011 had the following?

_____ Service agreement (1)

_____ Energy management system (2)

_____ CO2 control (3)

_____ Fan VFDs (4)

Answer if What types of HVAC equipment you install? Packaged units is selected.

Q79. What was the typical SEER of package units you installed in 2011?

_____ SEER (1)

Answer if What types of HVAC equipment do you install? Chillers is selected.

Q82. About what percent of the chillers that you installed in 2011 had the following?

_____ Service agreement (1)

_____ Energy management system (2)

_____ CO2 control (3)

_____ Variable speed controls (4)

Answer if What types of HVAC equipment you install? Built-up systems is selected.

Q83. About how many built-up HVAC units did you install in 2011?

_____ Built-up units (1)

Answer if What types of HVAC equipment do you install? Built-up systems is selected.

Q84. About what percent of the built-up systems that you installed in 2011 had the following?

_____ Service agreement (1)

_____ Energy management system (2)

_____ CO2 control (3)

_____ Variable speed controls (4)

Answer if What types of HVAC equipment do you install? Boilers is selected; or What types of HVAC equipment do you install? Gas furnaces is selected.

Q86. What percent of your 2011 projects involved the following equipment?

_____ Boilers (1)

_____ Gas furnaces (2)

Answer if What types of HVAC equipment you install? Boilers is selected.

Q87. What was the average size (in Btus) of your 2011 boiler installations?

_____ Average boiler Btus (1)

Answer if What types of HVAC equipment do you install? Boilers is selected.

Q88. What percent of the boiler systems you service have the following features?

_____ Multiple boilers (1)

_____ Manual controls (2)

_____ Atmospheric (3)

_____ Steam (4)

_____ Condensing (5)

_____ Oxygen trim controls (6)

_____ Linkageless burner controls (7)

COMM – FOODSERVICE BLOCK [DISPLAY IF Q28=3]

Commercial Foodservice

Q89. What types of energy efficient foodservice equipment do you sell? Select all that apply.

- ☐ Dishwashing pre-rinse spray valves (1)
- ☐ ENERGY STAR dishwashers (2)
- ☐ ENERGY STAR convection ovens (3)
- ☐ ENERGY STAR refrigerators (4)
- ☐ ENERGY STAR freezers (5)
- ☐ ENERGY STAR hot food holding cabinets (6)
- ☐ ENERGY STAR steamers (7)
- ☐ ENERGY STAR fryers (8)
- ☐ Vent hoods (9)
- ☐ Other energy efficient ventilation (10)
- ☐ Other: (11) _____

Q90. Is make-up air typically provided to the kitchen by an independent unit?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

Q91. Is the air from the independent unit heated or cooled?

- ○ Heated (1)
- ○ Cooled (2)
- ○ Neither (3)
- ○ Don't know (4)

COMM – REFRIGERATION BLOCK [DISPLAY IF Q28=5]

Commercial Refrigeration

Q95. About how many commercial refrigeration systems did you install in 2011?

_____ Systems (1)

Q96. What percent of the commercial refrigeration systems did you install in 2011?

_____ Floating head pressure control (1)

_____ Variable speed compressors (2)

_____ Multiplexed compressors (3)

_____ Controlled by an energy management system (4)

_____ Condenser fan VFDs (5)

_____ Floating suction pressure control (6)

_____ Refrigerant waste heat recovery (water) (7)

_____ Refrigerant waste heat recovery (space) (8)

COMM – BUILDING CONTROLS BLOCK [DISPLAY IF Q28=6]

Commercial Building Controls

Q97. For your firm's 2011 building control projects:

What percent of the buildings had an energy management system (EMS)? (1) _____

What was the average facility size, in square feet? (2) _____

What was the major building category (e.g., office, school, retail, etc.)? (3) _____

COMM – COMMISSIONING BLOCK [DISPLAY IF Q28=1]

Commercial Commissioning

Q98. When considering your firm's 2011 commissioning work:

How many projects did you do? (1) _____

What was the average size of the building, in square feet? (2) _____

COMM – BUILDING OPERATIONS AND MAINTENANCE (O&M) BLOCK [DISPLAY IF Q28=7]

Commercial Building Operations and Maintenance

Q99. What is the average length of your O&M service agreements?

