



CORVALLIS ENERGY CHALLENGE EVALUATION



FINAL REPORT



Submitted to:

Phil Degens
Energy Trust of Oregon, Inc.
851 SW 6th Avenue, Suite 1200
Portland, Oregon 97204

Submitted by:

Dethman & Associates  
Linda Dethman
3600 38th Avenue S
Seattle, Washington 98104

April 2010

≈ ACKNOWLEDGEMENTS ≈

The evaluation would not have been possible without:

- ❖ Phil Degens, the Evaluation Manager at Energy Trust, who supported this effort throughout.
- ❖ Jan Schaeffer at Energy Trust, who managed the Corvallis Energy Challenge, who provided so much valuable information about its process and outcomes, and who introduced us to our key contacts in Corvallis.
- ❖ The generous time and insights of the 15 key contacts who contributed so many insights and time to this effort.

≈ TABLE OF CONTENTS ≈

≈ EXECUTIVE SUMMARY≈	5
INTRODUCTION.....	5
SUMMARY OF KEY FINDINGS.....	6
METRICS OF “BOTTOM LINE” SUCCESS.....	7
Follow-Through Rates.....	7
Energy Savings and Costs.....	8
RECOMMENDATIONS.....	9
≈ SECTION ONE: BACKGROUND, GOALS, METHODS & HISTORY≈	13
BACKGROUND.....	13
COMMUNITY ENERGY CHALLENGE EVALUATION GOALS.....	13
METHODS.....	13
ENERGY CHALLENGE HISTORY.....	14
Energy Trust Perspective and Readiness.....	14
Corvallis Perspective and Readiness.....	16
Next Steps and Due Diligence.....	16
Roles.....	18
Further Planning of the Energy Challenge.....	18
Energy Challenge Program Year Implementation.....	19
Ongoing Activities in Corvallis.....	20
KEY ENERGY CHALLENGE PROGRAM COMPONENTS.....	20
SECTION TWO: PROCESS ASSESSMENT OF THE ENERGY CHALLENGE	23
INTRODUCTION.....	23
SELECTION PROCESS AND VIABILITY OF THE PARTNERSHIP.....	23
SETTING AND REACHING GOALS.....	24
PLANNING.....	25
OVERALL IMPLEMENTATION AND LESSONS LEARNED.....	26
Coordination.....	26
Evaluation.....	27
Overall Program Strengths.....	28
Overall Areas for Improvement.....	29
IMPLEMENTATION OF SPECIFIC ELEMENTS.....	31
Home Energy Reviews (HERs).....	31
Solar Assessments and Installations.....	32

Greek Challenge.....	32
Commercial Walk-Through Assessments.....	33
Public Relations/Marketing/Outreach/Coordination	34
Climate Masters Program	34
SECTION 3: ENERGY CHALLENGE OUTCOMES	35
HER FOLLOW-THROUGH RATES.....	35
Measures Taken and Estimated Savings Compared to Base Year	37
Residential.....	37
Commercial.....	39
Solar	41
COSTS	42
APPENDIX A: EVALUATION INTERVIEW GUIDE.....	44

TABLE OF TABLES AND FIGURES

Table 1. % Follow-Through: Corvallis Home Energy Review Sites.....	7
Figure 1 % Change in Residential Sector, Measures and Savings (Base Year to Program Year).....	8
Figure 2 % Change in Commercial Sector Measures and Savings (Base Year to Program Year).....	9
Figure 3 % Change in Residential Sector, Measures and Savings (Base Year to Program Year).....	39
Figure 4 % Change in Commercial Sector Measures and Savings (Base Year to Program Year).....	40

≈ EXECUTIVE SUMMARY≈

INTRODUCTION

The Corvallis Energy Challenge (Energy Challenge) was designed as a year-long partnership (March 2008-February 2009) between Energy Trust of Oregon (Energy Trust) and the Corvallis Sustainability Coalition (Coalition). Energy Trust had been looking for a community with the right blend of attributes to foster a community-wide efficiency and renewables effort. Corvallis, a university town of 58,000 located 90 minutes south of Portland, had embraced sustainability as a challenge and goal and was ready for a project to focus their efforts on.

The key goals of the Energy Challenge were to (1) learn more about how to design and implement a community-wide initiative and (2) test whether such a focused initiative could increase energy savings at an equal or lower cost compared to other delivery mechanisms. In addition, the partners hoped other benefits would result from a community-based approach – such as boosting local economies, long-term relationships, and positive public relations.

The Energy Challenge was a substantial social marketing effort, using hundreds of volunteers as well as expertise from Energy Trust, to involve the community and raise awareness about and interest in energy efficiency and renewables, and to achieve a targeted level of participation in some of Energy Trust's existing programs, with the greatest emphasis on:

- **Completing 1,000 Residential Home Energy Reviews (HERs)**, mostly of owner-occupied single family homes. HERs recommended energy efficiency improvements and urged participants to follow-through with taking action through Energy Trust's residential retrofit program. Coalition member organizations participated in a competition to recruit the most households.
- **Completing 50 walk-through assessments for small and medium-sized businesses**, provided by a local firm; the assessment included a written report and follow-up contacts at 90 days to assist businesses in taking action through Energy Trust's commercial retrofit program.

Later in the pilot, the Energy Challenge launched the **Greek Challenge** – a competition that rewarded the participating fraternity and sorority house that took the most energy saving actions. In addition, some events were targeted to trade allies, industrial customers, and multi-family property owners, and workshops on residential solar applications and home weatherization were held. Energy Trust also offered its

standing programs on solar energy to households and businesses interested in solar energy, and industrial customers.

This evaluation is based upon extensive review of program documentation; in-depth interviews with 15 key Energy Challenge actors, including Energy Trust staff and program implementation contractors, city government officials, and members of the Coalition; and information from Energy Trust's FastTrack database which tracks program participation and estimates savings.

SUMMARY OF KEY FINDINGS

The Corvallis Energy Challenge:

- Nearly met its key program participation goals by completing almost 800 HERs and completing all 50 walk-through assessments and follow-ups for businesses.
- Partnered a motivated community with Energy Trust in an impressive community-wide effort to promote energy efficiency in a short time frame.
- Provided visibility to both the Sustainability Coalition and to Energy Trust.
- Established and grew relationships both within the community and between the community and Energy Trust.
- Provided momentum and credibility for the community to apply for Federal stimulus funding to pursue energy efficiency, which it subsequently received.¹
- Appeared to improve energy savings, during difficult economic times, in the two program areas where the most effort was spent.

However, results from this evaluation also show that the Energy Challenge:

- Needed a better system to track key Energy Trust metrics, including methods to determine the incremental influence of the Challenge on energy savings and the cost for those savings.
- Needed a greater focus on how to effectively get the community to follow-through to savings in the time frame available.
- Had a lower one-year follow-through rate (22%) for HER participants taking action through Energy Trust programs compared to most other years.
- Spent more to deliver the savings achieved, based upon the information available.

¹ The City of Corvallis has been allocated \$511,600 from the US Department of Energy's (DOE) Recovery Act Energy Efficiency and Conservation Block Grant (EECBG) program. The purpose of the EECBG program is to reduce fossil fuel emissions, reduce a community's total energy use, and improve energy efficiency in government buildings and transportation services.

METRICS OF “BOTTOM LINE” SUCCESS

Follow-Through Rates

Residential. A HER follow-through site is a home that installed energy saving equipment and received an Energy Trust incentive after receiving a HER. As Table 1 shows, the follow-through rate for receiving incentives for energy saving actions was lower in Corvallis at the one-year point of the Energy Challenge (22%) compared to most other years. However, as shown, follow-through has tended to increase as years pass, so the one-year measure does not capture all the savings activities.

Notably, many more HER ratings were done in 2008 compared to any other year even though follow-through was lower. According to feedback from key contacts, the competition to achieve participation, while successful in raising the number of HERs, may have been encouraged by more loyalty to the competing organizations than by energy savings. Feedback also revealed that available contractors may have been in short supply which could have influenced follow-through.

Table 1. % Follow-Through to Savings: Corvallis HER Sites

Year	N	3 Month	6 Month	1 Year	2 Year	3 Year	4 Year	5 Year
2003	64	17%	19%	27%	34%	39%	44%	52%
2004	68	13%	16%	22%	29%	34%	38%	44%
2005	171	24%	27%	35%	43%	51%	53%	--
2006	189	17%	23%	29%	37%	42%	--	--
2007	170	19%	25%	34%	39%	--	--	--
2008	755	10%	16%	22%	--	--	--	--
2009	109	12%	--	--	--	--	--	--

Commercial. Energy Trust’s FastTrack did not reveal much follow-through from to savings from equipment upgrades based upon commercial audit activities during the first year, but often a one-year time frame is often not long enough to capture the steps the businesses may eventually take. The Environmental Center staff noted that the program continued to operate beyond the CEC time frame and they believe follow-through is increasing with time.

The Environmental Center also tracked energy savings activities from the initial set of assessments. While many of their recommendations were for smaller actions that are behaviorally based and do not produce the same level of energy savings as equipment change-outs, their report² stated:

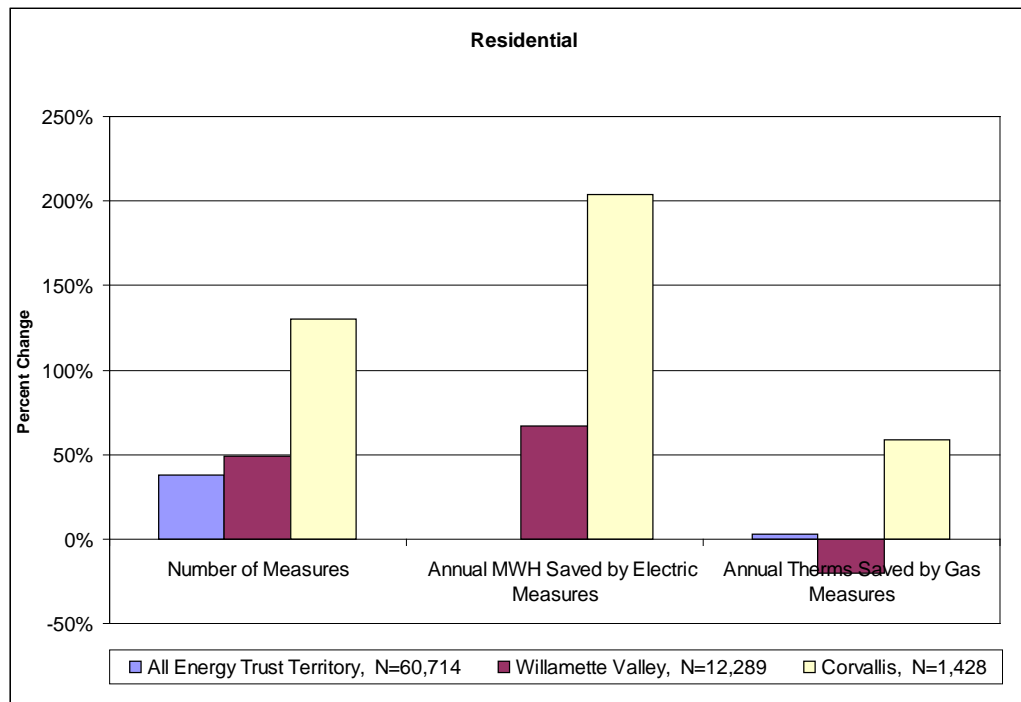
² 2008-2009 Final Report, Resource Efficiency Program of the Corvallis Environmental Center, Funded by Energy Trust of Oregon.

