PREPARED FOR:

ENERGY TRUST OF OREGON

Commercial Sector Focus Group Research

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PREPARED BY:

DHM RESEARCH

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1. INTRODUCTION & METHODOLGY

Davis, Hibbitts & Midghall, Inc. (DHM Research) conducted two focus groups for Energy Trust of Oregon on December 19 and 20, 2011. The purpose of the research was to understand how businesses make energy related decisions including energy use, savings, and investments.

The fourteen participants in these focus groups were mid-level and frontline staff, such as building facility managers, who were most likely to identify potential energy needs and then communicate those needs to company decision-makers. The focus groups are the first component of a three-part research study. Additional research will include in-depth interviews with business owners and executives and an online survey with commercial sector businesses.

The two focus groups were distinguished by the participants' organizations' market area. One group consisted of local and regional businesses (Local) and the second group was made up of national businesses (National). A variety of business types were recruited, including manufacturing, hospitality, publishing, and local government. Some of the job titles of the participants were "facility manager", "electrical supervisor", and "maintenance and mechanical engineer." See Appendix A for complete demographics.

The focus groups were led by a professional moderator and consisted of both written exercises and group discussions. Although research of this type is not designed to measure, with statistical reliability, the attitudes of a particular group, it is valuable for giving a sense of the attitudes and opinions of the population from which the sample was drawn.

This memo highlights key findings from the discussions. Each section reviews a major topic from the group discussions and includes representative quotations, as well as evaluative commentary. The quotes and commentary are drawn from both written exercises and group discussions.[1] The referenced Appendices provide the complete responses to all written exercises.

DHM Research: Davis, Hibbitts & Midghall, Inc. has been providing opinion research and consultation throughout Oregon and the rest of the Pacific Northwest for over three decades. The firm is non-partisan and independent and specializes in research projects to support community planning and public policy-making. www.dhmresearch.com

[1] Quotations were selected to represent the range of opinions regarding a topic, and not to quantitatively represent the expressed attitudes.

2. SUMMARY AND OBSERVATIONS

Cost and return on investment were primary considerations when making investments to save energy.

- Throughout the focus groups the participants said that bottom line concerns drive their decisions about not just energy investments, but all their capital investments.
- This was consistent across all industries and company sizes, and whether it was a local, regional, or national organization.
- The participants said they expect to see a ROI within about 18 months to three years. This was true for energy and other capital investments.

Secondary considerations when making energy investments were image, customer relationships, workplace conditions, and sustainability.

- Image and customer relations tended to be more important to service-oriented and green sector organizations. This is some evidence that it may be valuable to segment messages about the benefits of energy saving investments by industry sector.
- Workplace conditions were considered but were not reasons to make investments or not make investments. The participants had an interest in creating a comfortable work environment, but also said that employees resist change and that businesses are reluctant to make changes that will upset their employees (e.g., changing the color of lighting) or require training.

Upgrading HVAC systems and installing energy efficient lighting were the top most mentioned building improvements that the participants would like their businesses to make.

- The primary reason for not yet making these upgrades was upfront costs.
- Service and customer oriented businesses may also value more visible energy saving investments (e.g., automatic light switches at a hotel) that send a “signal” to customers that the business uses energy wisely.

Energy Trust of Oregon was viewed very positively among the participants as a credible and unbiased organization that can help businesses save money.

- Most participants were aware of Energy Trust and they rated it positively.
- Energy Trust was seen as the most credible source of information to both the participants and their companies’ decision-makers.
- They said the greatest benefit of Energy Trust’s technical expertise is identifying energy saving projects and finding ways to fund them.

The most effective messages about Energy Trust of Oregon directly referenced cost-saving and other financial benefits - primary motivators for making energy investments.

- Messages about technical expertise were important, but providing a free service or identifying cost saving projects were more important than messages about implementing projects.
- Messages about company image – to customers or stakeholders – did not resonate. More important were costs and meeting deadlines.

3. KEY FINDINGS

3.1 | Values that Guide Decision-Making

The focus group started by the moderator leading a group discussion about the factors the participants' businesses consider when making decisions about energy savings and energy investments. The factors they listed included:

- *Cost*
- *Return on investment*
- *Image*
- *Value to stakeholders*
- *Workplace environment*
- *Reducing office space*
- *Cash flow*
- *Availability of product*
- *Need vs. want*
- *Tax incentives*
- *Paperwork*
- *Downtime*
- *Employee training*
- *Company culture*
- *Sustainability*

Of these, cost and return on investment (ROI) were the most important considerations. Everything else was secondary to whether the project is affordable and will save the business money over time. The participants said that this was consistent with any business investment and not unique to energy projects, however, they also indicated they are more cost sensitive now than they might be in a most robust economy. *"It's all dollars and cents. The bottom line. These are rough times with the economy."*

Cost: The participants said that their businesses consider several factors related to cost, not just the upfront sticker price of the "thing" they are purchasing, whether that is LED lighting, high efficiency HVAC, or a solar system. When available, they factor in incentives and tax credits that can reduce the price of an investment. They also consider costs related to downtime, employee training, and whether they have the necessary in-house expertise. One participant also said they factor in the time and difficulty of completing paperwork for tax incentives and other credits, and that it is not always possible for a small company to meet the bureaucratic demands.

In the National group, the moderator asked if they typically pay cash or finance investments in energy savings. Of the seven participants, four said they pay cash, two said they use financing, and one did not know. They all said that how they pay for energy savings projects is no different than other business investments.

ROI: The participants in both groups stressed the importance of return on investment. A purchase must pencil out financially for a business to consider the investment. The moderator asked what a reasonable time horizon is when doing a ROI calculation. Participants gave times of between six months to five years, with 18 months to three years being most typical. Some said that for larger investments, with more significant cost savings potential, they are willing to allow more time to recoup the investment costs. Smaller projects are expected to make a return on their investment sooner.

A positive ROI would not ensure that a business would make an energy savings investment. Participants also said they must consider their current cash flow situation and the upfront

costs. One participant said that, although his mechanical staff had found a positive ROI for a lighting replacement project, the company's finance leaders would not sign off on it because of the high upfront costs. *"They understood the savings, but they weren't interested in the upfront costs."*

Image and Customer Relationships: A few participants said their businesses consider the image they project to customers when they make an investment. These businesses tended to be service-oriented or catered to environmentally sustainable clients. For example, a participant who was a facility manager for a national hotel chain said that their customers value sustainability, and so their business has responded to their expectations by installing energy savings devices that are visible to their guests, like automatic light switches. Another participant, whose business works closely with an architecture firm known for sustainable design, said that, because of this relationship, they are more likely to consider sustainability when making business investments.

Workplace Conditions: A couple of participants said they consider workplace conditions and employee satisfaction when making energy savings decisions. One said that the employees *"are my customers"* and that it is important to make certain that the work environment is comfortable for them. Another said that his business considered employee concerns about the color of new lighting when making a decision to purchase a high-efficiency lighting system.

Sustainability: Few participants said concern about the environment or sustainability were reasons for taking actions to reduce energy consumption. There was nothing in their comments to indicate that their businesses are antagonistic to environmental concerns, but they were at best a secondary consideration when making energy investments.

3.2 | Energy Saving Improvements: What's Been Done

> *"We became a partner with Energy Trust to improve our opportunities and to be involved with the 'green movement.'" – Local*
>
> *"When replacing equipment it is my idea to always replace with something better in all aspects." – Local*
>
> *"Replace old MV lights with T5. Half the power and better light color." – National*
>
> *"Copiers that reduce energy. Because copiers waste a lot of energy!" – National*

In the first written exercise, we asked the participants to list steps their business had taken in the last few years to reduce the amount of energy used (Appendix B). For the action they felt was the best, we also asked them to elaborate on why the business took this step. The most mentioned improvement was lighting, which was mentioned by 10 of 14 participants. They were also easily able to recall a variety of other projects, including:

- *Installed LED lighting*
- *Improved building installation*
- *Hybrid vehicles*
- *CO_2 sensors on HVAC*
- *Reducing temperatures*
- *Variable frequency drives*
- *Upgraded chillers*
- *Digital controls on machinery*
- *Tighter HVAC schedules*

The primary motivation for making these improvements was to save money on energy. However, in the written comments a few of the participants also indicated that there were environmental considerations: *"Less damage to the environment." "Environmental awareness." "Improve sustainability."*

3.3 | Energy Saving Improvements: Opportunities

Next, the participants were asked to record any actions or improvements that they would like their business to take to reduce the amount of energy used, why it should be a priority, and any reasons why the action has not yet been taken (Appendix C). Below are some of the actions:

- *Improve HVAC*
- *Utility monitoring*
- *GPS for fleet management*
- *VFD Retrofits*
- *Switch to natural gas*
- *Efficient hydraulic system*
- *Lighting retrofits*
- *More recycling*
- *Unplug appliances*

The most mentioned actions were HVAC improvements, energy efficient lighting, and reducing auto fuel consumption.

Not surprisingly, the most significant barrier to change was upfront capital costs. Other frequently mentioned reasons related to company culture and employee training. Actions that require employees to be more aware of their energy use, or change their behavior, are difficult for businesses to make. The participants said that their businesses are reluctant to invest in energy saving projects that will require a cultural change or require significant employee training. One (particularly cynical) participant said that his company doesn't want to *"do anything to confuse"* their employees. Another participant who said that the improvement he would like his business to take was unplugging appliances when not in use, felt that this had not happened because of *"bad habits"* and that the employees *"are not aware of the consequences of wasting energy."*

3.4 | Tracking Energy Use

> *"If the task was assigned to a different person they may have more time to examine the issues." – Local*

> *"It would be more effective if single source of responsibility and firm budget was applied." – Local*

> *"It is not understood as something that really saves money, and, therefore, it is assigned to people who simply address the need." – National*

We asked the participants who in their company tracks energy use and to share their thoughts about how this affects their organization's decisions about energy (Appendix D).

A variety of people and groups were responsible for energy decisions, including owners, presidents, executive teams, finance executives, and facility managers. A couple of businesses said they have at least one staff member who is dedicated to energy and efficiency matters and a couple of others said their businesses have a "green team."