○ Less than 1 year (1)

○ 1-2 years (2)

○ 3-5 years (3)

- ○ More than 5 years (4)
- ○ Don't know (5)

Q100. For your firm's 2011 O&M service agreements, what was the average facility size?

- ○ Less than 10,000 sq. ft. (1)
- ○ 10,000 - 24,999 sq. ft. (2)
- ○ 25,000 - 49,000 sq. ft. (3)
- ○ 50,000 - 100,000 sq. ft. (4)
- ○ Greater than 100,000 sq. ft. (5)
- ○ Don't know (6)

COMM – WINDOWS BLOCK [DISPLAY IF Q28=8]

Commercial Windows

Q101. In 2011, what percent of your firm's project were in new construction versus replacement windows? (Should add to 100%)

_____ New construction (1)

_____ Replacement (2)

Q102. In 2011, what was the most common U-value of installed windows?

- ○ More than 0.49 (1)
- ○ 0.45 - 0. 49 (2)
- ○ 0.40 - 0.44 (3)
- ○ 0.36 - 0.39 (4)
- ○ 0.33 - 0.35 (5)
- ○ 0.30 - 0.32 (6)
- ○ 0.26 - 0.29 (7)
- ○ 0.23 - 0.25 (8)
- ○ 0.22 or less (9)
- ○ Whatever is code (10)
- ○ Don't know (11)

Q103. In 2011, what was the most common SHGC of installed windows?

- ○ 0.45 - 0.50 (1)
- ○ 0.40 - 0.44 (2)
- ○ 0.35 - 0.39 (3)
- ○ 0.30 - 0.34 (4)
- ○ Whatever is code (5)
- ○ Don't know (6)

COMM – BUILDING CONSTRUCTION, ENGINEERING AND ARCHITECTURE BLOCK [DISPLAY IF Q28=9]

Commercial Building Construction, Engineering, and Architecture

Q222. Which of the following services do you provide in the commercial sector? Check all that apply:

- ☐ Building construction (1)
- ☐ Engineering & design: mechanical (2)
- ☐ Engineering & design: lighting (3)
- ☐ Engineering & design: refrigeration (4)
- ☐ Engineering & design: general (5)
- ☐ Architectural services: existing buildings (6)
- ☐ Architectural services: new construction (7)
- ☐ Other (8) _____

Answer if Which of the services do you provide in the commercial se... Building construction is selected; or Which of the services do you provide in the commercial se... Architectural services: new construction is selected.

Q104. How many square feet of commercial building space was your firm involved in building in Oregon in 2011?

_____Oregon construction (sq. ft.) (1)

Answer if Which of the services do you provide in the commercial se... Building construction is selected; or Which of the services do you provide in the commercial se... Architectural services: new construction is selected.

Q105. For projects in Oregon in 2011, what percentage exceeded the 2007 energy code?

- ○ 0% (1)
- ○ 1% - 24% (2)
- ○ 25% - 49% (3)
- ○ 50% - 74% (4)
- ○ 75% - 99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Answer if Which of the services do you provide in the commercial se... Building construction is selected; or Which of the services do you provide in the commercial se... Engineering & design: general is selected; or Which of the services do you provide in the commercial se... Architectural services: new construction is selected; or Which of the services do you provide in the commercial se... Architectural services: existing buildings is selected.

Q107. What percent of your firm's projects in 2011 were LEED certified?

_____ Percent of 2011 projects LEED certified (1)

Q106. What is your typical energy efficiency goal when designing projects?