- Participants reported they had implemented 42% of all energy savings recommendations and that businesses said they intended to do more.
- 19 participants (38%) had said they had either applied for or received Energy Trust incentives, or were in the process of receiving special studies for custom incentives.

Energy Savings and Costs

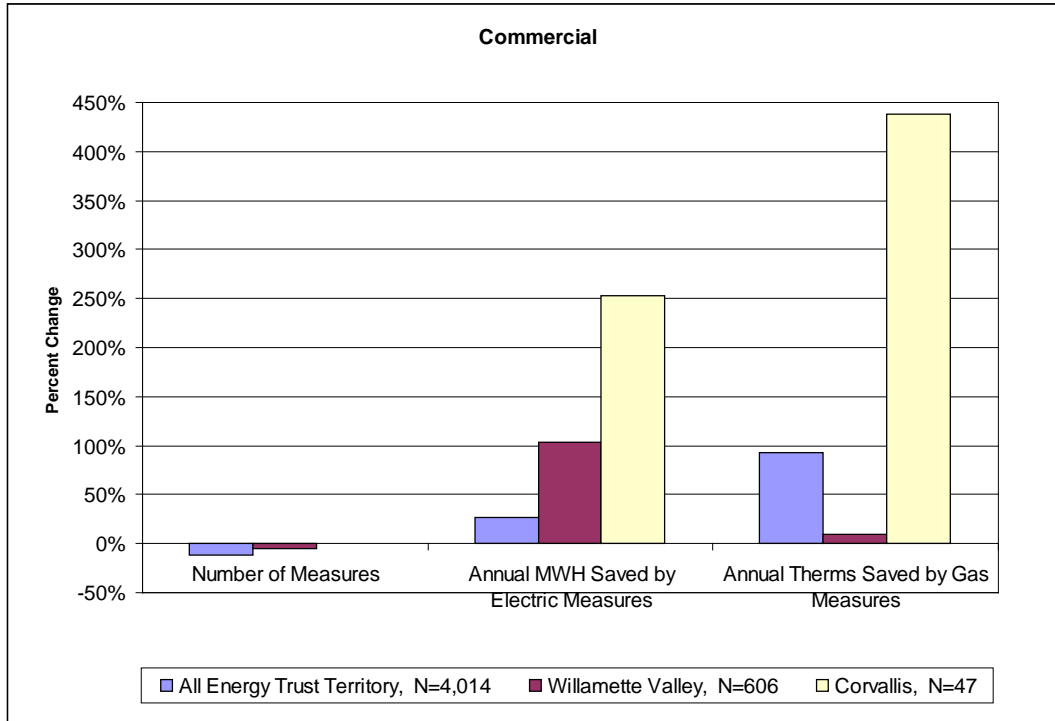
Savings. As Figures 1 and 2 show, Corvallis did outstrip other areas (Willamette Valley and All Other Energy Trust territory) in terms of the percent increase in measures taken and electric and gas savings from the previous year to the Energy Challenge year. While this improvement is encouraging, we do not have the data to know the incremental effect of the Energy Challenge in influencing these positive results. Other factors may be at play, such as program activities from prior years or the activity of large commercial or industrial customers that were not a focus of the Energy Challenge.

Figure 1 % Change in Residential Sector, Measures and Savings (Base Year to Program Year)³



³ N's reported in the legend are the number of sites participating in each area in the base year prior the Energy Challenge.

Figure 2 % Change in Commercial Sector Measures and Savings (Base Year to Program Year)



Costs. The cost for achieving the extra savings through the Energy Challenge was about \$112,000. Data, without these added costs, show that the cost per energy unit (kWh or Therm) saved in Corvallis during the program year was slightly lower than for the other two areas. One measure of costs would be to compare how much is spent per account to do marketing for all of Energy Trust’s customers and the cost per account in Corvallis. Based on the 2009 Energy Trust Annual Report, the agency serves 1.5 million accounts. The marketing budget is about \$5.5 million, which translates into about \$3.67 per account. The \$112,000 spread across about 28,000 residential and commercial accounts in Corvallis would add another \$4 per account.

RECOMMENDATIONS

Based on these findings, key recommendations for the Energy Challenge include:

- 1. Clarify what success is.** While the Energy Challenge nearly met its key program participation goals, savings and cost-effectiveness goals were not specified, nor were these metrics able to be clearly tracked, even though these are two “bottom-line” goals for Energy Trust. The logic of the Energy Challenge was that raised awareness and more audits/assessments would produce more follow-through and more savings; however much past research suggests the link between audits and actions are tenuous if more isn’t done to encourage next steps. If other goals are important, those also need to be clearly delineated. Finally, as discussed in the next

recommendation, programs need to build in a plan and budget for gathering and analyzing data that measure success.

- 2. Have an evaluation and tracking system that gives a better before and after look at community efforts and provides more in-depth insights into the influence of the Energy Challenge.** Involving evaluators up-front to develop a careful plan for measuring results is especially important for pilot programs, since one basic reason for such programs is to learn what to do in the future. Feedback from the Energy Challenge suggests that more was being accomplished in the community than could be measured through Energy Trust's standard FastTrack system (which only looks at entities who received incentives through programs). No pre- and post- information tracked changes in awareness, intention, motivations and barriers, or actions taken outside of Energy Trust programs. In addition, while some information was available on an interim basis to track progress, a more systematic, robust approach would have provided better feedback and guidance to implementers. Finally, results suggest that measurement after only one year may be inadequate to show the impacts of this type of program approach.
- 3. Be more "hardboiled" about articulating and reaching savings goals.** The emphasis was on community-wide social marketing, especially involving local people in the process. However, savings goals and costs to achieve them received little attention. Given that the core goal of Energy Trust is to achieve cost-effective energy savings, it needs to be a greater part of planning, marketing, implementation, and evaluation efforts. For instance, marketing and sign-up for HERs need to emphasize that the true goal is to achieve savings and that the audit is only the first step in the process. In addition, some type of pledge to make changes that save energy might be included. While competitions to recruit could still be used, participants who have no intention of acting could be discouraged.

In addition, greater feedback should be given on savings achieved to encourage further action. If the timeframe for the effort is one year, the type of programs offered, the measures emphasized, and the target audiences also need to be carefully weighed for their potential and ability to take action quickly and achieve savings within the allotted timeframe. For instance, greater focus might be put on the most easily amenable target audiences (e.g., government and institutions) and simpler measures.

- 4. Reach beyond the usual sustainability audiences.** The great part about the Coalition was its many members and its zeal. However, when sign-ups for the HERs waned, it became clear that the Coalition needed to develop other ways to reach into the community, beyond those who were already concerned with sustainability. This suggests simpler types of programs (like direct install, a brief list of behavioral tips that benefit energy efficiency and sustainability, or giveaways) are needed in addition to more complex services that the Energy Challenge provided. A community-wide program does not mean that the only focus should be a more comprehensive approaches since not all customers are ready for such activities.

5. **Do pilot programs at a smaller, more manageable scale, particularly for a 1-year time frame.** While community-wide efforts are alluring, especially with an enthusiastic community, it would likely be more “doable” if efforts were phased in over time or if they focused intensive effort on a few measures being implemented. In addition, if possible, it would be good to see if a more experimental design might be incorporated for pilot programs, so that more than one approach might be compared for its impacts.
6. **Be prepared for increased demand.** As the HER requests mounted, the ability to serve households in a timely way decreased, resulting in some delays and customer complaints. The level of response needs to be carefully estimated and plans made for how it will be met, both for HERs and for follow-on work to install efficiency measures. A customer’s experience with energy efficiency services needs to be positive in all respects.
7. **Provide more handholding and follow-up.** The Energy Challenge experience reinforced the need to strengthen the link between information and action. The HER raters are a crucial piece in encouraging action; it is possible to use them both as assessors and advocates. Further prompts and handholding are also needed to get people to the next steps, and perhaps changes in program design as well (e.g., greater incentives for acting in a certain time period, or special events giving products for free, etc). Lists of “approved” contractors could also be developed. On the commercial side, the local presence did concentrate on hand-holding, which the implementers believe was a critical piece of their delivery strategy. Still, most customers did not continue on to participate in Energy Trust incentive programs, underscoring the continuing challenge of getting small and medium sized businesses to take larger energy savings actions.
8. **Clarify roles and level of community input.** Some feedback suggests that the Community expected to have more “line-item” approval than it got on various decisions. While roles were fairly well defined and relationships were positive and cordial, it is important to define how a democratic approach dovetails with getting quick decisions.
9. **Ensure trade ally involvement.** Feedback suggests that trade ally availability was much less than anticipated for follow-on work, and that the community wanted to use local firms. While trade allies were not interviewed, respondents thought that trade allies didn’t know about Energy Trust programs and even if they did, that program requirements might be too onerous. This suggests that trade ally training to inform and motivate them to take advantage of program opportunities would have benefited the Energy Challenge.
10. **Clarify if and how “hard” audiences will be included and how cross-sector situations will be served.** It is important to be clear about which audiences are to be targeted with resources for a short-term community effort. For instance, research showed a large population of rental housing with potential for savings;

however, reaching these savings are often challenging due to split-incentives and other market factors. To decide whether a segment like the rental market should be addressed, more details about the market are needed, such as information about landlord motivations and investment cycles. In addition, the responsibility for multi-family services needs to be clarified since they have both residential and commercial elements and may fall between programs unless responsibilities are explicit.

MEMO

Date: April 15, 2010
To: Board of Directors
From: Philipp Degens, Evaluation Manager
Amber Cole, Director of Communications and Customer Service
Subject: Staff Response to the Corvallis Energy Challenge Process Evaluation

The Corvallis Energy Challenge was Energy Trust's first long-term community partnership project. Energy Trust had sought such a community partnership for a considerable time. One of the main drivers of this had been the idea that community partnerships could provide an effective delivery mechanism for energy efficiency. In some earlier discussions, the potential for community partnerships to be a major low cost delivery option was also raised.

Given that the search for a suitable community partner took a number of years, it may be optimistic to think that communities are readily available to be developed as a major general delivery channel for energy efficiency and renewables. The Corvallis experience also indicates that partnering and coordinating with a community can require significant Energy Trust resources both in the area of Energy Trust and PMC staff time as well as increased program funding. This is not to say that Energy Trust will not partner with communities in the future, but should enter into these partnerships aware of the attendant additional needs.

Energy Trust program participation data did indicate an increase in program activity during the Energy Challenge. The increased activity was not associated with those customers directly touched by Energy Challenge activities and therefore could not be attributed to the program. In the event of another community partnership, Evaluation recommends surveying a sample of Energy Trust program participants within that community to gauge the influence of the community program on their participation in Energy Trust programs. Evaluation will also consider looking at the persistence of program influence over time as Energy Challenge, though lasting only one year, may have influence on decisions in later years.