The participants agreed that the person responsible for energy use affects the amount of attention given to energy issues within the company and the types of investments that are made. A frequent comment was that the people responsible do not have the time or skills to make energy use a priority. One participant wrote, *"The president is very aware of overall company energy costs, but other priorities often take precedence when we are all busy."* As a result, the participants said that their companies are most often reactive, and only make energy investments when *"something completely fails."*

It is worth noting that one participant said his company's "green team" is the same group of people responsible for employee safety, though he did not feel that this was working well. *"We have an actual safety, hazardous waste, and green team. They are supposed to do all that stuff, but I have never seen anything come of it. I've never seen them provide any information to improve things."*

3.5 | Perceptions of Energy Trust of Oregon

"We are a green energy company, so any well-known energy group we can work with adds to our profile." – Local

"They have a good reputation. When I turn in my paperwork I indicate that Energy Trust recommended the project." – Local

"The primary reason we use them is they are the administrators of the incentives. They hold the key." – National

"They give management hard numbers to review for investing in projects." – National

Towards the end of the focus group, the participants were asked in a written exercise if they had heard of the Energy Trust of Oregon and to describe their feelings about Energy Trust as positive, negative, or neutral (Appendix F). Earlier in the focus groups, and unprompted by the moderator, participants in both groups mentioned working with Energy Trust or indicated that Energy Trust is influential with their organizations' decision-makers. Throughout the focus groups, all the mentions of Energy Trust were generally positive.

In the written exercise, 13 of the 14 participants said they had heard of Energy Trust. Twelve rated Energy Trust positively and two rated it as neutral. Those who gave a neutral rating said that it was because they had not worked with Energy Trust or that they were not familiar enough with it to have a positive feeling.

The most mentioned reason for working with Energy Trust was to help businesses identify energy savings opportunities. *"Energy Trust knows where the biggest values are going to be. It helps to focus on what the options are and where we want to spend our money."* About one-half of the participants indicated that they had taken advantage of incentive programs through Energy Trust, which was a significant reason for working with Energy Trust. Some participants less familiar with Energy Trust did not know about possible incentives and the availability of free technical assistance. However, when these less informed participants heard about the experiences that others had with Energy Trust they were immediately impressed. One participant said, *"I'm going to have to look them up."*

In the group discussions, the participants repeatedly said that Energy Trust is knowledgeable about energy saving opportunities and identifying incentive programs to help businesses defray investment costs. They also felt strongly that Energy Trust is objective and not *"trying to sell you something."* The participants said that this was critical to decision-makers when evaluating whether or not to make an energy investment. One participant described situations where he has received multiple recommendations for energy projects from Energy Trust and other commercial venders. Even in situations where he personally believed the commercial vender made the better recommendation, he would still take the Energy Trust recommendation to the decision-makers because the Energy Trust recommendation would carry more weight:

"My mechanical engineer is [name omitted], but if I turn in my paperwork with their name on it [my executives] will just say they are trying to sell us something. When I hand in something from Energy Trust it's just not perceived as trying to sell you something or biased."

3.6 | Energy Trust Messages

Near the conclusion of the focus groups, we presented the participants with 10 statements about the values and benefits of Energy Trust. For each statement, participants were asked how important it would be when making a decision about investing in energy efficiency project. After rating each statement, they selected the one statement that is the most important and one statement that is the least important in their decision-making (Appendix G).

Table 1
Energy Trust Message Ratings

Statement	Not at all important	Not too important	Somewhat important	Very important	Don't know / NA
Energy Trust makes it easy to save energy by providing free technical expertise that's worth thousands of dollars.	0	0	3	11	0
Energy Trust has technical expertise that can help you identify potential actions to save energy.	0	1	1	11	1
Energy Trust pays you to save energy.	0	0	2	10	2
Using energy wisely is a good indicator of a well-run business.	0	3	2	9	0
When you save energy, you save money and boost your business at the same time.	0	1	4	7	2
Your customers will be impressed that you're saving energy and cutting costs.	2	2	4	6	0
You're paying for Energy Trust services and incentives on your energy bill – you should take advantage of it.	0	2	6	5	1
Energy Trust has technical expertise that can help you implement projects using existing staff.	0	3	5	5	1
Energy efficiency is a competitive edge for your business.	0	5	4	4	1
Your customers will be impressed that you're concerned about the environment and using energy wisely.	2	2	7	3	0

Source: DHM Research, December 2011

Three statements stood out above the rest:

- **Energy Trust makes it easy to save energy by providing free technical expertise that's worth thousands of dollars.**
- **Energy Trust has the technical expertise that can help you to identify potential actions to save energy.**
- **Energy Trust pays you to save energy.**

These messages addressed technical expertise and money. We heard earlier in the focus groups that a significant value of Energy Trust to the participants was their ability to help businesses identify ways to save energy. One participant said, *"They bring some things up that the company isn't aware of. There is a lot of value to that."* Another participant said that their technical expertise goes beyond which projects could save the most energy; they give insight about how to get financial assistance for the projects: *"their focus is on the current available incentives. We don't have the time to keep up with that bureaucracy."* Ultimately, saving money was the primary motivator for these participants, and it is not surprising that the direct message that Energy Trust pays you to save energy was a top choice statement for several participants.

It should be noted that a third statement about technical expertise rated towards the bottom. Although 10 of 14 participants said that it was at least somewhat important that **Energy Trust has technical expertise that can help you implement projects using existing staff**, just five said it was very important. It is likely that this statement did not resonate as well because it makes no direct reference to saving money and/or the participants did not need as much assistance implementing projects as identifying those that would be most effective.

The two lowest rated statements were:

- **Energy efficiency is a competitive edge for your business. (Least important: 0)**
- **Your customers will be impressed that you're concerned about the environment and using energy wisely. (Least important: 4)**

These statements did not resonate with the participants. The statement about energy efficiency being a competitive edge may have seemed contrived and heavy-handed, as if the participants didn't already know what's best for their business. Several of the participants just didn't think that their customers cared about the environment or that it was very low priority. More important were costs and meeting deadlines. As one participant empathically said, *"I don't think most customers care!"*

3.7 | Final Messages

We asked the participants to write a final message to Energy Trust about what it can do to help people like them help their businesses use energy wisely. Below are a few representative messages. For a complete list of messages see Appendix E.

> *"Send me reminders that I can help my organization save money and energy by utilizing their services. Let me know about incentives." – Local*

> *"Continue to keep on the cutting edge of technology and provide ways to implement it into our existing building systems with ideas on how to pay for it." – Local*

> *"I would say increase awareness to the Energy Trust of Oregon. It's shocking to me how many people and companies have never heard of Energy Trust. And the more people that use Energy Trust the better our environment will be." – National*

> *"Provide easy access to information about your services. I don't have much of an opinion because I don't know enough." – National*

APPENDIX A
Background Information

Job Title	
Local & Regional	**National**
Vice President and General Manager	Electrical Supervisor
Service Manager	Facility Maintenance
Facility Manager	Maintenance
Mechanical Systems Designer	Maintenance and Mechanical Engineer
Assistant Project Manager	Electrical Supervisor
Facilities Maintenance Manager	Manager
NA	Facility Maintenance

Business Description	
Local & Regional	**National**
Digital printing	Metal manufacturing
Commercial HVAC	Grinding and metal fabrication
Publishing	Tire retread and new tire wholesale
HVAC and Construction	Hotel
Biomass Boiler Projects	Forest products
City Government	Electrical construction/Renewables
NA	NA

Number of FT and PT Employees	Local & Regional	National
1-24	2	1
25-99	1	1
100-249	4	2
250 and above	0	3

Education Level	Local & Regional	National
Less than High School Grad (1-11)	1	0
High School Graduate	0	1
Some College, Technical School, Community College, 2-Year Degree	3	6
College Degree/4-Year Degree	2	0
Post-College	1	0

Age	Local & Regional	National
18 – 24	0	0
25 – 34	1	0
35 – 44	2	2
45 – 54	3	2
55 – 64	1	3
65 – 74	0	0
75+	0	0
No Response	0	0

Gender	Local & Regional	National
Male	6	7
Female	1	0

Racial or Ethnic Group	Local & Regional	National
White/Caucasian	6	6
Black/African American	0	1
Spanish/Hispanic	1	0
Asian or Pacific Islander	0	0
Native American	0	0
Other	0	0

Party Registration	Local & Regional	National
Democrat	2	2
Republican	2	2
Independent	3	1
Other	0	1
Not registered	0	2

APPENDIX B

Written Exercise 1: Thinking about the last few years, list the steps your company has taken to reduce the amount of energy used? Place a star by the best improvement/action your business made. // For the best action/improvement, record why you took this step.

Local & Regional

- *Installed LED lighting at our downtown office; installed LED lighting in 1/8 of office at main facility.// We wanted to improve sustainability in our new office.
- *We became a partner with Energy Trust of Oregon; purchased smaller trucks for some field employees.//To improve our opportunities to be involved in the "green movement."
- *CO2 sensors on HVAC units; lighting retrofit; tighter HVAC schedules.//Comfort for our employees and energy savings.
- *Employee carpooling; endeavoring for paperless.//Reduction of fuel costs.
- *Hybrid vehicles; putting electronics on schedules for turning on and off; changing light bulbs; reducing temperatures in the work space.//General environmental awareness and enacting the principles we are selling to our customers.
- *When replacing equipment we upgrade to equipment that is more efficient; changed lighting.//When replacing equipment it is my idea to always replace with something better in all aspects.
- *Lighting retrofits using Energy Trust credits; variable frequency drives retrofits for air handlers; reduced staff and streamlined processes.//It was the simplest step toward energy savings.