- ○ Design to standard practice (1)
- ○ Exceed standard practice energy efficiency (by about what percent) (2)

_____

RES – HVAC SCREENING BLOCK [DISPLAY IF Q27=1]

Residential HVAC

Q223. What types of residential HVAC systems or services did your firm perform in 2011? (Select all that apply)

- ☐ Gas furnace (1)
- ☐ Heat pump (2)
- ☐ Ductless heat pump (DHP) (3)
- ☐ Gas fireplace (4)
- ☐ Other (5) _____

RES – HVAC: GAS FURNACE BLOCK [DISPLAY IF Q223_1=1]

Residential Gas Furnaces

Q291. In which type(s) of homes did you install gas furnaces in 2011?

- ☐ Existing homes (1)
- ☐ New homes (2)

Answer if In which type(s) of homes did you install gas furnaces in... Existing homes is selected.

Q109. In 2011, what percent of your total gas furnace sales for existing homes were in the following efficiency categories? (Should add to 100%)

_____ 95% or more efficient (1)

_____ 90% - 94% efficient (2)

_____ Code efficient furnaces (3)

Answer if In which type(s) of homes did you install gas furnaces in... New homes is selected.

Q110. In 2011, what percent of your total gas furnace sales for new construction homes were in the following efficiency categories? (Should add to 100%)

_____ 95% or more efficient (1)

_____ 90% - 94% efficient (2)

_____ Code efficient furnaces (3)

RES – HVAC: HEAT PUMPS BLOCK [DISPLAY IF Q223_2=1]

Residential Heat Pumps

Q122. What percent of your total 2011 heat pump jobs were in the following efficiency categories? (Should add to 100%)

_____ 9.5 HSPF or better (1)

_____ 9.0 - 9.4 HSPF (2)

_____ 8.5 - 8.9 HSPF (3)

_____ 8.2 - 8.4 HSPF (4)

_____ Code HSPF (5)

Q123. What is the cost difference (equipment and installation) between an 8.5 HSPF heat pump and a heat pump with a 9.0 HSPF?

- ○ Less than $200 (1)
- ○ $200 - $500 (2)
- ○ $501 - $750 (3)
- ○ $751 - $1,000 (4)
- ○ $1,001 - $1,250 (5)
- ○ Over $1,250 (6)
- ○ Don't know (7)

Q124. On what percent of your heat pump jobs do you use commissioning?

- ○ 0% (1)
- ○ 1% - 24% (2)
- ○ 25% - 49% (3)
- ○ 50% - 74% (4)
- ○ 75% - 100% (5)
- ○ Don't know (6)

Q125. What are the reasons for not using commissioning? Select all that apply.

- □ Takes too much time (1)
- □ Do not trust results (2)
- □ Too expensive (3)
- □ No customer demand (4)
- □ Do not need commissioning, standard diagnostic adequate (5)
- □ Other: (6) _____

Q126. On what percent of your jobs do you install a temperature cut-out control?

- ○ 0% (1)
- ○ 1% - 24% (2)
- ○ 25% - 49% (3)
- ○ 50% - 74% (4)
- ○ 75% - 99% (5)

- ○ 100% (6)
- ○ Don't know (7)

RES – HVAC: DUCTLESS HEAT PUMPS (DHPS) BLOCK [DISPLAY IF Q223_3=1]

Residential DHPs

Q114. How many ductless heat pumps (DHPs) did you install in 2011?

- ○ {CHOICE 1} (1)
- ○ 1 - 9 (2)
- ○ 10 - 20 (3)
- ○ More than 20 (4)
- ○ Don't know (5)

If 0 is selected, Then Skip To End of Block; if Don't know is selected, Then Skip To End of Block.