Energy Trust now does more up-front planning when partnering with communities. Community profiles are now developed and service/program recommendations have been made based on these profiles. Energy Trust is also moving more cautiously when pursuing longer term community partnerships. Given the resources required to partner in the Corvallis Energy Challenge, Energy Trust probably can only develop and implement one of these in-depth level partnerships every two years (one year of development and one year of implementation).

Energy Trust can also partner and participate in community projects at a more modest or focused level. Energy Trust offers a set of turnkey services/measures that can be configured to meet the varying community wants and needs. The “Solarize” PV initiatives that have sprung up are an example of tightly focused community-based program that appear to be cost-effectively replicable. Other examples of services that are turn-key and stand alone that could be tailored to community based programs:

- Refrigerator recycling
- Kill-A-Watt® library loan
- Low income refrigerator rebates
- Community lighting retrofits
- Climate Master training

≈ SECTION ONE: BACKGROUND, GOALS, METHODS & HISTORY≈

BACKGROUND

The Corvallis Energy Challenge (Energy Challenge) was designed as a year-long partnership (March 2008-February 2009⁴) between Energy Trust of Oregon (Energy Trust) and the Corvallis Sustainability Coalition (Coalition) to pursue and learn from a community-wide energy efficiency and renewable energy effort. Energy Trust, an independent nonprofit organization helping Oregonians benefit from saving energy and renewable resources, had been looking for a community with the right blend of attributes to foster a multi-pronged efficiency effort. Corvallis, a university town of 58,000 located 90 minutes south of Portland, had embraced sustainability as a challenge and goal, both in city government and at a grass roots level through the Coalition, and was ready for a project to focus their efforts on.

The two key goals of the Energy Challenge were to (1) learn how to design and implement a community-wide initiative and (2) test whether such a focused initiative could increase energy savings at an equal or lower cost compared to other delivery mechanisms. This evaluation addresses each of these goals. Although Energy Trust hoped other benefits would result from a community-based approach – such as boosting local economies, long-term relationships, and positive public relations – the most important drivers were to learn more and to find out if a community-wide effort produced more savings cost-effectively.

COMMUNITY ENERGY CHALLENGE EVALUATION GOALS

The goals of this evaluation are to:

- Document the Energy Challenge's history
- Assess the Energy Challenge's implementation, including its strengths and benefits, difficulties encountered, and lessons learned
- Estimate savings and costs from the Energy Challenge to date and compare them to the savings and costs for similar Energy Trust programs

METHODS

This evaluation is based upon on information gathered from these resources:

- Extensive program documents, including reports, meeting minutes, and memos, that track the process of the Energy Challenge

⁴ Some activities (e.g., the Greek Challenge) extended a few months further.

- In-depth interviews and other communication with 15 key CEC actors, including Energy Trust staff and program contractors, city government officials, and members of the Coalition
- Energy Trust’s FastTrack database and other information on incremental costs for the Energy Challenge

Surveys of Corvallis citizens and businesses were not conducted for this evaluation, although Energy Trust did prepare a market research report as part of its preparation for the pilot and it has been used for this evaluation.

ENERGY CHALLENGE HISTORY⁵

Separate efforts over a number of years by Energy Trust and the community of Corvallis eventually led to their intersection in the Energy Challenge. The steps each entity took prior to their partnership are described in the next two sections. The highlights of the Energy Challenge planning and year-long effort, as well as key program components, are described in succeeding sections. We have tried to provide enough detail in these descriptions to capture the flavor, level, and type of effort involved.

Energy Trust Perspective and Readiness

Energy Trust first began thinking about undertaking a community-wide energy pilot program in 2003. They knew such programs had been successful elsewhere and they hoped this approach would create a synergy that would reap greater savings for at a lower cost. They also recognized there might be a variety of secondary benefits, including balancing its portfolio across its service territory, increasing recognition of Energy Trust, and leveraging community resources. And, as one Energy Trust respondent put it, to test out an “almost religious belief in community marketing.”

In 2005, Energy Trust had commissioned a study that explored the “potential role of community-based energy programs” for Energy Trust.⁶ This study “had many players from the Northwest involved with assessing the merits of going deep into a community.” The study analyzed a number of community-based programs in the U.S. and Canada. It developed program concepts and worked with Energy Trust staff to refine those concepts into two types of community-based program strategies:

- **Community Outreach** – a 3-6 month marketing based strategy targeted to smaller, underserved communities using a limited set of existing programs

⁵ See Appendix B for Energy Trust’s annotated chronology of the Energy Challenge coupled with related documents that are available upon request.

⁶ David Hewitt, Jeff Pratt, Gary Hill, Blair Hamilton, Chris Neme, David Hill, Scott Bernstein, Jen McGraw, and Paul Berkowitz, *Recommendations for Community-Based Energy Program Strategies*, June 1, 2005.

- **Community Partnerships** – a 2-3 year strategy targeted to mid-sized (10,000-50,000) communities that would compete for project funding, and which would respond to community needs and help build community capacity for savings over time

The report also noted the many possible benefits that could stem from such programs, listed some significant areas of challenge, and outlined further steps to ensure that community programs could become a successful part of Energy Trust’s portfolio. The study helped confirm Energy Trust’s interest in community-based programs and it decided they “should pilot a couple. . . and see what we can learn.”

In August of 2006, Energy Trust staff met to discuss a possible community energy effort with Northwest Natural, one of its utility partners. This led to a workshop and several meetings with Northwest Natural during the first half of 2007 to better define desired outcomes of a joint community energy effort, criteria for selecting communities, a selection process, possible elements for a community energy project, a rough schedule and next steps.

In pursuing a community-based approach, Energy Trust adopted a strategy similar (but not identical) to the one described above as “Community Partnerships.” In April and May of 2007 they developed and sent out solicitation letters to a short list of five communities that might want to undertake a pilot and that would have the right blend of resources and attributes to make it work, including:

- Both electric and gas coverage so it could be as comprehensive as possible
- Strong potential for savings (e.g., many older homes, growing commercial/industrial sector)
- A small size (around 10,000)
- Some advocacy groups/infrastructure already in place
- A location that was near enough to Portland to be visited regularly by Energy Trust and program staff

Community letters of application were due June 16, 2007, but none were received, although one community called several weeks later to express interest. In August, Energy Trust staff visited the interested community but discovered it had no community infrastructure to support the effort.

Corvallis, although mentioned as a potential partner in several meetings, was not sent a solicitation letter, in part due to its larger population, its university population, and the fact that part of Corvallis is served by a public utility whose customers would not be covered by Energy Trust’s program unless a partnership could be forged.

Corvallis Perspective and Readiness

Over the years, Corvallis has increasingly become committed to being a sustainable city. The Corvallis City Council (City), with its adoption of *The Corvallis 2020 Vision Statement* in 1997, stressed economic vitality, environmental responsibility, and long-term livability. Between 2003-2005, the City adopted an “overarching” sustainability goal and policy and hired a coordinator to focus on sustainability in its municipal operations.

A groundswell of enthusiasm for creating community-wide sustainability gave rise in early 2007 to the Corvallis Sustainability Coalition (Coalition). This grass-roots organization, operating under the auspices of the Natural Step Network (www.ortns.org), and now numbering a wide cross-section of 140 associations and businesses, undertook to bring environmental protection, social equity and economic stability to the people and businesses of Corvallis through a “democratic, highly participative decision-making process.”

In early 2007 the Coalition persuaded the City to partner with it in developing a community-wide sustainability initiative; they then embarked on creating a Sustainability Action Plan for Corvallis. Three town hall meetings attracted hundreds of attendees (650 at the first event in March 2008), several hundred of whom participated in producing a *Community Sustainability Action Plan* adopted by City Council in December 2008.

The Coalition then organized a dozen action teams to implement the plan, including the Energy Action Team, which has ambitious 2020 goals for reducing “per capita consumption of energy in buildings by 50% using energy conservation” with the remaining energy for buildings supplied through renewable energy sources.

Next Steps and Due Diligence

According to one respondent, a staff person for Energy Trust’s residential contractor was cold-calling to identify outreach opportunities, including having a booth at the Corvallis Fall Festival, and stumbled onto the Corvallis Sustainability Coalition “totally out of the blue.” This person was put in touch with the city’s internal sustainability coordinator, who was also on the steering committee of the Coalition. She told him about the Coalition and a connection between the two entities was made.

In early September 2007 Energy Trust met with the Mayor, two city councilors, and the Coalition leaders. Everyone at the table agreed in principle that a community-energy program partnership seemed like a good fit. They decided to move forward and sketched out a preliminary plan for what became the Corvallis Energy Challenge.

Both the Coalition and Energy Trust took action to vet and prepare for the Energy Challenge. In September 2007, the Coalition leaders presented the idea to their

membership. The members voted to take on the Energy Challenge as their first action project.

October 2007 began the ramp-up for the Energy Challenge. Energy Trust designated a staff person with strong marketing skills, who had already been working on the community energy efforts, to be their point person for the Energy Challenge effort. They met with the University of Oregon about potential sponsorship of the Oregon Climate Masters program; met with their program contractors to produce a master list of potential Energy Challenge elements for Corvallis to discuss at a November workshop; and prepared a market research report based on secondary data sources that informed decision-makers about “the potential savings from energy efficiency projects, and to a lesser extent the potential for renewable generation in Corvallis.” This report revealed some notable aspects about the community and its already existing relationship with Energy Trust that could potentially affect the Energy Challenge, both negatively and positively, including:

- The community’s somewhat skewed demographics due to the college influence, including being younger, better educated, and somewhat less affluent (on average) than similar cities in Oregon
- The influx of 19,000 students each school year who attend Oregon State University and who are largely “high turnover” renters in a tight rental market. The report assumed that this large proportion of renters, mostly in multi-family properties, would limit energy efficiency improvements, since neither renters (who mostly pay their own utility bills but have limited incomes and no long term interest in the properties), nor owners (who do not need to make efficiency improvements to enhance their rental prospects) had much incentive to take action. Still, the student population might offer leveraging opportunities for the Energy Challenge.
- A significant stock of older, owned houses with gas and electric space heating that have not participated in Energy Trust programs and would likely would be good candidates for efficiency upgrades
- A significant number of commercial businesses that have not participated in Energy Trust programs that could benefit from commercial efficiency services.
- The good potential for solar installations.
- How to handle the largest customers in Corvallis – the university, the City, and Hewlett-Packard – some of which do not pay into the system benefit charge and usually direct their own efficiency efforts, and where short-term efforts may not be particularly effective.

Although this report evoked some reservations on the part of Energy Trust, especially about how to achieve cost-effective savings, the opportunities, the desire to try a community energy approach, and the strong community commitment pulled them forward. Energy Trust also understood that once the Energy Challenge was underway

and the community was engaged, it would be “hard to stop in the middle and do a resource analysis and say no.”