National

- *Retrofit manufacturing lighting; upgrade chillers; UFAC on compressors; programmable ballasts in the parking lot; OCC sensors.//Established energy team to seek out biggest benefits and prioritized from there.
- *Improved building insulation—water and heater; digital controls on machinery; reduce electrical use.//Reduce electrical consumption.
- *New lighting in the entire plant; found leaks in the boiler and air systems; added motion lighting so lights shut off when no one is around.//Lights did not need to be on 24 hours a day if no one was in that section of the plant.
- *Utility monitoring and management; replace to efficient motors; light bulbs.//Money savings; less damage to the environment; less usage of natural resources.
- *Replace old MV lights with T5; Buy new energy efficient motors; install.//Lights need to be replaced –1/2 power and better light color.
- *Install dishwater; lamp changes; controls and switches; vending machine changes to efficiency; install window wells; evaluation office equipment and use; purchase new appropriate equipment.//Reduce consumption of disposable cost savings.
- *Copiers that reduce energy; energy efficient light bulbs; solar panel; energy efficient windows.//Because copiers waste a lot of energy! The majority of the time there is no one using them. It saves costs and energy.

APPENDIX C

Written Exercise 2: Now list any actions/improvements that you would want your company to take to reduce the amount of energy used. Place a star by the action/improvement you would most like your company to take.//For the top energy saving priorities record any comments about why you feel that this should be a priority for your company.//For the top energy saving priority, record any comments about why this action/improvement has not yet been taken.

Local & Regional

- *Improve electrical efficiency; improve HVAC energy use.//High cost//Busy with other business concerns.
- *Implement GPS for fleet management.//Improve dispatching of technicians and cut down on travel between calls.//Cost and concerns about employee morale.
- *HVAC upgrade with VFD and Co sensors.//This is the biggest energy use in the building – it improves the workplace environment.//Major capital expense.
- *Invest in our own fabrication shop and utilize new technology and software (BIM modeling).//Building information modeling (BIM) is used to evaluate the energy use and ways to reduce the amounts used.//Very new technology and initial investments are costly.
- *Reduce driving for work and combine trips; encourage more bike commuting; raise awareness among employees of individual actions that help.//Even though we drive a hybrid vehicle for work trips, gasoline has a huge impact on the environment – also hybrids are expensive – less driving, less maintenance/fewer new vehicles.// Requirements of the job – on site visits into eastern Oregon.
- *We need HVAC upgrades to be more efficient.//We have old HVAC systems and they are not efficient.//It is very costly to replace or upgrade HVAC units, controls, ducting, etc.
- *VFD retrofits and controls; additional lighting retrofits and occupancy sensors.//Maximum savings year by year.//Cost and scope of the projects.

National

- *Follow up with other lighting apps; upgrade HVAC control systems; VFAC on all remaining compressors; thermal recovery in the heat treat area//First run at lighting was “low hanging fruit” many others apps out there.//Administration and budget hold ups this year. Waiting until January 1, 2011 to reassess Energy Trust of Oregon, BETC, etc.
- *Switch to natural gas.//Because it’s cheaper/most efficient for water and cheaper building heat.//Cost of conversion.
- *Be more efficient on waste removal – do not run rubber conveyor unless needed – more efficient hydraulics system.//Waste removal is done poorly – hazardous material is mixed with garbage and that’s bad all around.//Our employees are not interested in proper clean-up and removal of waste and management does not enforce it.
- *More efficient utility monitoring and more recycling.//Less usage equals less cost.//Cost; resisting change.

- *Replace more old lighting; install outer capacitor banks; switch off part of lights during off hours.//Low cost and fast payoff.//All capital projections have been put on hold.
- *Adopt fleet change; HVAC equipment upgraded; vehicle fleet management.//Approach reaches every aspect of our business. Improves performance safety, reduces cost, waste, and will ultimately reduce our CO output.//We are currently pretty successful. The ROI is intangible if we change our current methods.
- Unplug appliances that aren't being used; use heating and air conditioning more efficiently.//We are wasting tons of energy by leaving appliances turned on or plugged in that haven't been used.//Honestly, I would say bad habits people forget to unplug the toaster or microwave. Also, they are unaware of the consequences of wasting energy.

APPENDIX D

Written Exercise 3: Who in your company tracks energy use? Describe the title of the person, not the individual's name.//Elaborate on any thoughts you have about how this affects your company's decisions about energy.

Local & Regional

- Executive team, president, owner, and VP.//If the task was assigned to a different person they may have more time to examine the issues.
- Minority owner, office manager, and HR director.//The job is spread thin. Decisions and discussions often involve management committees – where decisions aren't always completed.
- Facility manager.//It doesn't have high visibility unless I push it. Other areas of potential savings have an easier win – more savings.
- The owner.//The owner is very aware of the company's energy costs and I could help and inform using CAD BIM modeling.
- President and the Lead project manager.//The president is very aware of overall company energy/costs, but other priorities often take precedence when we are all busy.
- Myself as well as the Finance director.//Very little as our budget does not allow for replacement until something completely fails.
- Combination of finance VP, production VP, purchasing agent and myself.//It would be more effective if a single source responsibility and firm budget was supplied.

National

- Facilities supervisor, energy team, and purchasing group.//These people are assigned to the task of seeking our monetary benefits to be gained in energy conservation.
- Accounts Manager.//If someone else is may be open to spending money to save money.
- Maintenance as well as the plant manager.//Not done efficiently only is of concern if energy use gets too high and out of hand. It should be a team or individual responsible to be as efficient as possible.
- Chief engineer, engineering staff; management.//More attention should be paid by the management and corporate levels.
- I track energy use.//In normal times, all recommendations are approved; in a bad economy, very little is requested.
- Facilities Supervision; VP in charge of HR; vehicle and building manager.//It is not understood as something that really saves money. Therefore, it is assigned to people that simply address the need. Not the reason for understanding why the need exists.
- Energy Assistance Coordinator.//I feel their decision affects the company in a positive way. One of the members is totally green. She has implemented policies to make the company more energy efficient.

APPENDIX E

Written Exercise 4: Make a list of any organizations or entities that could provide you with helpful information to help your business make decisions about investing in energy efficiency.//Which of these would you find most helpful and why?

Local & Regional

- *Energy Trust of Oregon; Portland Office of Planning and Sustainability.//My understanding is that Energy Trust of Oregon is focused on helping businesses become more energy efficient.
- *Any energy consultant; Energy Trust of Oregon.//Diversity of knowledge; no restrictions through programs or limited actions; money can't be an object.
- *Energy Trust of Oregon; LEED organization; electricians; HVAC tech.//They are a good resource spanning multiple disciplines. Have a good immediate knowledge of what will work.
- AUTOCAD.//New software energy analysis tools available to incorporate sustainability into designs.
- *Energy Trust of Oregon; Clean energy works of Oregon; Earth Advantage; Metro.//They are well known; far-reaching; have many clients and partners and lots of resources available.
- *Energy Trust of Oregon; NW Energy Efficiency Council.//They are perceived as being unbiased in conclusions and have always been willing to come out and do a study.
- *Energy Trust; vendor contacts.//Most knowledgeable for current incentives and requirements.

National

- *Energy Trust of Oregon; BETC; PGE; EC Company//This is their prime reason for existence – to help businesses and people find ways of saving energy.
- *PGE; Northwest Natural; State of Oregon.//Provides multi-level analyses of power use.
- *Google; Internet; OSHA; PGE.//A lot of information of course about any item I want to look up. I can see actual savings and costs from other companies.
- Utility companies.//NA.
- *PGE; Oregon Energy Trust; local vendors like Platt.//Best at identifying cause of most savings.
- *ASHRAE, NECA; IBEW; OEC; NEBC; BSUG.//Building efficiency – HVAC largest energy consumer.
- *PGE; Northwest Natural; Pacific Power and Light.//Because they have created programs to conserve energy and save money.

APPENDIX F

Written Exercise 5: Have you ever heard of Energy Trust of Oregon? How would you describe your feelings about Energy Trust when it comes to businesses like yours: positive, negative, or neutral and why?//To the best of your knowledge, what, if anything, does Energy Trust of Oregon do for businesses like yours?

Local & Regional

- Yes; Neutral; We have not engaged them or vice versa.//Help businesses analyze and review energy use and suggest solutions.
- Yes; Positive; Good business ally and good use of public money.//Provide opportunities of profitability and present an opportunity to make new customers.
- Yes; Positive; They have saved us money.//Provide information about possible energy saving measures and referrals to experts.
- Yes; Positive; They specialize in energy reduction ideas.//Probably have ideas and methods for both short-term and long-term energy savings.
- Yes; Positive; We are a greener-energy company, so any well-known energy group we can work with adds to our profile.//I'm not sure since we don't own our facilities – they would be more helpful to our clients, I think.
- Yes; Positive; I can get answers from them as an outside source, often with no cost.//They help me put proposals together with good information.
- Yes; Very positive; Available and knowledgeable.//Identifies and explains possible and practical projects that could be implemented.

National

- Yes; Positive; They have come into our facility many times to help measure and assess apps.//Give management hard numbers to review for investing in projects. Provides lucrative money incentives when projects are inspected and completed.
- Yes; Good idea; Provide another solution to save our energy and money.//Help reduce energy consumption.
- No; Neutral; Just don't know enough about them.//Not sure.
- Yes; Positive; I don't have enough information to answer.
- Yes; Positive; Very active and excited to help/lots of follow-up.//Give use credits and tax credits.
- Yes; Positive; They are administrators of an incredible program. They hold the key (money) that makes us more competitive.//Aid in advertising and marketing – administration of programs, audits, seminars, trainings, etc.
- Yes; Positive; It has saved company's money by reducing energy costs.//Provide examples on how to save money and use less energy.

APPENDIX G

Written Exercise 6: For each of the following statements indicate how important it would be for you when making a decision about investing in an energy efficiency project (1=not at all important, 2=not too important; 3=somewhat important, 4=very important, 5=don't know; at the end, indicate which of the statements is the most important and which is least important, and why.