Q115. What percent of your total 2011 DHP sales were at each of these efficiency levels? (Should add to 100%)

_____ Less than 20 SEER (1)

_____ 20 - 24 SEER (2)

_____ 25 SEER or higher (3)

Q117. What percent of your total 2011 DHP sales were for units at each of these sizes? (Should add to 100%)

_____ 9,000 BTU (1)

_____ 12,000 BTU (2)

_____ 18,000 BTU (3)

_____ 24,000 BTU (4)

_____ 30,000 BTU (5)

_____ Other (6)

Q119. What percent of your total 2011 DHP sales were in each of the following applications? (Should add to 100%)

_____ A "single zone" DHP, with a single inside unit and a single outside unit (1)

_____ Multiple "single zone" DHPs at one residence (2)

_____ A DHP with a single outside unit and two inside units (3)

_____ A "multi-zone" DHP, with a single outside unit and more than two inside units (4)

Q118. What percent of your total 2011 DHP jobs were done for each of the following purposes? (Should add to 100%)

_____ Displace or replace existing zonal electric heat (baseboards or wall heaters) (1)

_____ Displace or replace a central heating system (2)

_____ Add heat to a previously unheated space (3)

Q120. What percent of your total 2011 DHP jobs were inverter driven?

_____ Percent inverter driven (1)

Q121. How much does a typical single-zone DHP installation (equipment and labor) at 18,000 BTU cost?

- ○ Less than $2,000 (1)
- ○ $2,000 to $2,999 (2)
- ○ $3,000 to $3,999 (3)
- ○ $4,000 to $4,999 (4)
- ○ $5,000 or more (5)
- ○ Don't know (6)

RES – HVAC: GAS FIREPLACE BLOCK [DISPLAY IF Q223_4=1]

Residential Gas Fireplace

Q288. When helping customers choose a gas fireplace, how often do you actively promote the intermittent pilot ignition incentive?

- ○ Always (1)
- ○ Often (2)
- ○ Sometimes (3)
- ○ Rarely (4)
- ○ Never (5)
- ○ I was not aware the intermittent pilot ignition incentive was different from the high efficiency incentive (6)

RES – DUCT SEALING AND INSULATION BLOCK [DISPLAY IF Q27=2]

Residential Duct Sealing and Insulation

Q131. In 2011, what percent of your duct sealing and duct insulation jobs were done in the following types of homes? (Should add to 100%)

_____ New homes (1)

_____ Existing homes (2)

Q132. What percent of your 2011 duct sealing jobs also had duct insulation installed?

- ○ 0% (1)
- ○ 1% - 24% (2)
- ○ 25% - 49% (3)
- ○ 50% - 74% (4)
- ○ 75% - 99% (5)
- ○ 100% (6)
- ○ Don't know (7)

RES AIR SEALING & INSULATION SCREENING BLOCK [DISPLAY IF Q27=3]

Residential Air Sealing and Insulation

Q231. Which of the following residential installations do you perform? (Select all that apply)

- □ Air sealing (1)
- □ Insulation (2)

RES – INSULATION/AIR SEALING: INSULATION BLOCK [DISPLAY IF Q231_1=1]

Residential Insulation

Q128. In areas you serve within Energy Trust territory, what percent of existing homes do you think still need additional insulation?

_____ Homes needing insulation (1)

Q129. What percentage of your 2011 insulation jobs also had air sealing performed?

- ○ 0% (1)
- ○ 1% - 24% (2)
- ○ 25% - 49% (3)
- ○ 50% - 74% (4)
- ○ 75% - 99% (5)
- ○ 100% (6)
- ○ Don't know (7)

RES – INSULATION/AIR SEALING: AIR SEALING BLOCK [DISPLAY IF Q231_2=1]

Residential Air Sealing

Answer if Which of the following residential installations do you p... Insulation is not selected.

Q133. What percentage of your 2011 air sealing jobs also had insulation installed?

- ○ 0% (1)
- ○ 1% - 24% (2)
- ○ 25% - 49% (3)
- ○ 50% - 74% (4)
- ○ 75% - 99% (5)
- ○ 100% (6)
- ○ Don't know (7)

Q130. Which parts of the house do you typically check for air leaks?