Roles

The primary roles of Energy Trust during the Energy Challenge were planning, assessment of the community potential, coordination among the various actors (Energy Trust staff and program implementers, Coalition, City), public and media relations, on-the-ground marketing, program delivery and incentives, and tracking progress through the FastTrackDatabase. Energy Trust’s program implementation contractors for residential, existing commercial, and solar programs delivered services and oversaw local services, especially a contract with the Corvallis Environmental Center to do walk-through assessments and hand-holding of small and medium sized commercial businesses.

The Coalition and the City provided the local credibility and resources to rally the troops and keep momentum going, get the word out through the various member organizations and by word-of-mouth, recruit Home Energy Review (HER) participants for residential audits, and coordinate with Energy Trust. As one respondent put it, they provided the “foot soldiers.”

Further Planning of the Energy Challenge

November 2007- February 28, 2008

From November 2007, up to the Energy Challenge kick-off on March 1, 2008, Energy Trust, the Coalition, and the City continued to plan the pilot program. November and December included a number of meetings and workshops to consider options, narrow those options down, and better define the components of the Energy Challenge. These meetings variously included the City, members of the Coalition, Energy Trust staff members, and Energy Trust residential and commercial program implementers. The Coalition and Energy Trust decided to kick off the Energy Challenge March 1, 2008, with an initial time-frame of operation set at one year.

In the beginning, both the community and Energy Trust brainstormed a wide variety of ideas for the Energy Challenge. Not surprisingly, the community wanted wider sustainability services included (such as a “Low Carbon Diet” program) while Energy Trust concentrated on energy efficiency and renewable options. Energy Trust developed a menu of over 30 possible ideas for marketing and services across all sectors. The Coalition developed 25 Energy Challenge “planks” that they prioritized. In late November Energy Trust and its consultants, Northwest Natural, and the Coalition’s steering committee for the Energy Challenge met for a workshop to figure out priority elements of the Challenge. By early December Energy Trust developed a draft work plan that included a list of activities, success indicators, next steps, assignments, and due dates.

From January 2008 and up to the kick-off, many meetings and more detailed planning occurred, including:

- Devising a strategy for recruiting trade allies in the Corvallis area to meet additional demand for services
- Refining goals and objectives and program delivery, notably establishing these objectives for program delivery:
 - Recruiting for (through a competition of Coalition members where the highest recruiter received \$1,000) and conducting 1,000 HER audits through Energy Trust's Home Energy Solutions (HES) program
 - Recruiting for and conducting 50 commercial walk-throughs to be overseen by Energy Trust's Business Energy Solutions (BES) program but provided through the Corvallis Environmental Center (Environmental Center)
 - Recruiting for solar energy reviews and fostering 65 solar installations through Energy Trust programs
- Refining social marketing plans and activities, including:
 - Ordering "kill-a-watt meters" to entice Coalition members to sign up for HERs during the kick-off week
 - Sponsoring "Celebrate Corvallis," an annual Chamber of Commerce awards event, and hosting Coalition members at their table
 - Preparing for the kick-off events, including a press release, media coverage, and a photographer
- Preparing materials, agendas, and arrangements for various meetings to promote and coordinate the Energy Challenge
- Obtaining cooperation and support from other key actors in Corvallis, including the University and Hewlett Packard, including staff time and expert advice, as well as the specific cooperation on the Greek Challenge.

Energy Challenge Program Year Implementation

March 2008-April 2009

After the March 1, 2008 kick-off, the Energy Challenge got into full swing. During the kick-off month, in addition to handling events and media coverage and ongoing coordination and communication, Energy Trust and the Coalition prepared and gave a presentation to the City Council and the Council adopted a resolution supporting the Energy Challenge. Energy Trust also prepared the HER sign-up form for Coalition members to use for recruiting; provided a scope of work and contract for the Environmental Center commercial walk-through assessments; issued an invitation to a "power lunch" for industrial managers in Corvallis; prepared an on-bill message for Pacific Power customers about the Energy Challenge; and created an advertisement for the Coalition's first Town Hall meeting and provided staff to sign up HER participants.

During this time the Coalition and City leaders participated in planning and events with Energy Trust and prepared for recruitment of HERs and other activities.

Succeeding months in the Energy Challenge brought a variety of meetings, events, and program activities, including:

- Energy Trust met with the Coalition Steering Committee on a regular basis
- Energy Trust staff and Coalition members sponsored and attended events (such as the Corvallis Earth Day Celebration, Da Vinci Days, Town Hall meetings), signed up HER participants, and continued to publicize and market the Energy Challenge to target audiences (e.g., a breakfast events for commercial trade allies and multi-family property owners, a presentation at OSU’s Energy Future roundtable)
- Evolving the Greek Challenge effort with OSU’s sororities and fraternities
- Sponsoring home weatherization and solar workshops reaching hundreds of citizens
- Conducting HERs, solar reviews, and commercial walk-throughs
- Encouraging program participants to take action

Ongoing Activities in Corvallis

The year-long Energy Challenge had a “soft” landing, some more formal Energy Trust sponsored efforts continued past the year-end date (e.g. the Greek Challenge) and the community and Coalition are still engaged. While most Energy Trust program activity has returned to pre-Challenge levels, the Energy Trust is sponsoring the Environmental Center to do 75 more commercial assessments. In addition, the City was able to use its experience with the CEC to help them successfully apply for and receive just over \$500,000 in federal stimulus money for energy efficiency programs.

KEY ENERGY CHALLENGE PROGRAM COMPONENTS

As described in the history above, many elements contributed to and emanated from the Energy Challenge, with various opportunities emerging over time to involve the community and prompt them to take action. This section summarizes the Energy Challenge’s main programmatic elements; these largely match existing Energy Trust programs so that the project would not be delayed. Later on in this report these components will be assessed for both their process and outcomes.

Free Home Energy Reviews (HERs): As mentioned, the Energy Challenge targeted 1,000 homes for HERs. Recruitment was accomplished through Coalition members who competed with each other for a \$1,000 prize.⁷ Homeowners receive a one-hour home walk-through by a trained Energy Trust energy advisor, a prioritized list of

⁷ The Corvallis League of Women Voters won.

recommendations and incentive and tax credits opportunities, and energy saving products (e.g., CFLs). Multi-family efforts were separately marketed to property owners, but follow-on and participation was tracked through residential services.

Solar Assessments/Installations: During HER recruitment, households were also recruited for free solar reviews. Energy Trust and the Coalition also sponsored several solar workshops to educate about passive solar design and solar electric choices and to recruit participation.

Greek Challenge: The Greek Challenge was a competition among sororities and fraternities to see which would take the most energy saving actions. It ran between January and May 2009. Greek houses could receive walk-through assessments from the Environmental Center and also were given a checklist of things to do that they could receive points for. The sorority and fraternity with the most points would each win the challenge, receive \$500 for a charity of its choices, and a Golden CFL trophy.

Free Commercial Walk-Through Assessments: Coordinating with Energy Trust's implementation contactor for energy efficiency in existing commercial buildings, the Environmental Center recruited participants and provided education, on-site technical assessments, and follow-on encouragement for 50 small and medium-sized commercial businesses. The written report resulting from the assessment, which was reviewed in-person with participants, listed cost-effective methods to reduce energy use, opportunities for using renewable energy, and incentives/tax credits available to help with costs. Participants also received trade ally and other information to help them take action. Three months after the initial visit, a follow-up phone call was made to field questions, solve problems, and assess progress. Participants were promoted in the local media.

Public Relations/Marketing/Outreach/Coordination: As illustrated in the history section, these activities were many and varied. The Energy Challenge wanted to be community-wide and have an active, on-going, personalized and local Energy Trust/Coalition presence. While most efforts focused on the key components described above, other activities reached into and may have affected other energy saving and renewables projects, including:

- Energy Trust and City of Corvallis Public Works staff met to discuss energy efficiency and solar projects; this set the stage for follow-up with Energy Trust programs.
- A biopower project at the Stahlbush Island Farm was funded by Energy Trust and received publicity during the Energy Challenge.
- Energy Trust introduced the Climate Masters program; the OSU Extension Office and the community picked it up and supported it. This program is an all-resources sustainability education program where those trained give back to the community.

- A power lunch was held for all the county's industrial customers with the hope that they could get leads. But in the end Energy Challenge implementers found that the turnaround for industrial activity is so subject to individual circumstances that no further specialized services were provided to these customers during the Energy Challenge.

SECTION TWO: PROCESS ASSESSMENT OF THE ENERGY CHALLENGE

INTRODUCTION

This section assesses various aspects of the planning and implementation of the Energy Challenge, including its goals and assumptions and its operational effectiveness, including strengths, areas needing improvement, and lessons learned.

SELECTION PROCESS AND VIABILITY OF THE PARTNERSHIP

Both Energy Trust staff and political and community leaders in Corvallis clearly had clear and justifiable motivations for embarking on the Energy Challenge, and, as described, both did some due diligence before diving in. Both also voiced some reservations about the partnership, but the plusses outweighed the minuses for both parties.

From Energy Trust's point of view, they had found, somewhat by default, a community that met most of their criteria for a viable community-energy pilot. Still, what did it mean that no other community had answered their invitation? In this process Energy Trust realized that there likely was no perfect option and that such "things are inherently messy." For instance, they were concerned about achieving cost-effective savings and about the community's energy saving potential; the "replicability" of the pilot; being spread too thinly over too many activities; the pull to bleed into other sustainability areas; and what they would be able to learn within a one-year time frame, since most community efforts lasted longer.

But the zeal of wanting to try out a deeper community strategy, and the level of support from the Mayor and the City Council, as well from the Coalition, made up of a large existing social network of volunteer organizations and individuals, was especially motivating. The town was unusually "geeky" and "loved energy [efficiency]" in a way that other communities don't or can't relate to." As one person put it, "These people were ready to rock and roll; if it couldn't happen here, then nowhere." Finally current programs could be made to fit with community needs and resources.

Representatives from the Coalition say they brought local energy, knowledge, and a cadre of eager sustainability volunteers, and Energy Trust brought marketing expertise and money for a cause they wanted to champion. Leaders of the Coalition and the Energy Action Team also were already experienced with energy efficiency and with Energy Trust program specifics as well and wanted the community to have wider recognition and use of them. They also saw that partnering with Energy Trust would build credibility within their new organization and provide tangible results and

momentum. In addition, Corvallis leaders wanted to build their city's reputation for innovation, sustainability, and leadership for other communities. However, some Corvallis respondents shared Energy Trust's concern with being able to replicate the effort.

SETTING AND REACHING GOALS

A community energy project is meant to and must respond to community needs; at the same time, the sponsoring agency must achieve its own goals. Various goals competed for attention, including cost-effective savings, raising awareness, visibility and credibility for Energy Trust and the Coalition, mutual leveraging of resources, transferability of the experience to other communities, sustainability, leadership, and improving the economic and social fabric of communities.

Energy Trust staff agreed, as one Energy Trust manager put it, the crucial goal was to show "dollar for dollar that they achieved greater savings or penetration in a specific geographic region versus normal program activities and outreach efforts." Still, how this would be done wasn't entirely clear. The Coalition appeared more focused on raising awareness and recruiting participation at the front-end, although some leaders did understand that taking action was the ultimate goal for Energy Trust.