Response Category	Not at all important 1	Not too important 2	Smwt important 3	Very important 4	DK 5
1. Energy Trust has technical expertise that can help you identify potential actions to save energy.					
Local & Regional	0	1	0	6	0
National	0	0	1	5	1
2. Energy Trust has technical expertise that can help you implement projects using existing staff.					
Local & Regional	0	3	4	0	0
National	0	0	1	5	1
3. Energy Trust makes it easy to save energy by providing free technical expertise that's worth thousands of dollars.					
Local & Regional	0	0	1	6	0
National	0	0	2	5	0
4. Energy Trust pays you to save energy.					
Local & Regional	0	0	1	5	1
National	0	0	1	5	1
5. When you save energy, you save money and boost your business at the same time.					
Local & Regional	0	0	4	2	1
National	0	1	0	5	1
6. Energy efficiency is a competitive edge for your business.					
Local & Regional	0	3	3	1	0
National	0	2	1	3	1
7. Using energy wisely is a good indicator of a well-run business.					
Local & Regional	0	0	2	5	0
National	0	3	0	4	0
8. Your customers will be impressed that you're saving energy and cutting costs.					
Local & Regional	0	1	3	3	0
National	2	1	1	3	0
9. Your customers will be impressed that you're concerned about the environment and using energy wisely.					
Local & Regional	0	0	5	2	0
National	2	2	2	1	0

Response Category	Not at all important 1	Not too important 2	Smwt important 3	Very important 4	DK 5
10.You're paying for Energy Trust services and incentives on your energy bill—you should take advantage of it.					
Local & Regional	0	1	5	1	0
National	0	1	1	4	1

Comments for Most Important:
Local & Regional

- (4) Direct message that tells me that Energy Trust will help me be more energy efficient and save money.
- (3) Energy Trust of Oregon studies the effect of programs and actions to determine actual savings over time.
- (1) They come up with things I have not thought of.
- (8) Our energy analysis tools work well, not just for our company, but they can also be utilized in the same manner for our clients.
- (4) Any way to save/make money, especially while saving energy, is a good thing for a start-up company.
- (3) A good source for budgeting.
- (1) Identifying potential.

National

- (1) Energy Trust of Oregon is in the business of helping you identify potential areas. Some you may not even be aware of.
- (3/10) A no cost way to improve your energy usage.
- (6) Everything we do is about energy usage. All our tires are capped with steam, air, and hydraulics.
- (8/9) Not only saving money, but raising revenue by instilling customer loyalty.
- (4) It makes the difference between doing a project or not.
- (4) Money – the rest is cream cheese filling.
- (8) Cutting costs is the key word! As you may know consumers love to feel like they are getting a deal. So anything that cut costs will be supported.

Comments for Least Important:
Local & Regional

- (10) I recognize that I am paying for Energy Trust, but this statement has the least impact from a "go forward" perspective.
- (2) The companies they refer people to are more knowledgeable that the Energy Trust of Oregon.
- (10) One big project covers a year's worth of this fee. It's not a big deal that we are paying for it.
- (2) We have a very small office, paperless (except for blueprints) Sustainable design for our client is very important.
- (10) "Taking advantage of it" can add up money much more quickly than just continuing to pay the energy bill premium for the service.

- (4) They have not paid us.
- (9) Customers are advertisers and users – neither are directly connected to these issues.

National

- (10) This is just a fact of life. The money ETO gets from your power bill is rather small in proportion.
- (8) Not something to relate to other companies as far as having an impact on their orders.
- (9) I would say this is the least important to our superiors at our plant – a rubber plant is dirty and greasy so they don't seem to stress any type of green or good environmental practices.
- (3) NR
- (8/9) I have never heard a customer say anything about how much money we saved.
- (8) Our customers are the producers and heavy consumers of energy. They want to know how to pay less for their consumption, not how to reduce the consumption per se. It is the money first and foremost, not the environment.
- (9) Customers being impressed that businesses are concerned about the environment. I don't think most customers care!

APPENDIX E

Written Exercise 7: What final message do you have for the Energy Trust of Oregon as it works to help individuals in positions like your help their businesses use energy wisely?

Local & Regional

- Send me reminders that I can help my organization save money and energy by utilizing their services. Let me know about incentives.
- Promote themselves and their services more. Broaden programs involving incentives.
- Provide ideas and information on a regular basis. Stay visible as a resource.
- I don't know, honestly.
- Have a brief case study/example of a company our size and their energy changes/profile – some sort of chart where you can select your company attributes and get ideas to get you thinking – then that would lead to an Energy Trust of Oregon contact.
- Continue to keep on the cutting edge of technology and provide ways to implement it into our existing building systems with ideas on how to pay for it.
- Keep us up to date on current incentives and opportunities to save energy/money. Help translate into real world projects – "sweet spots" – email.

National

- Keep on it. The ETO has been beneficial in helping make my company more aware of potential savings, helped identify best practices, and made the bottom line of our costs to our customers more attractive to them.
- Solicit and call businesses and facility managers and let them know about available resources to help them save money on energy.
- I don't have any information on Energy Trust. I have never used it, however, with the information I received today I do believe I am going to try and get my company to use the Energy Trust for our next energy related project.
- Provide easy access to information about your services. I don't have much of an opinion because I don't know enough.
- Allow large energy users to self-direct their funds to what we find to be best for our company. Some things the Energy Trust may not believe is helpful, is really great for us.
- Keep going. Critical to the success of our business. Improve/continue to improve outreach to businesses. Educate the service community. Expand into the policy world beyond their own self-interest.
- I would say increase awareness to the Energy Trust of Oregon. It's shocking to me how many people and companies that have never heard of Energy Trust. And the more people that use Energy Trust the better our environment will be.

PREPARED FOR:

ENERGY TRUST OF OREGON

Commercial Sector In-Depth Interview Report

February 2012

1. INTRODUCTION & METHODOLOGY

Between January 26, 2012, and February 10, 2012, DHM Research conducted a series of in-depth interviews exploring how organizations identify opportunities and make decisions about energy-saving investments. Working from a list of 18 names supplied by Energy Trust, DHM randomly called everyone on the list and completed 10 interviews. Industries represented included property management, hospitality, healthcare, retail, and government. The topic outline for the interviews is attached as Appendix A.

All of the individuals interviewed were involved at a high level in the investment decision-making process. In some cases the interviewee was the actual decision-maker. In other cases—particularly in property management, government, and larger businesses—the interviewee was at the top of an energy management chain of command, but had to send proposals to an owner, a finance committee, or higher-level executive for the final go-ahead. Even if they weren't the decision-makers, we found that the energy management executives we spoke to were keenly aware of the factors influencing the decision-making process, since they typically had to compete for funding against other investment needs.

The in-depth interviews were led by a professional moderator by telephone at times convenient for the interviewees. Although research of this type is not designed to measure, with statistical reliability, the attitudes of a particular group, it is valuable for giving a sense of the attitudes and opinions of the population from which the sample was drawn. This memo highlights key findings from the discussions. Each section reviews a major topic from the interviews and includes representative quotations, as well as evaluative commentary.

DHM Research: Davis, Hibbitts & Midghall, Inc. has been providing opinion research and consultation throughout Oregon and the rest of the Pacific Northwest for over three decades. The firm is non-partisan and independent and specializes in research projects to support community planning and public policy-making. www.dhmresearch.com

2. SUMMARY AND OBSERVATIONS

100 percent of interviewees believed that energy savings were important.

- Everyone had invested in lighting retrofits and more efficient HVAC units, the "low-hanging"—but valuable—fruit in the quest for energy savings.
- Less frequent but still common were investments in more sophisticated sensors and control panels and other forms of energy monitoring and saving, including energy audits, solar panels, and better roof systems.
- At the top of the scale we found large businesses that had made investments in energy management platforms and renewable energy resources.

Primary drivers of energy-saving investments were financial. Secondary factors included a broad network of environmental, technological, social, political, and legal factors.

- Return on investment (ROI) was the most important factor in making capital investments, while power purchase agreements and other fee-for-service arrangements had to beat existing utility rates.
- Most firms looked for an ROI of two years or less, and every firm expected less than five years.
- Exceptions to this timeframe were sometimes made for a variety of reasons, e.g., a longer return could be tolerated in purchasing energy-efficient equipment, providing the return came solidly within the life-expectancy of the unit. Longer returns might also be tolerated if the improvement provided an important hedge against future energy price increases.
- Whether a company was an owner or a tenant—and, if the latter, the terms of the lease—made a difference in such calculations. It was important that the entity making the investment was around to reap the benefit.
- Upfront cost and the timing of the expenditure also played important roles in decision-making. Investments were case-by-case: did the company have the cash on hand, had it budgeted for the improvement, and what were the competing cash needs?
- Rebates, incentives, tax credits, and grants were important in buying down the cost of investments and improving the ROI.

Most organizations also cared about broader goals of environmental sustainability, but these played a secondary role.

- It usually took prompting before an interviewee mentioned sustainability or workplace environment as a factor in making energy-related decisions.
- Many organizations had explicit goals of environmental stewardship. A project's support of such goals could play a decisive role in the approval process, but only if financial targets were also met.

Organizations evaluated energy-saving investments according to the same standards as other investments, but certain unique factors did have an impact. There is potential to elevate energy savings by assisting organizations to develop own energy expertise, and show how other benefits, like sustainability and image, affect their bottom line.

- Energy-saving measures competed for cash with other investment needs of the organization. Sometimes those other needs were more urgent or more specifically related to operations, and therefore won out.
- There was often more choice or discretion in making energy-saving decisions—they didn't present themselves as something the company *had* to do, in the way fixing a leak did.
- But energy investments had an advantage over other investments when it came to "soft benefits" such as public perceptions and tying into a firm's corporate responsibility goals.
- Most interviewees said making decisions about energy savings took more time than other investments. They attributed this to their own lack of expertise, the relative newness of the field, and the subjectivity or vagueness surrounding calculation of the financial benefits.

Energy savings is becoming more important.

- Rising energy prices, growing public awareness, and rapidly changing technologies were all cited as reasons for the increased importance of energy issues.
- Businesses are on the lookout for effective ways to save money on energy and to plan for a future of higher prices or volatility in energy supply.

Interviewees had a uniformly positive impression of the Energy Trust of Oregon.

- Among those with direct experience of the Energy Trust, impressions were very favorable. We routinely heard that Energy Trust representatives were responsive, professional, and knowledgeable.