- ☐ Windows (1)
- ☐ Doors (2)
- ☐ Sill plate (3)
- ☐ Dryer vent (4)
- ☐ Outdoor faucets (5)
- ☐ Crawlspace (6)
- ☐ Top plate (7)
- ☐ Recessed lights (8)

- ☐ Attic hatch (9)
- ☐ Duct registers (10)
- ☐ Dropped soffit (11)
- ☐ Plumbing vent stack (12)
- ☐ Other: (13) _____

RES – WATER HEATER BLOCK [DISPLAY IF Q27=4]

Residential Water Heaters

Q134. In 2011, what percent of your water heater installations were: (Should add to 100%)

_____ Gas tank, EF less than 0.62 (1)
_____ Gas tank, EF 0.62 - 0.66 (2)
_____ Gas tank, EF 0.67 or more (3)
_____ Tankless gas (4)
_____ Conventional electric (5)
_____ Heat pump electric (6)
_____ Solar (gas or electric back-up) (7)

RES – WINDOWS BLOCK [DISPLAY IF Q27=5]

Residential Windows

Q135. What percent of the residential windows you installed in 2011 had the following U-values? (Should add to 100%)

_____ 0.35 U-value (1)
_____ 0.33 - 0.34 U-value (2)
_____ 0.31 - 0.32 U-value (3)
_____ 0.26 - 0.30 U-value (4)
_____ 0.23 - 0.25 U-value (5)
_____ 0.22 U-value or less (6)

Q136. What is the availability of windows with the following U-values?

	Not Available (1)	Difficult to Get (2)	Some Models are Available (3)	Easily Available (4)	Don't Know (5)
0.26 - 0.30 U-value (1)					
0.23 - 0.25 U-value (2)					
0.22 U-value or less (3)					

RES – NEW CONSTRUCTION SCREENING BLOCK [DISPLAY IF Q27=6]

Residential New Construction

Q232. Which of the following types of homes do you build? (Select all that apply)

- ☐ Site-built homes (1)
- ☐ Manufactured homes (2)

RES – NEW CONSTRUCTION: SITE-BUILT HOMES BLOCK [DISPLAY IF Q232_1=1]

Site-Built Homes

Q137. How many homes did you build in Oregon in 2011?

_____ Homes built in 2011 (1)

Q138. What percent of 2011 homes were:

_____ ENERGY STAR (1)

_____ ENERGY STAR and Earth Advantage (2)

_____ LEED (3)

_____ Other: (4)_____

Q139. In 2011, did you use Energy Performance Score (EPS) to help you market your homes?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

Q140. What percent of your 2011 homes had an Energy Performance Score (EPS)?

_____ Percent with an EPS (1)

Q141. How valuable was the EPS in helping you sell homes in 2011?

- ○ Not at all valuable (1)
- ○ Not very valuable (2)
- ○ Somewhat valuable (3)
- ○ Very valuable (4)
- ○ Extremely valuable (5)
- ○ Did not use (6)
- ○ Don't know (7)

Q142. How many homes do you expect to build in 2012?

_____ Homes (1)

Q143. What are your plans to build homes with Energy Trust incentives in 2012?

- ○ Won't build any (1)
- ○ Build less than 2011 (2)
- ○ Build the same as 2011 (3)
- ○ Build more than 2011 (4)
- ○ Will build all with Energy Trust incentives (5)
- ○ Don't know (6)

RES – NEW CONSTRUCTION: MANUFACTURED HOMES BLOCK [DISPLAY IF Q232_2=1]

Manufactured Homes

Q144. How many manufactured homes did you sell in Oregon in 2011?

_____ Single section (1)

_____ Double section (2)

_____ Triple section (3)

_____ Quad section (4)

_____ Other units (5)

Q145. What percent of your Oregon 2011 unit sales were ENERGY STAR or eco-rated manufactured homes?

_____ ENERGY STAR (1)

_____ eco-rated (2)

RELATIONSHIP EE AND RENEWABLES BLOCK

Relationship with Energy Trust

Q151. How satisfied were you with Energy Trust in the following categories?