In analyzing program materials, activities, and interviews, the emphasis of the Energy Challenge was as a comprehensive promotional campaign focused on raising awareness and rallying the community but less on follow-through to ensure energy savings or renewable actions. Program logic assumed greater, targeted promotion would lead to greater awareness and participation in events, audits and walk-throughs which would in turn result in equal or better follow-through. Few changes were made in how programs were delivered or tracked. More specific evidence of the up-front promotional emphasis includes:

- Before voting on going forward, Coalition members received an upbeat "sell" of the Energy Challenge: "This is an exciting opportunity. . . a great opportunity to educate people on energy efficiency and show them that it will save them money." Many other objectives, such as community involvement and strengthening, were listed, but achieving cost-effective energy savings (or renewables) was not among them.
- Residential and commercial efficiency goals were stated in terms of numbers of audits (e.g., 1,000 HERs, 50 commercial assessments) but did not address desired follow-through levels. For HERs, especially, the recruitment competition was the focus. The January 15, 2009 (10 months after kick-off) the progress report shows that almost 800 HERs had been completed, but that Energy Trust had not issued a single efficiency retrofit incentive to those receiving HERs. The process for

commercial assessments emphasized follow-through more, but it is not clear from the same progress report if the 30 businesses receiving retrofit incentives were due to Energy Challenge efforts.

- No document lays out a savings goal, the logic of how it will be achieved, and how results would be measured. Materials do say that evaluation tracking would “focus on tangible results, including decreased energy usage and increased installation of renewable,” and that it would analyze the benefits to Corvallis in terms of “energy savings, economic development, and other factors.” However the requirements and methods for this assessment were not described.
- The tracking done for the Energy Challenge was mostly through Energy Trust’s regular mechanisms (e.g., the FastTrackdatabase). While this tracking allows for the Energy Challenge year to be compared to non-program years, it is only for Energy Trust funded measures. It also isn’t able to track and give credit any projects until they are complete; the time lag for projects to come to fruition can underestimate the program impacts.
- In looking back over the Energy Challenge, several respondents from Energy Trust and the community acknowledged the high quality of the promotional effort but said not enough attention hadn’t been paid to “removing barriers that keep [people] from being able to take action - that wasn’t the focus.” As one person from the community put it, we “met our goal for HERs – but. . .we want [people] to do something.” Several people also noted that future approaches were already concentrating more on how achieve greater follow-through.

In addition, the plummeting economy hit, just as the Energy Challenge was taking off. While saving money on utility bills certainly could have been a motivator, households and businesses were in a time of uncertainty about having any extra money to spend.

PLANNING

The initial planning for the Energy Challenge lasted about four months – a fairly quick time frame considering all the components that needed to be put into place and the coordination needed among the various players. The planning process, to some, seemed a little rushed or scattered overall, and some mentioned they would have liked more information ahead of meetings. Most respondents, however, said that no major problems stuck out and that they were not sure it could have been handled better. They did point out these specifics about the process:

- The learning curve was high for the Coalition members. Knowledge about Energy Trust varied and it took several meetings to communicate about the services available and who they were partnering with. Although Energy Trust’s liaison met with the Steering Committee every month, one person said that at

the beginning it would have been helpful to have more telephone conferences. In addition, some Coalition leaders initially thought of Energy Trust as marketers and coordinators, but meeting with a wider array of Energy Trust staff and program implementers taught them about the breath of the agency's services and goals.

- Both the community and Energy Trust developed lists of ideas for elements to include in the Energy Challenge. While everyone liked exploring the options, there were “too many good things and good ideas to do.” This made it difficult to pare the options down to a manageable level. They realized they “didn’t have enough time for all the things we were interested in,” needed to be more realistic about what they could accomplish within the one-year time frame, and to stick with ideas that would get them “the most bang for the buck.”
- Concerns about how to effectively serve all of Corvallis arose, since some consumers were served by a public utility that does not contribute to Energy Trust funding. While Energy Trust was able to arrange for the utility to provide audits, it was challenging to track them. In addition, several people mentioned they thought coordination with contributing utilities could have been stronger.
- Despite Energy Trust’s helpful market research report, full data about baseline consumption and customers to target were not available for planning purposes. For instance, it might have been useful to assess whether the large rental market (landlords and students) for potential interventions.
- Several respondents mentioned that they were concerned about how progress would be tracked for the Energy Challenge. One person said we “couldn’t figure out which metrics we wanted to use – what we wanted to measure and not measure.” Another said we “needed consistent ways of tracking the data.”

OVERALL IMPLEMENTATION AND LESSONS LEARNED

Coordination

Most of those interviewed agreed that coordination between Corvallis and Energy Trust went well and that the friction between them was low, especially given all the work that had to get done. Both Energy Trust staff and Coalition members commented on the good relations between them. Many commented on the deft coordination skills of Energy Trust’s point person. And the Coalition did its part in steering Energy Trust to the right local players.

The coordination among Energy Trust programs presented challenges if customers needed services from more than one program. Some targets, like those in multi-family buildings often have need for both residential and commercial services, and industrial customers may have need for process and commercial services. One person noted that the Greek Challenge did successfully marry residential lighting upgrades with commercial cooking incentives, but that in general the programs are not set up to work

together seamlessly -- “it remains an issue about how to approach a customer with a menu that makes out programs transparent to them, without having to wade through different requirements and forms.” Some also commented about challenges in coordinating across the electric and gas utilities, since they are concerned about paying for non-customers and about fuel-switching.

Evaluation

Evaluation issues were been raised at various points in our interviews, with most comments focusing on inadequate data tracking. Respondents thought the Energy Challenge didn’t give enough thought to evaluation and that more needed to done to obtain a full picture of what the Energy Challenge had accomplished, including how well it met goals other than savings – like its ability to raise awareness and economic development -- and what barriers stand in the way of residences and businesses taking action. Respondents were also interested to see whether the adoption curve was different than normal program experience. Finally, while direct costs were fairly well documented, extra staff time was not.

One person suggested that a next step should be to follow-up with households that haven’t taken action and to include in this interview questions about barriers and what the Energy Challenge can do to remove them. Consistent feedback from both participants and non-participants for both residential and commercial customers is limited, but it is most limited on the residential front. The feeling is that homeowners are reluctant to act for a variety of reasons, from worries about needing to clean house to economic challenges.

The Environmental Center’s tracking efforts with its commercial assessments, as mentioned, were more robust, although how their results differed from the FastTrack system results. The report states that their efforts resulted in:

- 970 energy efficiency recommendations – an average of 19 per participants – giving some idea of resource potential
- Environmental Center follow-ups showed that as of the time of the report, participants had implemented 42% of recommendations. When this is combined with what businesses intend to implement, follow-through on implementing recommendations would be 76%.
- Environmental Center records show that 19 participants (38%) have either applied for or received Energy Trust incentives, or are in the process of receiving special studies for customer incentives.

The report also includes these observations about specific aspects of the commercial effort:

- The Environmental Center was able to share project files on-line with Energy Trust’s implementation contractor, which allowed them to track their progress.

- The Environmental Center observed that it was difficult to get participants to fill out and submit program forms (Form 100Es).
- The most effective forms of outreach were cold-calling and word of mouth.
- Advertising the success of participants help to engender further interest from the commercial sector.
- Lawn signs were not popular with businesses but “window clings” were.
- File folders were a secure and visual way to deliver participant reports and other efficiency and renewable information.
- While the Environmental Center was at first resistant to Energy Trust’s recommendation codes, they later realized they were helpful for participants and their own staff to locate specific recommendations within the report.

Overall Program Strengths

Respondents had many positive things to say about the Energy Challenge, especially in the areas they focused on. Strengths included:

- **The sense of common purpose and reinforcement across people and groups.** Powerful people were effectively working together and “talking to all the right people about all the right things.” People who didn’t know how to get involved got involved. Energy efficiency became embedded into the wider purview of sustainability.
- **The strong community response to workshops and events.**⁸ Energy Trust and the Coalition produced large turnouts, including:
 - Solar workshops, which attracted more participants than similar workshops in other communities in that time frame
 - The multi-family breakfast, where the community identified and invited all the key property owners
 - Robust attendance at two workshops on winterizing homes to be more energy efficient
- **Mobilizing initial interest and steps in taking action.** The number of HERs completed in a community that size over that time frame was unprecedented, as was the number of small and medium-sized businesses assessed. The Greek Challenge was effective in garnering interest and some savings among the student population.
- **Marketing, communications, increased visibility.** Both the Coalition and Energy Trust thought recognition and appreciation of their organizations grew through professional and cooperative marketing. For instance, the HER of OSU’s president’s home and other events received news coverage.
- **Relationship- building.** In addition to building a stronger relationship between the Coalition and Energy Trust, respondents mentioned other improved relationships, including those between Energy Trust, OSU, and local trade allies and between the City and the Coalition.

⁸ The impact of these events were not tracked.

- **Skill and capacity building.** The number of volunteers increased as did their skill levels. Corvallis now has a cadre of interested and prepared energy champions. For instance, this group can do further follow-ups with households that have not taken any actions.
- **City interest and funding.** The City funded a volunteer coordinator to carry on further with the Energy Challenge work.
- **Momentum for the future.** Through participation in the Energy Challenge, Corvallis was better able to pursue and obtain Federal stimulus monies. And Energy Trust saw, through things that didn't work as well, new opportunities, such a new rooftop maintenance and thermostat program and pilot programs that incorporate more hand-holding and fewer barriers to action.

Overall Areas for Improvement

When asked to think back across the whole Energy Challenge and describe what could be improved, respondents pinpointed some key areas, including the need to:

- **Clarify what success is.** A number of respondents were concerned about the transferability of the Corvallis effort to other communities and how many communities have the level of support and motivation it takes to not only launch a community-wide challenge but to see it through to action. This experience has, in part, prompted Energy Trust to rethink how they are delivering programs and how they need to provide more and different options for people to enter and to take action. Each community experience should provide more guidance for what tends to work and what tends not to work. A community approach also carries with it the expectation for further services and is based upon mutual trust. Energy Trust needs to consider carefully how it will handle its relationship with these types of communities over time to achieve the most out of its investments.
- **Have a better tracking system.** Several respondents talked about the need to have more timely and more comprehensive data, including:
 - An accurate baseline
 - Insights from participants and non-participants about satisfaction, barriers and motivators, and energy steps taken outside Energy Trust incentives
 - Data on where jobs were in the pipeline, making it harder to do appropriate handholding
 - Information about important non-energy benefits such as raising awareness and economic and other community benefits.

No one we interviewed had yet seen the results from Energy Trust's FastTrack system; yet they were fairly pessimistic that Energy Challenge results would be stronger than regular Energy Trust programs. They also said FastTrack didn't tell the whole story of the Energy Challenge, given its narrow purview of tracking incentives and estimating savings from incentives provided. While the

commercial audit sub-contractors did develop their own tracking tool, it was outside the budget; while it allowed progress to be tracked, it still wasn't set up to gather deeper insights about the process and outcomes.