3. KEY FINDINGS

3.1 | General Energy Questions

Types of Investment. The most universal form of energy-saving investment was installation of more efficient equipment, particularly lighting and HVAC systems. Lighting improvements included retrofitted fixtures, upgrades in sensors and controls, and installation of skylights to take better advantage of daylight. Regarded by some as the "low-hanging fruit," lighting was universally perceived as a valuable investment, and by many as the most important they had undertaken. "Lighting, certainly, has made a huge impact," said a property manager, adding that it was also one of the easiest changes to make. "We're a 24-hour a day business," said another interviewee, "so lighting is probably biggest."

Replacing high energy-use HVAC and other mechanical units with more efficient equipment was also a universal practice. Several interviewees talked about budgeting for such actions on an annual basis and routinely looking for the most efficient units, balancing upfront costs against longer-term savings as a matter of course. Several also mentioned adding or upgrading sensors and control panels for their mechanical systems, and looking for ways to recapture energy expended in routine business processes, such as heat from compressors, kitchen hoods, and dishwashers in a restaurant business. "Just about all decisions we make, we always look at the highest efficiency available," said one man, and many participants echoed this statement in one form or another.

The bigger companies were able to make investments that extended beyond building and equipment improvements. One large firm had implemented a comprehensive energy management platform including hardware, software, and an operations intelligence center to provide in-depth analytics and create energy models for each of the company's buildings. The system covered all aspects of energy use from HVAC and lighting to the plug load from other electronic equipment. Another national company made widespread use of solar systems, wind turbines, and fuel cells at its locations.

Representatives of the larger businesses also talked about entering into power purchase agreements to save costs relative to utility prices. Such agreements were also an important part of one organization's effort to promote the development and use of renewable resources. "The main vehicles we've used for renewable energy are power purchase agreements and operating leases," said the executive of this business. "For example, we pick a solar company to install, maintain and operate a system, and we buy the power they produce for a specified length of time." This executive didn't want to discount the importance of energy-efficiency, but he felt that the "on-site renewable energy side of the equation" was the most significant for his business.

Identification of Energy-Saving Opportunities. Organizations identified energy-saving opportunities in multiple ways, ranging from ground-level employee suggestions to internal technical expertise, to reliance on external vendors, contractors, and consultants.

Internally, some organizations had green teams, sustainability management personnel, or "think tanks" charged with finding ways for the company to conserve energy. When an interviewee cited input from ground-level employees outside of such channels, it was typically from an operations and maintenance manager or a staff electrician. "Our employees fit in in a couple of different areas," said an executive of one large organization. "Living in a specific state they're our eyes and ears on the ground to understand the local communities and the politics; and they help control energy waste on site, something we can't really do from headquarters."

Some companies started with a line-item review of expenses to identify where energy costs might be better managed. The larger businesses had high-level energy management personnel supported by the human and technical resources necessary to track usage, identify energy-saving opportunities, and develop proposals to capture those savings.

Externally, companies used a variety of resources, including outside consultants, vendors, contractors, utility companies, and the Energy Trust. We heard examples illustrating all of these methods of identifying opportunities and found no particular trends other than widespread praise for both utility companies and the Energy Trust. Some companies had engaged in a full-scale energy audit led by an outside consultant. Others eschewed consultants and relied instead on internal expertise, vendors, contractors, or utility companies. The Energy Trust was a very important external source for many of those we talked to.

On the whole, except for organizations large enough to have significant internal expertise, companies usually pointed to outside sources as the most useful means of identifying energy-saving investments. Smaller businesses that didn't use outside help weren't typically doing much besides lighting retrofits and buying more efficient HVAC units as the older ones died out.

3.2 | Role of Financial Factors in Decisions about Energy-Savings Investments

Decisions to make energy-saving investments were case by case and depended on a large network of factors—primarily financial, but also social and technological. Moreover, each organization worked within a particular set of constraints and resources that limited and sometimes determined its range of action—again primarily financial, but also physical (e.g., old buildings versus new construction), legal (e.g., leases or franchise agreements), and political (e.g., local permitting rules).

Within that overall context, and without exception, the first-mentioned and most important factor in making energy-saving investments was the bottom line. Without a positive financial impact, the investments would simply not be made. We heard this repeatedly. "It's financial," said one participant. "That's pretty much it." When probed about workplace environment, sustainability, and public perceptions the same participant acknowledged that such factors do play in at some level but said "they are really tangential."

Other interviewees would not have used the word "tangential," but all echoed the basic message that the business's first job is to survive as a business; only then it can worry about improving the environment. "It's still gotta be cost effective," said one executive who strongly affirmed the importance of sustainability. "I've had customers say to me, 'We like what you're doing but I don't want to pay more for bread because of it.'" Echoes of this sentiment reverberated throughout the series of interviews.

When it came to making a capital investment, the most important contributors to the financial picture were return on investment (ROI), upfront costs, and timing of the expenditure. Everyone mentioned these issues in one way or another without prompting.

Return on Investment. All interviewees specified an ROI timeframe of less than five years. "We're looking for one to five years," said one. "The decision is much simpler, much quicker. When it gets closer to ten years, there's a lot of debate involved. Above ten it's not worth it."

Most organizations were more aggressive and wanted to see a payback in less than two years. One participant in this category pointed to the lease term as a key constraint. Where his company's building leases used to be 10-15 years, now they are more typically five to seven years, reflecting a wider trend in the national real estate market. Any investment would have to realize its savings within the lease term.

Another consideration affecting ROI was cost of capital, identified by one executive as "a huge factor." A particular energy-saving proposal might show a two-year payback, but when it gets to the finance committee additional costs come into play that may extend that timeframe. "If I can generate something with a two-year ROI, I've seen the cost of capital push that out to three or four years. I've seen many deals killed because of that."

Some organizations were willing to tolerate longer payback periods for items like HVAC units or other pieces of equipment that have clear life-expectancies. They reasoned that dying equipment had to be replaced, requiring some level of investment no matter what. The important consideration in that case was getting the payback a few years prior to the end of the new unit's life cycle. "If we're buying a major piece of equipment," said one executive, "for example, a washer or dryer, we're looking at a 10 to 15 year lifespan. We'd like to see the higher cost pay itself out before that. We try to make it fall two to four years below the life expectancy of the unit." Owners sometimes appeared more willing to tolerate longer-term ROIs than tenants or lessees. In any event, the ROI timeframe needed to be such that the entity making the investment also reaped its benefits.

Upfront Costs and Timing. Just because an investment involved an adequate ROI did not mean it would be approved. Whether companies had cash on hand was also a big factor, as were the business's other needs. "I can usually get it [approved] with a three to five year ROI," said one interviewee, "but it's very case by case. In this [economic] climate we're avoiding really big things even if they are good, because of the capital outlay."

Energy investments frequently involved more discretion and less urgency than other items, so timing issues played more importance. "If a roof is leaky you have to replace it," said a property manager, drawing a contrast to energy-related expenditures. "It's beyond its economic life. There isn't a lot of choice."

The budgeting process was an important consideration to decision-makers in evaluating new investments. "We have capital expenditure lists," said one executive. "From a timing standpoint we look at when we can afford to make the changes. We try to look at our capital needs three to five years out, but realistically three years. Most of what we plan for is 12-36 months out."

Timing and cost also came into play when businesses had to balance competing investments. "Conservation is a great idea long term, but if I have to put [an energy-saving project] up against a piece of lab equipment it may or may not win." We heard from several sources that energy-saving investments were competing for capital against other uses, many of which might be more urgent, or more specifically suited to the business's operations or expertise. For example, a manager in the healthcare sector said, "If we're looking at a new CT machine I don't think we consider energy use as much as we should. We do with boilers but not so much with lab equipment. With clinical equipment we're looking for a certain functionality."

Incentive programs. Several interviewees pointed to various types of incentives, rebates, tax credits, and grants as playing an important role in mitigating upfront costs and giving energy-saving investments an edge in their competition for funding. "ETO's incentive was imperative on our last project," said a property manager. Another interviewee, describing the highly competitive process he was a part of, said, "there's only so many dollars to be spent on investments. The decision is made by the CFO or the president and chief executive as to how the money is to be invested. They're looking at ROI. When we've identified a way to reduce demand we go up against our colleagues—for example, there might be a competing proposal from IT. What gives us an edge is if we have rebates or incentives to help buy down the cost and increase the internal rate of return. That helps us—it's very crucial to find offerings of incentives or rebates."

Given a chance to sum up his thoughts at the end of an interview, one executive commented, "As I think more about the factors, rebate and grant opportunities are pretty important to us as corporations to assist us in achieving goals. These aren't just corporate goals, they're society goals. We're looking for partnerships—not only financial partnerships, but those public financial opportunities do come into play."

Non-Capital Investments. Not all energy-saving expenditures took the form of capital investments, but financial motives were still primary. One executive described his company's energy management platform as possible largely because they were able to set it up on a service fee basis with equipment supplied by outside providers, in hopes of recouping the fees through reduced consumption. Power purchase agreements also looked for better economics. "What can we bring it online for and how does that compare to power company rates?" said an executive. "Take solar, we look at the amount of sun in that location, the local utility rates, and the incentives and rebates that might be available. Then there are smaller issues such as the local permitting process and the metering interconnections with local utilities." He noted that onerous local procedures had the capacity to kill a good project.

3.3 | Role of Other Factors in Decisions about Energy-Saving Investments

Despite the emphasis on financial factors, we also heard that energy investments were unique for the way they dovetailed with broader social goals, which could give them an edge in competition for funding. "It ties into our corporate responsibility goals," said one manager. "When we make a proposal we summarize all the benefits, including what we call the soft benefits." "We're in there fighting for dollars like anyone else," said an executive. "But we get a check mark for the intangibles. It helps us in a tie."

One interviewee felt that interest in saving money on energy was growing among senior management in his company as they became more aware of the kinds of opportunities available. Another said that the decision-makers in his organization understood that energy costs were going to rise. "So if our ROI is a little less [than that of another project], they might give us consideration because they're hedging against future increases in energy costs."