	VERY DISSATISFIED (1)	DISSATISFIED (2)	NEUTRAL (3)	SATISFIED (4)	VERY SATISFIED (5)	DON'T KNOW (5)
Incentive payment processing time (1)						
Turnaround time for incentive application/approval (2)						
Interactions with Energy Trust program staff (3)						
Response time to requests for information or assistance (4)						
Quality of responses to requests (5)						
Quality assurance/quality control process (6)						
Overall satisfaction with Energy Trust (7)						

Q153. How has your working relationship with Energy Trust changed since last year?

- ○ Improved a lot (1)
- ○ Improved a little (2)
- ○ Stayed the same (3)
- ○ Gotten a little worse (4)
- ○ Gotten a lot worse (5)
- ○ Don't know (6)

Answer if How has your working relationship with Energy Trust chang... Gotten a little worse is selected; or How has your working relationship with Energy Trust chang... Gotten a lot worse is selected.

Q154. What is the main reason for the deterioration of your working relationship with Energy Trust?

- ○ Energy Trust staff not responsive to my questions or requests (1)
- ○ Application, data or documentation requirements became too heavy (2)
- ○ Incentive applications processed too slowly (3)
- ○ Other: (4) _____

Answer if How has your working relationship with Energy Trust chang... Improved a lot is selected; or How has your working relationship with Energy Trust chang... Improved a little is selected.

Q155. What is the main reason for the improvement in your working relationship with Energy Trust?

- ○ Energy Trust program staff became more responsive to my questions or requests (1)
- ○ I (we) developed a good working relationship with specific Energy Trust program staff (2)
- ○ Application, data or documentation requirements became easier (3)
- ○ Incentive applications were processed quickly (4)
- ○ I became more familiar with Energy Trust programs (5)
- ○ Other: (6) _____

DISPLAY RANDOMLY SELECT 3 BLOCKS FROM THE FOLLOWING 5 BLOCKS [EVENLY]

TRAINING BLOCK

Training

Q157. As a trade professional, how interested would you be in the following types of support from Energy Trust?

	NOT AT ALL INTERESTED (1)	SLIGHTLY INTERESTED (2)	SOMEWHAT INTERESTED (3)	VERY INTERESTED (5)
Cooperative advertising support (Energy Trust co-brands on your ad and pays a portion of costs) (1)				
Scholarships to energy conferences or workshops (2)				
Publicizing a Trade Ally of the Month in the newsletter (3)				
Training about Energy Trust programs and technical training on specific measures (4)				
Other (5)				

Answer if As a trade professional, how interested would you be in t... Training about Energy Trust programs and technical training on specific measures - Not at all interested is not selected.

Q156. Please rank the top three program areas in which you'd like to receive training, by dragging the topics into the box and ordering from 1 (most interest) to 3.

Top three training areas:

_____ Program paperwork (1)

_____ Savings calculation tools (2)

_____ Communicating the value of energy efficiency to customers (3)

_____ Code changes (4)

_____ Calculating customer incentives (5)

_____ Energy modeling (6)

_____ Program paperwork (7)

_____ Air quality and related diagnostics (8)

_____ Other: (9)

Q158. When was the last time you or your staff attended training sponsored by Energy Trust?

○ Sometime in 2011 or 2012 (1)

○ Before 2010 (2)

○ Never attended training (3)

○ Don't know (4)

If Never attended training is selected, Then Skip To… To what degree does your location pre...
If Don't know is selected, Then Skip To How likely would you be to attend web...

Q159. Thinking of your most recent Energy Trust training, how valuable did you find that training?

- ○ Not at all valuable (1)
- ○ Slightly valuable (2)
- ○ Somewhat valuable (3)
- ○ Very valuable (4)
- ○ Extremely valuable (5)

Q160. To what degree does your location prevent you from attending Energy Trust trainings?

- ○ Completely - I have never been able to attend an Energy Trust training because of my location (1)
- ○ My location makes is very difficult, but not impossible, to attend trainings (2)
- ○ My location makes it inconvenient, but not overly difficult to attend trainings (3)
- ○ My location does not prevent me from attending Energy Trust trainings (4)
- ○ Other: (5) _____

Q161. How likely would you be to attend webinar trainings if they were offered on a topic you were interested in?