- **Be more “hardboiled” about articulating and reaching savings goals.** While other perspectives are important and increase the allure of community-based programs, having and meeting savings goals needs to be at the center of thinking and action, not just raising awareness.
- **Reach beyond the usual sustainability avenues.** The Coalition sign-ups for HERs started out strong but then decreased because they “tend to go to the same events. . .and sign-ups decreased as folks already participated.” When they realized the need to contact households who weren't into sustainability, they began to run out of time.
- **Do pilot programs at a smaller, more manageable scale, particularly for a 1-year time frame.** In hindsight, and also due to the State of Oregon passed legislation requiring pilot programs, Energy Trust respondents said they now “need to look for smaller scale [projects] to try out the mandated strategies.” Energy Trust needs to “find, implement, and evaluate” several pilot programs between now and October 2010. While not “writing off” the Corvallis effort, it was a different type of effort. However, it may be possible to fund a continuation of the commercial approach.
- **Be prepared for demand.** Several respondents, particularly on the community side, said that in the beginning of the HER recruitment, Energy Trust “got a little overwhelmed” with the demand for audits, so that some recruits had to wait a few months for an appointment.
- **Provide more handholding and follow-up.** The residential effort in Corvallis was focused on recruitment, not “closing the deal.” The commercial services did include direct follow-up with participants in the walk-throughs. Part of the State pilot requirement is to start from the “premise that people in homes don't know what to do and don't have the money to do it.” This premise focuses programs on efforts far past recruitment and on making “it easy and understandable what to do, what the most important steps are to do, and what funding is available.
- **Clarify roles and level of community input.** Coalition members thought more clarity was needed about roles, especially how much input they would have for marketing materials. A few brought up frustration with short turnaround times and with not having much impact on Energy Trust marketing and outreach decisions. Lawn signs were given as an example; Coalition members had one day for feedback, the comments didn't carry through to changes, and some disagreed that lawn signs were desirable.
- **Ensure trade ally involvement.** While trade allies received some attention, it was at a fairly low level, because the assumption was that they were already in place. Some people reported having a hard time finding appropriate contractors.
- **Clarify if and how hard to reach audiences and cross-sector would be served.** Going into the Energy Challenge, everyone understood Corvallis had a lot of

rental property. Yet aside from one breakfast for property owners, few services were available for renters. Some respondents also want to focus on educational opportunities with children.

IMPLEMENTATION OF SPECIFIC ELEMENTS

This section reports on the strengths and needed improvements of the five key joint programs for the Energy Challenge and also on the Climate Masters program which the OSU and the community funded.

Home Energy Reviews (HERs)

On the positive side, the HERs recruitment pulled in a broad spectrum of Corvallis households and 800 audits (of the desired 1,000) were completed – a huge increase from previous years and, as mentioned, a significantly larger, faster penetration of the market than in other areas (see Section Four). Respondents also said the outreach and advertising were really good, that there were strong sponsors, and it was good to give an award to the organization that signed up the most people. Although direct feedback was not collected from participants, respondents thought customers were happy with the information they received. Respondents also said that the Energy Challenge’s wide Coalition membership coupled with Energy Trust credibility gave them “a foot in the door to make energy presentations” to groups like the Rotary Club, the Business Alliance, and the Real Estate Alliance; it made these groups and the individuals in them more interested in the topic.

On the improvement side, several people noted that as volumes grew, so did breakdowns in tracking recruits, scheduling, follow-up calls, and overall tracking. While recruitment was a competition among member organizations, the discrepancies in reporting sign-ups muddied the contest. Scheduling got further out from recruitment, some people received only one follow-up call while others received more, and it became difficult to figure out where people were in the process or how to do follow-up once the audit was completed. A few people also thought that the HER wasn’t very robust and should have provided more information on behavioral changes; at the same time they said the system was only set up to track incentives for equipment changes. One person noted that there were few services for rental homes.

However, the biggest concerns were about how to achieve greater follow-through. Respondents said the biggest emphasis was on recruitment and not on the follow-through qualifications of the recruits. In addition, there was little imperative to take action, “no marketing that made me say ‘I’ve got to get going on this tomorrow.’” Coalition members who had received the audit they weren’t sure what to do next and how much it would cost; some of them had not followed through to energy saving actions even though they were highly involved with the Energy Challenge. One key

person said “the home energy reviews are overpromised versus what they . . .do,” that she had an expectation that she would be left with a plan of action, but that her auditor “did virtually nothing to go through the package of materials her gave me.” She also felt that, as a woman, the auditor assumed she wasn’t technically capable, despite the fact that she is an engineer; she said she had to ask several very direct questions to clue the auditor in on her need for more specific information.

Some said materials and feedback from auditors focused on paybacks but that payback isn’t the only motivation that people have; many want to do something for the community and the environment. They said the quality of the HER auditors varied in their ability to guide, encourage, and motivate them to continue to taking action. Some said electric and gas audit delivery overlapped and varied in quality. In general, though, auditors are not advocates for customers and they do not have an ongoing relationship with customers to help them take action. In addition, some who did continue on said it was hard to find local trade allies.

Solar Assessments and Installations

Neither the supporting documents nor the interviews revealed much information about how the solar assessments and installations were integrated into the Energy Challenge. One respondent noted that the City had worked with the Energy Trust to assess eight city buildings and that some solar projects were underway. While the Energy Challenge was in operation at the time and Energy Trust representatives working on the challenge met with the city about these projects, these projects took place outside the Energy Challenge purview. Another respondent noted that the HER was modified to assess sites for solar, so that it would give homeowners a general indication of whether their home had the right attributes for solar success. Several mentioned the good attendance at solar workshops. Overall, solar efforts did not appear to be a focus of the Energy Challenge, and one key player said she “honestly was not aware that solar installations were part of it.”

Greek Challenge

Reviews of Greek Challenge were positive once it got underway with the “right student volunteers” that made it happen. Six of seven sororities and five of eleven fraternities participated in the challenge and moved forward with energy saving actions, including an emphasis on behavioral changes such as turning off computers and lights.

At the same time, the Greek Challenge was rather a last minute effort, that they needed more time, that that it was slowed down because even though the discussions began in November and December, house presidents changed in January and they had to start over again. Some respondents also said that the Greek participants wanted to go beyond energy to take wider sustainability actions such as saving water and recycling. As with other services, people noted the need for more follow-up and a few more

resources to get things to happen. Finally, the full results of the Greek Challenge are likely not captured by the FastTrack system.

Commercial Walk-Through Assessments

Of all the key elements of the Energy Challenge, this one is the best documented. Energy Trust's usual program received additional resources from a local sub-contractor - the Corvallis Environmental Center (Environmental Center); all agree this group was experienced, very eager to learn the program, and very committed to the work. The goal was to complete 50 walk-through assessments for small and medium businesses and the Environmental Center completed 49 (one dropped out).

The Environmental Center prepared its own well-documented evaluation report which greatly aided in this overall evaluation. The program is continuing on for a year with funding from Energy Trust. Energy Trust's contractor said they would like to have an ongoing local effort in every community – “a small band of brothers and sisters who support their efforts and are compensated.”

During the course of the year, all involved grew in their appreciation of how much and what type of follow-up was needed to get organizations moving. While the program incorporated 30 and 60 day follow-ups, in-person if at all possible, respondents said even more handholding was needed. In addition, Environmental Center needed to cover all market segments, while the Energy Trust program had obtained their best results when customers feel they are working with a specialist (i.e., someone who knows about non-profits or restaurants).

They also said “one of the failures was that we didn't do any real numbers – calculations of expected savings – and use it as a selling point. We just guided them to trade allies.” In addition, their assumption that trade allies could be relied on for marketing and follow-on proved problematic. First, trade allies didn't know about Energy Trust programs or incentives. Second, most trade allies were not prepared for this type or level of assistance – “most contractors are guys with a pick-up truck and they can't be bothered with bureaucratic paperwork.” In addition, only a handful of trade allies were in Corvallis; most were located in Eugene.

The commercial effort also revealed that some smaller businesses work better with residential programs and that a more flexible package of program offerings is needed in areas where customer needs don't fit neatly into defined programs. For instance, a commercial business may not need a commercial refrigerator. But if customers need to work across programs, they can get lost. Other feedback suggested that the walk-throughs were not always robust enough from technical standpoint – that in some cases more analysis of building systems was needed rather just looking at lighting, refrigeration, heating and cooling.

In addition, the year time frame was too short; by the time the program really got up and running they only had four months. Implementers said that in terms of energy savings at this point, the effort had probably not done all that well. However, they thought it was effective in raising awareness and would work over the long run if outreach and follow-up continued.

Public Relations/Marketing/Outreach/Coordination

Everyone agreed that Energy Trust provided extensive and incredibly helpful public relations and marketing strategies. All agreed that the community could never have sponsored such an intensive effort of news coverage, advertising, yard signs, posters, flyers, and other collateral materials. They felt the outreach was very effective in getting people's attention and getting them to sign up for a HER.

At the same time, hindsight revealed that the residential strategy recruited quite a number of people who wanted their organizations to win but who had no plans to follow-through with energy saving actions. And, once again, residential marketing strategies and messages focused more on getting audits than on achieving measurable savings.

Climate Masters Program

While Energy Trust first put Corvallis in touch with the Climate Masters program at OSU extension, the comprehensive sustainability training was not sponsored by Energy Trust, part because it had a wider purview than energy. Still, those involved with it said they thought it was highly successful and that graduates from the training said it gave them a "phenomenal background" and motivation to pursue behavior change.

SECTION 3: ENERGY CHALLENGE OUTCOMES

Section 4 is based on FastTracksystem data and some financial data from Energy Trust's program manager. As evidenced by various comments made in the interviews, Fast Track, which tracks incentives paid, likely does not capture all the energy savings attributable to the Energy Challenge, particularly households and businesses that installed energy efficiency equipment and made behavioral changes on their own without receiving incentives. In addition, due to time lags and the fairly short time frame for the Energy Challenge, data may not be up to date or further outcomes may occur later that are not in these data. Thus, we have some good information on short-term outcomes, but not over the long term. Long-term outcomes could include more program participation in the areas that were focused upon, but also independent actions outside of programs or being more able to pursue other Energy Trust programs (such as a version of Energy Trust's Solarize Portland program, a volunteer driven effort to bring solar power to Portland homes).

HER FOLLOW-THROUGH RATES

Home Energy Review Follow-Through Rates

A number of people interviewed were interested in comparing the follow-through rates after HER audits in Corvallis during the Energy Challenge year with the follow-through rates elsewhere in their Energy Trust's service area. Energy Trust defines a follow-through site as a home that installed energy saving equipment and received an Energy Trust incentive after receiving a HER. Tables 1 and 2 show follow-through rates for Energy Trust's HERs over the years, with Table 1 showing follow-through on all HER sites and Table 2 showing follow-through in Corvallis only.

The tables reveal some interesting patterns as well as absolutes. First, it's clear that follow-through increases over the years by a fair amount, so that a one-year measurement by no means captures all the follow-through activity. Second, some variation in adoption occurs across the years although not in entirely consistent ways; the reasons for these fairly small shifts could be many and varied. The percent follow-through for the 2008 Energy Challenge year was somewhat lower in Corvallis than elsewhere and somewhat lower than other years in Corvallis. Notably, many more HERs were done in 2008 (n = 755) compared to any other year when the counts were always less than 200. These data support the notion that while many more customers received HERs, more customers may have participated who didn't intend to take action but who wanted to help their organizations win the competition. In addition, the decline in general economic conditions likely affected follow-through.