It usually took prompting to direct the interviewee's attention away from the financial considerations to matters such as sustainability, workplace environment, and public image. Once prompted, however, several participants spoke emphatically about their organization's commitment to environmental and social goals. Consumer-driven businesses were especially sensitive to sustainability issues. "It's what consumers expect," said one manager. "Consumers have increased savvy. They make decisions based not only on dollars, but also how companies treat the environment and how they treat their employees."

Without losing focus on profits—"we have to be in business to make a difference"— some companies acted on values of environmental responsibility even when the financial return was vague. "Yes, there's a certain amount we can gain from public perception that we run our [business] in an environmentally friendly way. But it's really hard to put a quantitative statement to that." Using commitment to sustainability as an advertising tool fell into this category. A hotel executive described certain standards adopted by Portland's hospitality industry, which he said had helped attract conventions to the city, producing clear but hard to quantify benefits to local hotels.

Actions with no immediate economic benefit often had to do with an overall philosophy of sustainability or participation in programs like Blue Sky, and as such informed the making of all energy-saving decisions rather than governing any one specific investment. Most organizations were trying to be good environmental citizens while maintaining bottom line integrity. Several of the interviewees, while acknowledging the pre-eminence of the bottom line, spoke about looking for ways to reduce their company's carbon footprint as a general principle. "Our whole mindset is being as sustainable as possible," said one governmental employee. "It's part of the city's strategic plan and we always look at how to be more sustainable and decrease our carbon footprint. We want to be leaders in the field." Most of the private company representatives echoed this sentiment.

3.4 | Energy-Savings Investments Compared to Other Investments

As noted above, the connection between energy-savings and broader corporate goals of environmental responsibility can give energy-related investments a leg up on the competition. For the most part, however, we learned that organizations apply the same criteria to energy-saving investments as to other types, and evaluate them in a similar manner.

Several interviewees felt that energy investments were more difficult and time-consuming to make. Speaking of entering into power contracts, one executive said energy investments took "way more" of his time because of the complexity of the contracts. "One of the contracts on my desk right now is 38 pages long," he said. "There's so much different verbiage than I'm accustomed to. It's totally out of my realm of expertise." He had recently brought an energy consultant on board to help him with these issues.

Another executive, who had considerably more experience with power contracts, was less emphatic but agreed that energy investments took "slightly more time just because it's a relatively new field. There are more unknowns and questions. But we're developing a stronger understanding of areas where there's not so much experience—for example, will the roof leak if we put in the solar system? There's a learning curve involved."

Others spoke of a higher level of detail and coordination needed to research energy-savings. If you're fixing a roof, said a property manager, "you get three bids and move forward. With energy, you spend more time with the engineer, the Energy Trust, and contractors on getting information and developing proposals."

Cutting energy consumption out of projects is "extremely long-term" and ongoing, said one interviewee. "You're looking at a big picture, because there are so many things that contribute to it and the technology is constantly changing. There's more to manage, more options to consider, more things to weigh and balance. It's not a one-time shot in the same way that painting a building is or fixing a roof. With energy management you're looking out 20-30 years."

Another reason many felt energy-related investments took more time had to do with the "nebulous" or "subjective" nature of the financial calculations. Efficiency and savings could

depend on operational differences that were hard to control, and were therefore hard to predict accurately. "You can't sit down and calculate exactly how much your saving is going to be. The piece of equipment might not work exactly as it says."

Obtaining reliable analytics was extremely valuable to the interviewees. The better and more concrete the information relating to cost and payback, the more seriously a proposal would be reviewed. "We often receive very diluted or vague information," said one participant. "Companies come to us with claims about a product but there's no supporting documentation. If they have the proof, the math, the validation process—we have a very strong appetite for that." It was clear that a solid reputation for quality analysis and advice was a key element of the Energy Trust's value to the businesses we canvassed.

Those who did not agree that energy-related decisions were more time-consuming had distinguishing reasons or circumstances informing their positions. "Energy efficiency projects are more straightforward than other investments," said a governmental employee whose views were influenced by the complexities of the public funding process. "New facility investments or vehicle replacements involve many more considerations and complexity than energy savings," he said.

A private sector representative felt the same way: "You do a math problem and figure out the payback" of energy-savings, he said. "They're pretty painless as far as actual time spent." But his company had done nothing more complicated than lighting retrofits and HVAC replacements. A second private sector executive felt that energy investments took only marginally more time and resources, noting that all investments have unique factors that require special attention.

We interviewed only one public sector representative, but it was clear from him that the standards governing private sector organizations did not apply in quite the same way in the public sphere. "We're a city," he said, with explicit sustainability goals built into the strategic plan. "When we're looking at return on investment on new public infrastructure or a new fire engine—the money is just part of it. . . . We're not in business to provide services and a return for our shareholders. We're in business to provide services in the most effective way to the public."

3.5 | The Growing Significance of Energy-Related Investments

Nearly all of those interviewed agreed that energy use had become more important to their businesses over the past several years, and that it would continue to grow in importance in the future. Most cited rising costs and increasing public awareness about the environment as the two most prominent reasons for their impression. "It's more significant for two reasons," said one manager: "One, it cuts into our profits. We have to continually find ways to reduce consumption so the profit margin isn't lost; and two, the use of the earth's resources has to be done in a less damaging way."

One of the property managers noted that the impact on a property's bottom line and the return to the owner of cutting consumption are more important factors now than they used

to be, due to rising costs. But he also noted that "an increasing number of people are starting to talk green and care about energy efficiency. The majority of tenants aren't there yet, but it's growing and as public awareness grows that will grow too."

Changing technologies also contributed to the impression that energy issues were more important now than they used to be. The number of options for monitoring and reducing consumption had grown, as had opportunities to use alternative resources. For many, the technologies hadn't yet become cheap or prevalent enough to make a difference, but they knew that better capabilities were on the horizon and they were alert to future developments.

One participant thought energy-related issues had stayed about the same for his business. "But we're just running an office building," he said. "Actually our costs have probably gone down because of the work we've done."

3.6 | Attitudes Towards the Energy Trust of Oregon

Interviewees who had contact with the Energy Trust had very favorable impressions of the responsiveness, expertise, communications, and professionalism of its representatives. Energy Trust goals and personnel won universal praise, for example:

- "The staff is very easy to work with. If we've got questions we know the right people to get in touch with to get the answers."
- "They were a pleasure to work with. I felt like they were looking out for me as well, and that's important. I felt like they were on our side."
- "It's more of a partnership for us than a vendor. They've played a very important role for us in the last four or five years."

When asked what kind of services the Energy Trust could provide, interviewees talked about performing energy audits, providing technical assistance in evaluating energy options, developing proposals, and implementing solutions, helping to find incentive programs, and assisting with paperwork. "They help us identify opportunities for incentive dollars to get some of that back," said one participant. Another who had worked with Energy Trust on several projects said he felt "like I'm just scratching the surface of how they can help."

"I was skeptical when I first started out but I became a believer," said one interviewee. "They don't tie you up with a lot of paperwork, the advice is good, they're very responsive." This man suggested maintaining a list of references—which he was willing to be on—to help other businesses make decisions about working with Energy Trust on energy savings, especially insofar as the Energy Trust may be perceived and avoided as a government organization.

Not everyone loved the funding mechanism. "I would prefer not to have the dollars taken out in the first place," said one participant. Another wondered whether a separate organization was necessary to provide the services. "They've built up a pretty big staff over the years," he said. "It's a big organization doing things that were available before through the utility companies. What they do is good, I'm just not sure we couldn't have got the same services and products with less overhead from the utilities."

We also heard that the process that could be overly burdensome, and that the relationships between various energy-saving programs were confusing. And there was one concern that some of the financial projections hadn't worked out as predicted. "Early on with Energy Trust we saw some projects that weren't that successful," said one interviewee, because the payback turned out to be longer than expected. But, he added, "we've gotten smarter over time about the questions we ask and how we evaluate payback," and he seemed to think Energy Trust personnel had as well.

3.7 | Conclusions

Our research suggests that the Energy Trust can best serve the public with strong analytics and technical expertise that organizations can rely on in making financial decisions, with thorough information about and assistance in obtaining available incentives, and through a wide variety of offerings suitable to the needs of organizations of very different size, purpose, energy sophistication, and familiarity with local legal and political processes.

Appendix A

In-Depth Interview Guide

BACKGROUND QUESTIONS

1. Name
2. Company
3. Job title
4. Length of time with organization

GENERAL ENERGY QUESTIONS

5. What, if any, investments has your business (unit/division) made in the last few years related to saving energy?
6. Of these investments, what which would you consider the most important or significant to your business?
7. How are energy saving opportunities identified in your business?

    PROBES:
    - Role of employees
    - Role of outside contractors/consultants
    - Role of utility companies
    - Energy Trust of Oregon

DECISION MAKING

8. What factors do does your business consider when energy savings investments?

    PROBES:
    - Decision-makers involved
    - Upfront cost
    - Tax incentives
    - ROI
    - Workplace environment
    - Image
    - Value of stakeholders
    - Technical expertise
9. Relative to other business investments, would you say that you spend more, less, or about the same time and resources when making decisions about energy use? Why?
10. Does your business use same set of criteria when making decisions about energy savings investments or are there unique factors that you consider for energy savings investment? What is same, what is different?

11. What about Return on Investment (ROI) specifically? Do you the same or different ROI criteria when making decisions about energy saving investments compared to other business investment.

    PROBES:
    - Length of time for return
    - Non-monetary returns (e.g., image, workplace conditions, environmental, etc.)

12. What role, if any, do front-line employees have in identifying energy saving opportunities or in making decisions about energy saving investments?

13. Think back over the last several years. Would you say that energy use has become more or less significant in your businesses overall strategic planning?

    a. If more: Why? What has changed?

    b. If less or the same: Are there factors that you can think of that could make energy more significant in your businesses overall strategic planning?

    PROBES:
    - Cost of energy
    - Cost of energy savings investments
    - Political culture or demands of customers/stakeholders
    - Information – type and source

ENERGY TRUST OF OREGON

14. Would you say that you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable impression of the Energy Trust of Oregon. Why?