- ○ Very Unlikely (1)
- ○ Unlikely (2)
- ○ Undecided (3)
- ○ Likely (4)
- ○ Very Likely (5)

Q168. How important is it that a training you want to take qualifies for continuing education credits?

- ○ Very important (1)
- ○ Somewhat important (2)
- ○ Not important (3)

ROUNDTABLES BLOCK

BLRou Roundtables

Q162. Have you attended a trade ally roundtable discussion?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)

Q163. When was the most recent trade ally roundtable you attended?

- ○ Less than a month ago (1)
- ○ 1-3 months ago (2)
- ○ 3-6 months ago (3)
- ○ 6-12 months ago (4)
- ○ More than a year ago (5)
- ○ Don't know (6)

Q164. How useful do you find the trade ally roundtables?

- ○ Not at all useful (1)
- ○ Slightly useful (2)
- ○ Somewhat useful (3)
- ○ Very useful (4)
- ○ Extremely useful (5)

Q165. What discussion topics for roundtable meetings would interest you?_____

COMMUNICATIONS AND NEWSLETTER BLOCK

Communications

Q168. When receiving information about Energy Trust programs, what types of communications would you prefer? Drag as many items as you'd like into the box, and order them from the most preferred (1) to the least.

Preferred means of communication (rank):

_____ Emails from program staff (1)

_____ Insider newsletter (2)

_____ Roundtable meetings (3)

_____ Energy Trust website (4)

_____ Training sessions (5)

_____ Outlook/Google calendar invite (6)

_____ Social media (Facebook, Twitter, LinkedIn) (7)

_____ Other: (8)

Q174. What is the minimum amount of advance notice of important program changes that you would consider sufficient?

- ○ Two weeks (1)
- ○ One month (2)
- ○ Two months (3)
- ○ Six months (4)
- ○ More than six months (5)
- ○ Don't know (6)

Q170. Do you receive Energy Trust's "Insider" email newsletter?

- ○ Yes (1)
- ○ No (2)
- ○ Don't know (3)
- ○ Unfamiliar with Insider (4)

If Yes Is Not Selected, Then Skip To.. Which of the following would make the...

Q171. How useful do you find the Insider newsletter?

- ○ Very useful (1)
- ○ Somewhat Useful (2)
- ○ Not useful (3)

Q176. Regarding the length of the articles in the Insider newsletter, would you say they typically are...

- ○ Much too long (1)
- ○ A little too long (2)
- ○ About right (3)

- ○ A little too short (4)
- ○ Much too short (5)

Q178. How often do you follow the links in the Insider newsletter to program updates about:

	Every or Nearly Every Newsletter (1)	About Three Quarters of the Time (2)	About Half the Time (3)	About a Quarter of the Time (4)	Infrequently or Never (5)
Your area of interest (1)					
Training information (2)					

Q225. Which of the following would make the Insider more useful to you?

- ☐ Improve the searchability of the Insider (1)
- ☐ Make the Insider easier to navigate (2)
- ☐ Include different types of articles (3)
- ☐ Other: (4) _____

Answer if Which of the following would make the Insider more useful... Other: is selected.

Q179. Which of the following types of articles would be most useful in future newsletters? Select all that apply.

- ☐ Common problems/solutions (1)
- ☐ Emerging technologies (2)
- ☐ Technical assistance or resources (3)
- ☐ Tax credits (4)
- ☐ Other: (5) _____

WEBSITE BLOCK

Website

Q181. How often do you visit the Energy Trust website?

- ○ Never (1)
- ○ 1-3 times a month (2)
- ○ 1-2 times a week (3)
- ○ 3-4 times a week (4)

- ○ 5 or more times a week (5)

Q182. What pages do you typically visit on the Energy Trust website? Select all that apply.