Table 1. % Follow-Through: All Energy Trust Home Energy Review Sites

	N	3 Month	6 Month	1 Year	2 Year	3 Year	4 Year	5 Year
2003	2294	11%	16%	20%	25%	29%	32%	39%
2004	2548	16%	20%	25%	31%	35%	38%	43%
2005	2919	17%	22%	28%	34%	40%	44%	--
2006	4606	15%	21%	28%	35%	41%	--	--
2007	5206	14%	20%	26%	34%	--	--	--
2008	6216	14%	20%	26%	--	--	--	--
2009	5893	11%	--	--	--	--	--	--

Table 2. % Follow-Through: Corvallis Home Energy Review Sites

Year	N	3 Month	6 Month	1 Year	2 Year	3 Year	4 Year	5 Year
2003	64	17%	19%	27%	34%	39%	44%	52%
2004	68	13%	16%	22%	29%	34%	38%	44%
2005	171	24%	27%	35%	43%	51%	53%	--
2006	189	17%	23%	29%	37%	42%	--	--
2007	170	19%	25%	34%	39%	--	--	--
2008	755	10%	16%	22%	--	--	--	--
2009	109	12%	--	--	--	--	--	--

Table 3 further explores follow-through rates for the exact time frame of the Energy Challenge – between March 1, 2008 and February 28, 2009 – at three months, six months, and one year. At the one-year mark, 22% of Corvallis sites that completed a HER during the program year took incentivized savings actions; this rate is slightly lower than the 24% of all households receiving HERs outside of Corvallis. In addition, follow-through is consistently lower for Corvallis participants compared to the previous non-program year within each time frame shown.

Table 3: Comparison of Three Month, Six Month, and One Year Follow Through Rates

	N Previous Year	N Program Year	% Follow Through Previous Year	% Follow Through Program Year
Three Month Follow-Through Rates				
Corvallis HERs	167	771	17%	10%
All Other HERs	5139	6154	14%	15%
Six Month Follow-Through Rates				
Corvallis HERs	167	771	21%	16%
All Other HERs	5139	6154	20%	20%
One Year Follow-Through Rates				
Corvallis HERs	167	771	26%	22%
All Other HERs	5139	6154	27%	24%

Measures Taken and Estimated Savings Compared to Base Year

The following tables compare Energy Trust measures and their associated savings in Corvallis, OR during the Energy Challenge and the previous year. Measures taken in new buildings are not included in these tables. Energy Trust incentives of \$100,000 or more and measures taken by OSU campus or Hewlett Packard are also excluded included in these summary tables.

Overall, the tables show the strong and differential effects for the Energy Challenge year. In general, where the Energy Challenge put its greatest efforts, it also reaped its greatest and clearest rewards. Residential and commercial percent increases for measures taken, savings accrued, and projected savings are strongest for residential and commercial activities from the program year to the base year and compared to other parts of the service territory during the program year. Effects in solar and industrial activities are much less prominent.

Residential

Table 4 compares the number and percent increase in residential measures taken between the base and program year across three areas: Corvallis, the Willamette Valley/North Coast, and All Other Energy Trust Territory. It shows there was a tremendous increase (130%) in measures taken in Corvallis between the base and program year compared to the other areas, suggesting the impact of the Energy Challenge.

Tables 5 and 6 show a similar comparison for annual MWh and Therms saved. Once again the percent jump in savings between the base and program year is much larger for Corvallis (204%). When estimated savings are added in, Corvallis still leads with percent increase for electric savings (115%) but is somewhat lower for Therm savings compared to all other parts of the service territory (21%); however projected savings are higher for Corvallis than in the Willamette Valley. While costs on these tables do not include all the costs of delivering the measures, nor do they reflect costs over the lifetime of the measures, Corvallis costs per unit of energy saved are mostly lower than cost per unit in other areas.

Table 4: % Change in Number of Measures Receiving Incentives

Region	Base Year: # of Measures	CEC Year: # of Measures	% Change Over Base Year	Estimated (3/09-2/10)**	% change over 3/07-2/08
<i>Corvallis</i>	1,428	3,286	130%	1,798	26%
<i>Willamette Valley/North Coast*</i>	12,289	18,292	49%	19,932	62%
<i>All Energy Trust Territory*</i>	60,714	83,996	38%	106,146	75%

*Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

Table 5: % Change in Annual MWh Saved

Region	MWh saved (3/07-2/08)	MWh saved (3/08-2/09)	% Change over 3/07-2/08	Estimated (3/09-2/08)**	% Change over 3/07-2/08
<i>Corvallis</i>	338 \$0.18/kwh	1,028 \$0.15/kwh	204%	728 \$0.21/kwh	115%
<i>Willamette Valley/North Coast*</i>	3,646 \$0.24/kwh	6,102 \$0.21/kwh	67%	7,056 \$0.21/kwh	94%
<i>All Energy Trust Territory*</i>	54,486 \$0.10/kwh	69,736 \$0.10/kwh	28%	67,419 \$0.14/kwh	24%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

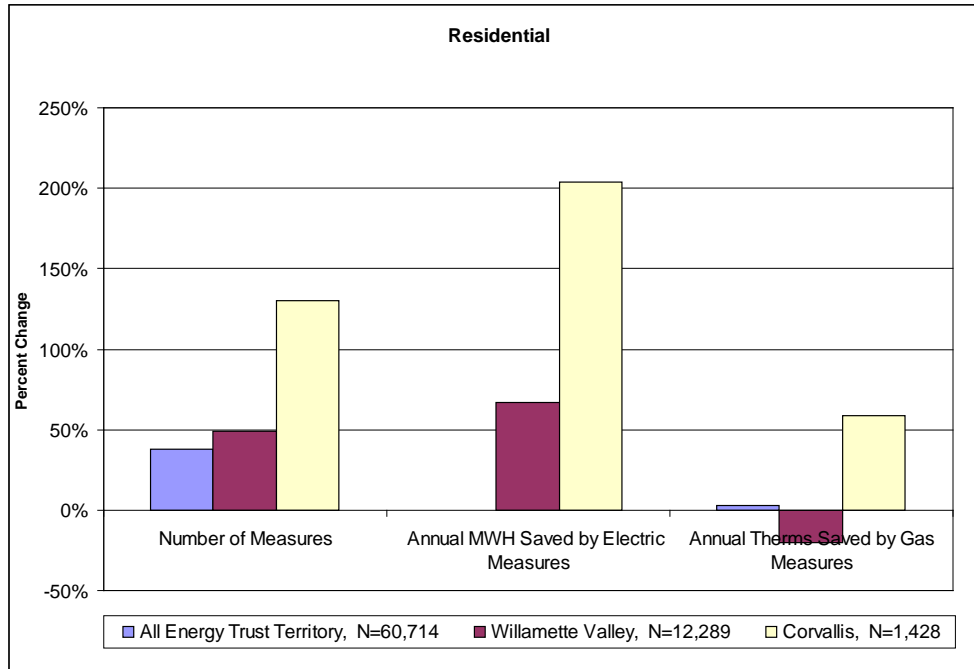
Table 6: % Change in Annual Therms Saved

Region	Therms saved (3/07-2/08)	Therms saved (3/08-2/09)	% Change over 3/07-2/08	Estimated (3/09-2/08)**	% Change over 3/07-2/08
<i>Corvallis</i>	23,037 \$5.27/therm	36,521 \$5.12/therm	59%	27,794 \$5.10/therm	21%
<i>Willamette Valley/North Coast*</i>	208,066 \$4.65/therm	166,495 \$5.56/therm	-20%	206,969 \$5.11/therm	-1%
<i>All Energy Trust Territory*</i>	825,303 \$4.85/therm	849,794 \$5.64/therm	3%	1,113,219 \$5.35/therm	35%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

Figure 3 combines elements of Tables 4, 5, and 6 to visually emphasize the percent change in Energy Trust residential activities across the three geographic areas between the program year and the base year. The N's reported in the legend are the number of sites participating in each region in the base year prior the Energy Challenge. The program impact can be clearly seen.

Figure 3 % Change in Residential Sector, Measures and Savings (Base Year to Program Year)



Commercial

Tables 7, 8, and 9 show the same information for the commercial and once again the strong effects of the Energy Challenge appear. The most notable finding in Table 7 is that Corvallis did not lose any ground in terms of measure incentives during the program year despite the poor economy. On the other hand the Willamette Valley and the rest of Energy Trust’s service territory lost ground (-5% and -11% respectively). Furthermore, annualized estimates based on data from March 2009 through August 2010 suggest Corvallis will see much stronger follow-through than in the other areas (235%). In Tables 8 and 9 depicting electric and gas savings, the percent change for Corvallis over the base year for both fuels far outstrips the percent change in other areas. When estimated savings are added in, Corvallis percent increases continue to exceed comparison areas by far. Once again cost per unit of energy saved for the year designated is a little lower for Corvallis than for the other areas.

Table 7: % Change in Number of Measures Receiving Incentives

Region	Measures (3/07-2/08)	Measures (3/08-2/09)	% change over 3/07-2/08	Estimated (3/09-2/10)**	% change over 3/07-2/08
Corvallis	47	47	0%	158	236%
Willamette Valley/North Coast*	606	578	-5%	623	3%
All Energy Trust Territory*	4,014	3,560	-11%	4,063	1%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

Table 8: % Change in Annual MWh Saved

Region	MWh saved (3/07-2/08)	MWh saved (3/08-2/09)	% Change over 3/07-2/08	Estimated (3/09-2/10)**	% Change over 3/07-2/08
Corvallis	138 \$0.10/kwh	488 \$0.08/kwh	253%	679 \$0.12/kwh	392%
Willamette Valley/North Coast*	2,441 \$0.12/kwh	4,979 \$0.10/kwh	104%	4,526 \$0.11/kwh	85%
All Energy Trust Territory*	23,264 \$0.10/kwh	29,551 \$0.10/kwh	27%	22,421 \$0.11/kwh	-4%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

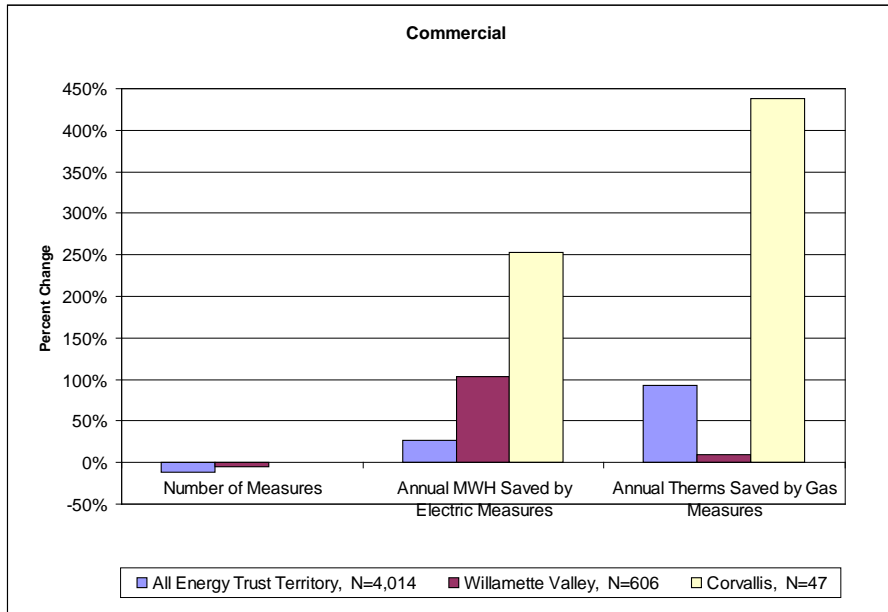
Table 9: % Change in Annual Therms Saved

Region	Therms saved (3/07-2/08)	Therms saved (3/08-2/09)	% Change over 3/07-2/08	Estimated (3/09-2/10)**	% Change over 3/07-2/08
Corvallis	3,150 \$3.46/therm	16,961 \$1.79/therm	438%	8,951 \$4.49/therm	184%
Willamette Valley/North Coast*	169,552 \$1.98/therm	184,110 \$1.83/therm	9%	133,851 \$2.09/therm	-21%
All Energy Trust Territory*	413,187 \$2.86/therm	797,875 \$1.90/therm	93%	321,744 \$2.16/therm	-22%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

As with Figure 3, Figure 4 graphically compares the percent change in the commercial sector for number of measures, electric, and gas savings.