15. As far you know, what can Energy Trust of Oregon do for businesses like yours?

SUMMARY

16. Is there anything else you would like to share about energy use at your business or how your business makes decisions about energy use?

April 6, 2012

To: Susan Jowaiszas, Energy Trust of Oregon
From: Davis, Hibbitts & Midghall, Inc. (DHM Research)
Re: Energy Trust Commercial Sector Survey Results

1. INTRODUCTION & METHODOLOGY

DHM Research and Energy Trust administered an online survey of commercial customers to evaluate how they make energy related decisions including energy use, savings, and investments. The survey builds on previous qualitative research with commercial sector customers. This memo highlights key findings from the survey.

Research Methodology: Between March 19-April 3, 2012, DHM Research and Energy Trust administered an online survey of commercial customers (including governments and non-profit organizations). Approximately 3,500 people were invited to participate and a total of 527 customers responded, which is a sufficient sample size to assess customers' opinions generally and to review findings by multiple subgroups, including organizational size, type, and structure, as well as the age, gender, and education of the survey taker.

DHM Research: DHM Research has been providing opinion research and consultation throughout the Pacific Northwest and other regions of the United States for over three decades. The firm is non-partisan and independent and specializes in research projects to support public policy making. www.dhmresearch.com

2. SUMMARY & OBSERVATIONS

Decision Making

Cost and return on investment were the most important factors in deciding to invest in energy savings.

- Opportunities to lower energy costs (99% combined very or somewhat important), return on investment in energy savings (97% combined), and upfront costs (96% combined) were most important for customers.
- Availability of financial incentives (91%) and providing a comfortable workplace for employees (91%) also scored equally high.
- Government organizations (more than for- and non-profit organizations) and customers ages 35 and older were more likely to say return on investment and opportunities to lower energy costs were very important; whereas for-profit companies were more likely to place importance on financial incentives.

Cost was again front-and-center when compared to other factors. When asked to rank by level of importance, organizations ranked return on investment (30%), opportunities to lower energy costs (21%), and upfront costs (18%) higher than other factors.

- Men, government organizations, and organizations of twenty or more said these were the most important to their organization.
- Adversely, two in ten rated "having technical expertise in-house to make the upgrade" and "recommendations from contractors" much less important.

Almost all organizations had made some sort of energy investment.

- All (100%) government organizations had made some sort of upgrade.
- Larger organizations (100 or more) were also more likely (98%) than small organizations of 1-4 (86%) or medium-sized of 20-99 (89%).

For organizations that have made energy investments, customers said lowered energy costs and reduced carbon footprint were, by far, the most prevalent reason.

- Half said energy saving investments improved the quality of their organizations' product or service. Larger and government organizations were more likely to report "reduced energy costs."
- About one-half said, however, investments did not develop new customers (49%) or expand business (53%) with existing customers. More than seven in ten said investments did not add jobs (71%) or extend hours of operation (74%).
- Except for "cost" and "reduced carbon footprint," a number of customers (range: 20-39%) said they didn't know what investments did for their organization.
- Energy Trust could benefit by supplying targeted communications outlining the role and function of different energy investments for different organizations.

For energy savings investments, a plurality expected a return between 3-5 years and one-third (32%) expected a return in 1-2 years.

- Government organizations, customers with a graduate degree or higher, men, and those 55 and older were most likely to say their organization expected a return in 3-5 years.
- Compared to other capital investments, 33% expected the payback of energy saving projects to take the same amount of time, 17% said they expect to take more time, and 25% less time.
- Also compared to other capital investments, a majority of customers said that simple payback time, upfront costs, and ROI were more important for energy savings investment.

Information Needs

More than half (58%) said research recommendations from Energy Trust of Oregon was very valuable, with another third (33%) saying somewhat valuable; more than all other sources.

- Three in ten said the same info from utility companies was very valuable.

Fewer than 3 in 10 (28%) had a "Green Team" or group responsible for monitoring or researching energy saving opportunities.

- Larger organizations of 100 or more employees, government organizations, and national organizations were all more likely to have such a group.

Energy Trust of Oregon

Almost all customers had a positive impression of Energy Trust of Oregon (combined 90% very or somewhat).

- Younger workers 18-34 and larger organizations were more likely to say their organization had a very positive impression of Energy Trust.
- Over three-quarters had worked with Energy Trust on a project on some scale.
- Larger and government organizations were most likely to have worked, or recall working, with Energy Trust.
- A similar number (91%) said their organizations' experience working with Energy Trust was excellent or good.

Energy Trust of Oregon
Commercial Sector Online Survey
March 19-April 3, 2012; 10 minutes; N=527
DHM Research

Title: Energy Trust of Oregon: Organization Survey

Landing Page:
To best fulfill our mission, Energy Trust of Oregon is assessing the energy needs of the region's commercial business, nonprofit and governmental organizations. We hope that you will take a few minutes to complete this short survey about energy savings and decision-making.

Energy Trust of Oregon has partnered with an independent public opinion firm – DHM Research – to administer the survey and collect the data. The survey is confidential. All the results will be reported in the aggregate and your individual answers will not be shared with Energy Trust of Oregon. At the end of the survey, you will have the opportunity to enter a raffle for an **iPad2**. One winner will be randomly selected by DHM Research.

I. Background Questions

1. How many people does your organization employ?

Response Category	N=527
1-4	21%
5-9	14%
10-19	13%
20-49	11%
50-99	10%
100-249	12%
250-499	6%
500-999	3%
1,000+	10%

2. Is your organization for profit, nonprofit, or governmental?

Response Category	N=527
For profit	69%
Nonprofit	22%
Governmental	9%

3. **(if 'profit' or 'nonprofit')** Which best describes your organization's sector?

Response Category	N=480
Manufacturing	6%
Consumer goods/retail	19%
Education	5%
Financial	4%
Healthcare	7%
Services	17%
Technology	2%
Utilities	1%
Other	40%

4. **(if 'for profit' or 'nonprofit' to Q2)** What best describes the structure of your organization?

Response Category	N=480
Local	66%
Regional	17%
National	17%

5. **(if 'regional' or 'national' to Q4)** Is your organization headquartered in Oregon or somewhere else?

Response Category	N=165
Oregon	58%
Somewhere else	42%

6. **(if 'regional' or 'national' to Q4)** Neither may be an exact fit, but which statement best describes how decisions about energy consumption and efficiency are made at your organization?

Response Category	N=164
a. Mostly centralized decision-making by executive leaders at your organization's headquarters	58%
b. Mostly local decision-making by leaders at each of your organization's various locations	42%

II. Decision-Making

Below is a list of different factors that organizations like yours may consider when making investments in energy savings. For each, indicate how important it is to your organization in deciding to make an investment. **(Randomize Q7-Q18)**

Response Category, N=527	Very important	Smwt important	Not too important	Not at all important	Don't know
7. Return on investment (ROI) in energy savings	79%	18%	2%	2%	0%
8. Upfront costs	70%	26%	4%	0%	0%
9. Ability to finance projects at a reasonable rate	53%	22%	15%	9%	2%
10. Availability of financial incentives (e.g., tax credits)	69%	22%	5%	3%	1%
11. Opportunity to lower energy costs	84%	15%	1%	0%	0%
12. Demonstrating environmental sustainability to my customers	35%	41%	18%	4%	2%
13. Communicating the organization's image to customers	46%	33%	16%	5%	1%
14. Providing a comfortable workplace for employees	57%	34%	6%	2%	1%
15. Having the technical expertise "in-house" to make the upgrade	24%	33%	32%	9%	2%
16. Recommendations from contractors	24%	49%	23%	3%	1%
17. Recommendations from your utility company	25%	50%	21%	3%	1%
18. Recommendations from Energy Trust of Oregon	43%	46%	8%	2%	2%

(Repeat list in same order as above) Which of these reasons is the most important and which is the least important when your organization is making investment in energy savings?

19. (Most important)
20. (Least important)

Response Category, N=527	Most important (Q19)	Least important (Q20)
Return on investment (ROI) in energy savings	30%	0%
Upfront costs	18%	2%
Ability to finance projects at a reasonable rate	4%	9%
Availability of financial incentives (e.g., tax credits)	10%	3%
Opportunity to lower energy costs	21%	0%
Demonstrating environmental sustainability to my customers	5%	11%
Communicating the organization's image to customers	3%	10%
Providing a comfortable workplace for employees	4%	6%
Having the technical expertise "in-house" to make the upgrade	2%	23%
Recommendations from contractors	1%	19%
Recommendations from your utility company	0%	13%
Recommendations from Energy Trust of Oregon	3%	2%

21. What are other factors that your organization considers when making investments in energy savings? **(Open)** ***See verbatim file for complete set of responses.***
    - *"We consider appearance, inconvenience, and interruption to business and to customers."*
    - *"Cost and necessity."*
    - *"Does the technology make sense? Is the technology proven or is it kind of a "fad?" How disruptive would the project be to the operation of the business?"*
    - *"Ease of the transition."*
    - *"We look for the ways to make the biggest positive impact for the least amount of expenditure. Need to be able to make a good return on our investment."*

22. Has your organization made any energy savings investments, even if they were small?

Response Category	N=527
Yes	93%
No	2%
Don't know	5%

List up to three of your organizations most recent investments in energy savings. ***See verbatim file for complete set of responses.***

23. Investment one **(Open)**
24. Investment two **(Open)**
25. Investment three **(Open)**
    - *"Change in lighting in our restaurants."*
    - *"Energy efficient equipment."*
    - *"Insulation."*
    - *"New windows."*
    - *"Timers."*

Because of investment in energy savings, has your organization **(Randomize Q26-Q34)**

Response Category, N=489	Yes	No	Don't know/NA
26. Developed new customers	14%	49%	36%
27. Maintained existing customers	42%	19%	39%
28. Expanded business with existing customers	11%	53%	36%
29. Improved the quality of your product or service	48%	32%	20%
30. Added jobs	5%	71%	24%
31. Extended hours of operation	3%	74%	22%
32. Increased profit	44%	27%	29%
33. Lowered energy costs	88%	5%	8%
34. Reduced your "carbon footprint"	80%	4%	16%

III. Return on Investment

35. Organizations often determine a target for return on investment (ROI) for capital projects. What statement comes closest to your organization's experience determining the ROI of investment in energy savings?