- □ Program forms (1)
- □ Program incentives (2)
- □ General program information (3)
- □ Contractor search (4)
- □ Calendar/meetings (5)
- □ Customer-facing pages (6)
- □ Other: (7) _____

Q183. How useful do you find the trade ally web pages?

- ○ Not at all useful (1)
- ○ Slightly useful (2)
- ○ Somewhat useful (3)
- ○ Very useful (4)
- ○ Extremely useful (5)

Q184. How easy is the Energy Trust website to navigate?

- ○ Extremely difficult (1)
- ○ Difficult (2)
- ○ Neither difficult nor easy (3)
- ○ Easy (4)
- ○ Very easy (5)

Q285. How useful would you find it if Energy Trust provided you with a website navigation aid - a set of instructions on how to navigate to the correct spot for what you are looking for?

- ○ Not at all helpful (1)
- ○ Slightly helpful (2)
- ○ Somewhat helpful (3)
- ○ Very helpful (4)
- ○ Extremely helpful (5)
- ○ Don't know (6)

Q286. Do you use a Smartphone (iPhone, Android, Blackberry, Galaxy, etc.)?

- ○ Yes (1)
- ○ Tablet (2)

Q187. Would you download and use an app (for a tablet, Smartphone, etc.) that gives you links to Energy Trust program information?

- ○ Definitely (1)
- ○ Probably (2)
- ○ Maybe (3)
- ○ Probably not (4)
- ○ Definitely not (5)
- ○ Don't know (6)

Q227. What kind of Energy Trust app would be useful for you?

- □ Incentive application/web form (1)
- □ Program information or requirements (2)
- □ Financing application (3)
- □ Savings calculation tools (4)
- □ Other (5) _____

MARKETING CHANNELS AND RATING SYSTEM BLOCK

Marketing

Q279. Would an ID showing Energy Trust affiliation help you in marketing programs to customers?

- ○ Yes (What kind of ID would be helpful?) (1) _____
- ○ No (2)
- ○ Unsure (3)

Q280. Do you encounter skepticism or suspicion when marketing free or discounted measures to customers (such as through Direct Install programs)?

- ○ Yes, but it is quickly overcome (1)
- ○ Yes, it is a barrier to Direct Installs and other work with Energy Trust (2)
- ○ No (3)

○ Do not market free or discounted measures (4)

Q188. How effective are the following channels for creating leads?

	VERY INEFFECTIVE (1)	INEFFECTIVE (2)	NEITHER EFFECTIVE NOR INEFFECTIVE (3)	EFFECTIVE (4)	VERY EFFECTIVE (5)	NA / DON'T KNOW (6)
Energy Trust website in general (1)						
Find a contractor page (2)						
Co-op advertising (3)						
Energy Trust advertising (4)						
Energy Trust in the media (5)						
Star rating for trade allies (6)						
Other: (7)						

STAR RATING SYSTEM BLOCK [DISPLAY IF Q25_1=1 OR Q25_2=1]

Star Rating System

Q189. Are you familiar with the Energy Trust "star" system for rating residential trade allies that was released in 2010? Please answer even if you don't work on residential projects.

○ Yes (1)

○ No (2)

If No is selected, Then Skip To End of Block.

Q190. How clear is the star rating system to you?

○ Very Clear (1)

○ Somewhat Clear (2)

○ Not Clear (3)

○ Not sure (4)

Q191. How fair do you think the star rating system is?

○ Fair (1)

○ Slightly unfair (2)

- ○ Not at all fair (3)
- ○ Not sure (4)

Q192. How useful do you think the star rating system is to your customers?

- ○ Very Useless (1)
- ○ Useless (2)
- ○ Neutral (3)
- ○ Useful (4)
- ○ Very Useful (5)

Q229. Do you know how to check your star rating?

- ○ Yes (1)
- ○ No (2)

Q230. Have you received any feedback from your customers about your star rating?

- ○ Yes (Please Specify) (1) _____
- ○ No (2)

Q193. How could the star rating system be improved?

LAST PAGE BLOCK

Q195. Do you have any final comments or suggestions for Energy Trust?