Figure 4 % Change in Commercial Sector Measures and Savings (Base Year to Program Year)



Solar

Solar efforts received considerably less attention through the Energy Challenge and it's not clear what proportion of any increases should accrue to its efforts. Tables 10, 11, and 12 show that the percent of increase in solar measures receiving incentives was greatest in Corvallis compared to other areas. However, the difference in the percent change in savings is closer across the areas and the greatest percent change varies by fuel type and area. The cost of first year savings is notably higher in Corvallis than in other areas.

Table 10: % Change in Number of Measures Receiving Incentives

Region	Measures (3/07-2/08)	Measures (3/08-2/09)	% change over 3/07-2/08	Estimated (3/09-2/10)**	% change over 3/07-2/08
Corvallis	22	38	73%	33	50%
Willamette Valley/North Coast*	55	66	20%	73	33%
All Energy Trust Territory*	394	445	13%	465	18%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

Table 11: % Change in Annual MWh Saved

Region	MWh saved (3/07-2/08)	MWh saved (3/08-2/09)	% Change over 3/07-2/08	Estimated (3/09-2/10)**	% Change over 3/07-2/08
Corvallis	52 \$1.55/kwh	100 \$1.41/kwh	92%	164 \$1.44/kwh	215%
Willamette Valley/North Coast*	357 \$1.19/kwh	682 \$1.13/kwh	91%	485 \$1.28/kwh	36%
All Energy Trust Territory*	1,414 \$1.14/kwh	3,073 \$1.04/kwh	117%	3,003 \$1.32/kwh	112%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

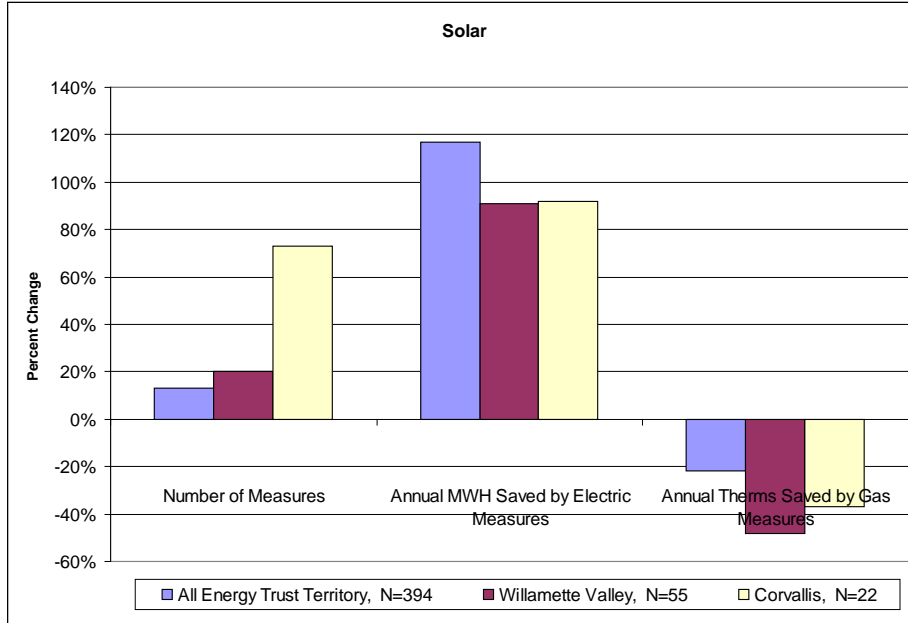
Table 12: % Change in Annual Therms Saved

Region	Therms saved (3/07-2/08)	Therms saved (3/08-2/09)	% Change over 3/07-2/08	Estimated (3/09-2/10)**	% Change over 3/07-2/08
Corvallis	347 \$6.22/therm	218 \$9.62/therm	-37%	516 \$6.15/therm	49%
Willamette Valley/North Coast*	6,213 \$2.50/therm	3,244 \$5.07/therm	-48%	7,154 \$1.97/therm	15%
All Energy Trust Territory*	32,300 \$2.37/therm	25,049 \$3.02/therm	-22%	19,622 \$2.59/therm	-39%

* Excludes Corvallis, **Annualized estimates based on data from 3/09 through 8/09

Figure 3 compares key elements of Tables 10-12 in more graphic form, showing that the increase in the number of measures, compared to other areas, taken during the Energy Challenge is notable. However, the increase (or decrease) in savings was greater elsewhere.

Figure 3 % Change in Solar Measures and Savings (Base Year to Program Year)



COSTS

Table 16 estimates the extra costs associated with the Energy Challenge – about \$112,000. The division into residential, commercial, shared costs is estimated and obviously doesn't break out costs for solar and industrial activities or by electric, gas, or renewable savings.

If just the data from the residential and commercial services are used (see Tables 5-9), it's clear these efforts bumped up the percent increases in measures and both electric and gas savings. And, in general, the basic costs (without the ones below) per KWh and Therms are somewhat lower for residential and commercial savings in Corvallis than in the Willamette Valley or in other parts of Energy Trust's service territory.

One measure of costs would be to compare how much is spent per account to do marketing for all of Energy Trusts customers and the cost per account in Corvallis. Based on the 2009 Energy Trust Annual Report, the agency serves 1.5 million accounts. The marketing budget is about \$5.5 million, which translates into about \$3.67 per account. The \$112,000 spread across about 28,000 residential and commercial accounts in Corvallis would add another \$4 per account. If costs are just applied to participants, the extra cost of about \$49,000 for the 771 HER ratings is about \$63 dollars per HER; the

extra cost of about \$64,000 for the commercial walk-throughs is about \$1,300 per participant.

Table 16: Estimated Direct and Extra Staff Costs for the Corvallis Energy Challenge

Shared Costs	
Website copywriting + project mgmt	\$ 2,438
Website design + maintenance	11,941
Estimated extra staff costs	20,000
	\$34,379
Mostly Residential	
Advertising	\$ 4,863
Banners	449
Banner stand displays	1,840
Cash awards (HER signup, Greek challenges)	2,000
Energy Saver Kits	3,283
Event sponsorships	8,270
Expenses – Energy Trust staff lead	1,203
Kill-a-Watt meters	1,479
Lawn signs	3,478
Printing – brochures, flyers, fact sheets	1,943
Room rental for workshops	120
Trophies	362
Workshop presenters	2,175
½ shared costs	\$17,190
	\$48,655
Mostly Commercial	
Corvallis Environmental Center (commercial assessments + follow-up)	\$46,535
	\$17,190
	\$63,725
Grand Total	\$112,380

APPENDIX A: EVALUATION INTERVIEW GUIDE

Date

Name(s)

Title(s)

Introduction

The purpose of this talk is to talk with you about the Corvallis Energy Challenge (written as CEC but not spoken that way). This discussion is an important step in ETO's evaluation process. We will be talking about the CEC's history, process, strengths, needed improvements, and lessons learned.

Note: Questions were adjusted to each respondent.

A. Interviewee Background (Briefly)

1. What has been your role in the Corvallis Energy Challenge pilot program and for how long?
2. What is your background with energy efficiency or sustainability?

B. Program Design (Need to determine what questions fit what respondents.) First I'm going to ask you about the background and design of the Challenge.

1. (For 2 hour group meeting only) Please complete this sentence: "The first thoughts that come to my mind when I think of the Corvallis Energy Challenge are. . ."
2. How did the CEC come about?
3. What motivated Corvallis to get involved? What "building blocks" were already in place in Corvallis to help with the CEC?
4. What is your understanding of the goals of the CEC pilot program? What specific challenges was it trying to address??
5. For those involved in design (2-4 pm meeting)
 - a. In designing the EC, what key things did you consider?
 - b. What problems or challenges were encountered during design process? How were they resolved
 - c. How well did the planning process go? Why?
 - d. What lessons did you learn from the planning process?

C. Program Approach and Implementation

1. (For those in the know) I need to develop an accurate picture of the CEC – its key components, their delivery, and how well they worked. I'll begin with the list I have and then you can let me know if I missed anything. (For each activity listed)
 - a. What were the strengths and challenges of implementing this activity?
 - b. In the end, how would you rate the success of this effort? Why?
 - c. What were the key lessons learned?
- Home energy reviews for homeowners – targeted 1,000 homes, ETO delivered these
- Walk-through assessments for small/medium businesses – targeted 50, Corvallis Environmental Center delivered these (under contract to ETO)
- Sorority and fraternity challenge (need more information)
- Climate masters program
- Solar installations
- Marketing
2. **Overall, how well did coordination work among the various actors in the CEC?**
3. **Looking over all the program components, how effective was program delivery?**
4. **What components of the EC worked best? Why?**
5. **What would you have changed or improved? How?**
6. **What lessons are important to remember from the CEC implementation?**

D. Program Outcomes

1. **What evidence should we look at to help us assess how well the CEC is progressing?**
2. How has progress and participation in the CEC been tracked?
3. **What feedback do you have from households, businesses, and trade allies taking part in the CEC?**
4. **How has the CEC affected any alliances or relationships among programs or for members of the Sustainability Coalition?**
5. **What have been its greatest strengths of CEC to date? What have been its most positive outcomes?**
6. **What challenges did the CEC encounter? How were they overcome?**
7. **What would you change or improve about the CEC?**

- 8. Were there any missed opportunities that would have enhanced the CEC or that you think should be pursued in the future?**
9. What aspects, if any, of the CEC are continuing? Who is involved with these efforts?
- 10. Looking back over this whole discussion, how would you rate the success of the CEC so far? Why?**
- 11. What are the lessons you would want to pass on to others considering a community energy challenge like this one?**
- 12. Do you have any concerns about this evaluation? Do you have any other feedback you'd like to provide about the CEC to Energy Trust?**

Thank you very much for your time today.