Response Category	N=527
a. We have a clear set of guidelines that we consistently apply to determine the ROI of all energy savings investments **(Skip to Q39)**	9%
b. Each project is unique and we use a different set of guidelines to determine the ROI for our various energy savings investments **(Go to Q36)**	64%
c. We do not know how to determine the ROI of energy saving investments **(Skip to Q37)**	12%
d. The ROI of energy saving investments is not important to our organization **(Skip to Q38)**	4%
Don't know	12%

36. **(if 'B' or 'C' to Q35)** Would your organization benefit from having a clear set guidelines to determine the ROI of energy savings investments?

Response Category	N=399
Yes	46%
No	29%
Don't know	25%

37. **(If 'C' to Q35)** What information or training would help your organization determine the ROI of energy savings investments? **(Open)** ***See verbatim file for complete set of responses.***

- *"An audit of our building and ideas for how we can manage our energy use in a better way."*
- *"Examples and success stories."*
- *"Simply knowing energy cost prior to energy saving measure, and after instituting measures."*

38. **(If 'D' to Q35)** Why is the ROI of energy saving investments not important to your organization? **(Open)** ***See verbatim file for complete set of responses.***
    - *"Our nonprofit is committed to energy conservation and renewable energy usage regardless of ROI. Some projects might be out of reach because of cost, but anything within cost that we can do, we will do."*
    - *"Usually we are just trying to save money, not necessarily bring in new customers due to energy investments."*
    - *"We buy new systems when there is a need."*

39. Projects vary, but typically how quickly does your organization expect an investment in energy savings to pay for itself?

Response Category	N=527
Less than 6 months	4%
6 months to one year	9%
1-2 years	33%
3-5 years	39%
6 or more years	6%
Don't know/Not applicable	10%

40. Generally, compared to other capital investments, does your organization expect the payback time for energy savings investments to take more time, less time, or about the same amount of time? **(Add "don't know/not applicable" category)**

Response Category	N=527
More time	17%
Less time	25%
About the same	33%
Don't know/Not applicable	25%

Below is a list of factors that some organizations consider when making investments. Your organization may consider some of these more important or less important when making investments in energy savings than when making other capital investments. For each factor, indicate if it is more important for energy savings investments, less important for energy savings investments, or equally important compared to other capital investments. **(Add don't know/not applicable) (Randomize Q41-Q46)**

Response Category, N=527	More important	Less important	Equally important	Don't know/NA
41. Return on investment	50%	11%	34%	5%
42. Simple payback time (cost of project less incentives, divided by the annual savings)	52%	10%	33%	5%
43. Organizational image	23%	31%	32%	14%
44. Environmental sustainability	38%	20%	35%	7%
45. Upfront costs	53%	10%	34%	4%
46. Ability to finance at reasonable rates	31%	20%	30%	19%

47. Use the space below to add any additional comments on what your organization considers when making decisions about energy savings investments. **(Open)** ***See verbatim file for complete set of responses.***
    - *"As a non-profit, we don't like to take out loans so it is usually about the up-front cost."*
    - *"In difficult economic times, up-front costs are very important."*
    - *"Will the product last the life of the payment period? Example: solar panels."*
    - *"We would love to save energy. I would say the hardest part is taking the time to seek out how to do it."*

IV. Informational Needs

Below is a list of sources of information that some companies may use to make decisions about energy savings investments. For each, indicate how valuable it is for your organization. **(Randomize Q48-Q52)**

Response Category, N=527	Very valuable	Smwt valuable	Not too valuable	Not at all valuable	Don't know
48. Research and recommendations from your utility company	31%	52%	10%	3%	4%
49. Research and recommendations from contractors	27%	53%	15%	2%	3%
50. Research and recommendations from manufacturers	19%	57%	17%	3%	4%
51. Research and recommendations from Energy Trust of Oregon	58%	33%	4%	2%	3%
52. Research and recommendations from your employees	24%	50%	15%	5%	6%

53. Does your organization have a "green team" or employees specifically responsible for monitoring or researching energy savings opportunities?

Response Category	N=527
Yes	28%
No	70%
Don't know	2%

54. Please add any additional comments about the information your organization needs when making decisions about energy savings investment. **(Open)** ***See verbatim file for complete set of responses.***
    - *"Always looking for that energy savings via [the Energy Trust] email: news, other systems, or companies that have used "green" opportunities."*
    - *"How long a product will last? Will it reach the payback time and still be working?"*
    - *"New ways to save. Ways to save with current topology."*
    - *"More incentives."*
    - *"Would like to know about actual local businesses. How they have benefited from the different programs and different methods of saving energy, and how much they have saved on their utility bills? Maybe a newsletter telling their stories would be a good way to present this information."*

V. Energy Trust of Oregon

55. What is your impression of the Energy Trust of Oregon?

Response Category	N=527
Very positive	67%
Somewhat positive	23%
Neutral	6%
Somewhat negative	2%
Very negative	1%
Don't know	1%

56. To the best of your knowledge, describe what you think that Energy Trust of Oregon can do for an organization like yours? **(Open)** ***See verbatim file for complete set of responses.***
    - *"Assist financially and in a consultative fashion to improve energy efficiency within the plant."*
    - *"Be a catalyst for awareness for opportunities to be more environmentally conscious and save money while achieving the goal."*
    - *"Education about new products and how to get the best deals in a reasonable time and cost."*
    - *"Save energy, save money, reduce environmental impact."*
    - *"We would appreciate the Energy Trust of Oregon providing more information on possible incentives. Our office has never received a call promoting incentives, like other utility companies do."*

57. Has your organization ever worked with the Energy Trust of Oregon on an energy project?

Response Category	N=527
Yes	77%
No	16%
Don't know	7%

58. **(If 'yes' to Q57)** Do you recall when was the last time your organization worked with Energy Trust of Oregon?

Response Category	N=407
Currently	16%
Within the last 6 months	31%
6 months to one year	20%
1-2 years ago	25%
3-5 years ago	6%
6 or more years ago	1%
Don't know/Not applicable	1%

59. **(If 'yes' to Q57)** How would you rate your organization's last experience working with Energy Trust of Oregon?

Response Category	N=407
Excellent	66%
Good	25%
Fair	5%
Poor	3%
Don't know	1%

60. **(If <u>not</u> 'don't know' to Q59)** Why would you say that the last experience with the Energy Trust of Oregon was **(answer from Q59)**? **(Open)** ***See verbatim file for complete set of responses.***
    - *"A rebate check was issued for installing the CaptiveAir Hood. While the check did arrive, it took longer than we were lead to believe."*
    - *"Because I saved money."*
    - *"Good communication and very responsive."*
    - *"Keeping me informed."*
    - *"Our point of contact at the Energy Trust is sometimes very hard to get a hold of and it has taken weeks for her to call back if at all."*

61. Would you recommend Energy Trust of Oregon to colleagues?

Response Category	N=527
Yes, definitely	76%
Yes, probably	20%
No, probably not	4%
No, definitely not	0%
Don't know	0%

Demographics – Optional

62. Age

Response Category	N=527
18-24	0%
25-34	6%
35-44	18%
45-54	30%
55-64	35%
65+	11%
Refused	1%

63. Gender

Response Category	N=527
Male	71%
Female	27%
Refused	2%

64. What is the highest level of education you have had the opportunity to achieve?

Response Category	N=527
High school/GED	7%
Some college/2-year degree	36%
4-year degree	38%
Graduate degree or higher	19%
Refused	1%

65. Company **(Text box)**
66. Job title **(Title)**

67. What best describes your involvement energy consumption/efficiency decision-making at your company?

Response Category	N=527
No involvement	1%
Very little involvement	4%
Some involvement	20%
Significant involvement	76%

Follow-Up

This survey is confidential. All reporting will be done in the aggregate and your answers will not be shared with Energy Trust of Oregon. However, if you are interested entering the raffle for the iPad2 or in receiving additional information about the Energy Trust of Oregon, please provide your contact information below.

68. Please enter me if the iPad2 raffle **(check box)**
69. Please send me additional information about Energy Trust of Oregon **(check box)**

70. First Name
71. Last Name
72. Address 1
73. Address 2
74. City
75. State
76. ZIP
77. Email
78. Telephone

MEMO

Date: November 30, 2012
To: Phil Degens, Manager, Evaluation
From: Oliver Kesting, Business Sector Lead
Spencer Moersfelder, program manager, Existing Buildings
Susan Jowaiszas, Sr. Marketing Manager, Commercial + Industry|Ag
Subject: Staff Response to the 2012 Commercial Market Research Study

In late 2011, the Business Sector/Existing Buildings conducted the sector's first market research study, for Energy Trust. The purpose of the research was to probe decision-making by customer, determine the customer priority for energy efficiency, identify barriers to energy efficiency investment, gauge customer engagement with energy efficiency efforts and Energy Trust, and test messages about Energy Trust and energy efficiency. The study included two focus groups, 10 in-depth executive interviews and an online survey of past participants.

This in-depth information, collected and reported in the customers' own words, is highly complementary to the ongoing Evaluations research, including process evaluations and Fast Feedback surveys. Staff feels that similar market research of this nature, or perhaps a shorter format of the study, would be valuable to conduct every 2 years to inform program design decisions.

In summary, the research documented that customers are satisfied with the program's ability to help them make energy efficiency improvements that fit their payback criteria. Customers are also highly appreciative of the ideas and suggestions for energy savings opportunities that Energy Trust can identify for them. We also learned more about how customers make capital upgrade decisions and their criteria for Return on Investment and other barriers.

Program staff will be integrating findings into future marketing efforts, which is a particularly good opportunity during the transition of the Program Management Contractor. Marketing and program improvements will be considered in the following areas:

- Tuning up Existing Buildings program messages to articulate the business case for energy efficiency
- Streamlining access to program information through more targeted program marketing materials and website enhancements
- Presenting a comprehensive view of financial and business benefits of energy efficiency investment.