Management Review and Evaluation
February 2010

4800 SW Macadam Ave
Suite 400
Portland, OR 97239-3973

P 503.274.2849
F 503.274.2853

www.tkw.com

4800 SW Macadam Ave
Suite 400
Portland, OR 97239-3973

P 503.274.2849
F 503.274.2853

www.tkw.com

February 2010

Nancy Klass, Executive Assistant
Energy Trust of Oregon
851 S.W. 6th Avenue, No. 1200
Portland, Oregon 97204

Dear Ms. Klass:

We have completed our management review and evaluation of the Energy Trust of Oregon. Our review and evaluation has found that Energy Trust has developed a model and approach to meet its original legislative intent and is effectively providing applicable services.

Energy Trust has shown its ability to benefit Oregonians through energy savings and by providing energy solutions that save dollars and protect the environment. However, opportunities for enhanced efficiency and effectiveness do exist. This report contains our detailed analysis and conclusions based on our review.

We wish to express our appreciation to Energy Trust employees and managers and those persons from other organizations we spoke with for their cooperation and assistance during this review.

Talbot, Korvola & Warwick, LLP

Talbot, Korvola & Warwick, LLP

Management Review and Evaluation

Table of Contents

Report Summary

Energy Trust of Oregon™

Management Review and Evaluation

REPORT SUMMARY

In response to the Oregon Public Utility Commission's (OPUC) requirement to conduct an independent management review and evaluation every five years, the Energy Trust of Oregon initiated a competitive solicitation process for selecting a contractor and chose Talbot, Korvola & Warwick, LLP (TKW).

The Energy Trust board audit committee, in conjunction with the OPUC and the management team, developed the following questions as a basis for the review:

1. Is Energy Trust meeting the Oregon legislative initial objectives for public purpose charges and how effectively is it meeting new legislative and contractual requirements?
2. Is Energy Trust operating efficiently, particularly considering the growth in funding and expansion of responsibilities?
   Are there places where Energy Trust can trim cost without adversely affecting results?
   Are there areas where Energy Trust is assuming too much risk and should exercise more restraint?
   Does Energy Trust have well-designed, effective programs to cost-effectively achieve conservation/efficiency and to acquire renewable resources?
   How does Energy Trust compare with other similar organizations?
3. Has Energy Trust effectively allocated its budget among different functions?
4. Is Energy Trust sufficiently open, transparent, and inclusive in its decision-making and other processes helping to gain public confidence that it is effectively accomplishing its mission?
   Does Energy Trust effectively communicate its role and its program results to various stakeholders?
5. Are evaluations funded by the Energy Trust objective, appropriately scoped, sufficiently resourced, independent, and timely?
   Are Energy Trust evaluation procedures geared to produce results that meaningfully inform the OPUC, the Oregon Legislature, Energy Trust and others about program achievements and whether course corrections are needed?
6. Does Energy Trust have the appropriate flexibility and scalability to incorporate new innovations and opportunities into its work as the markets for energy efficiency renewable resources continue to diversify and grow?

To accomplish these objectives, our team conducted in-depth interviews with applicable personnel and an extensive review of various documents and records concerning the history of Energy Trust, current organization and operations, evaluation and performance standards,

policies and procedures, and reporting requirements. In addition, research and analysis conducted by the American Council for an Energy-Efficient Economy (ACEEE) provided additional information regarding energy conservation practices and other states' processes and approaches.

Our review focused on determining the processes and practices Energy Trust has in place to ensure it is meeting legislative intent, is operating efficiently and effectively, allocating its budget appropriately given its defined objectives, conducting self-evaluations, and communicating/reporting effectively and identifying any opportunities to improve its efficiency and transparency. The results of our evaluation found that Energy Trust has developed a model and approach to meet the legislature's initial intent of investing in new energy efficiency, market transformation, and the above-market cost of new renewable energy. The organization, and its current programs, is effectively providing applicable services. Based on current Energy Trust benchmarks and statistics, its programs have delivered significant benefits to utility ratepayers as well as extensive economic and environmental benefits to Oregonians.

An approach of continuous program improvement has been established within Energy Trust. An organizational re-design was recently completed and focused on developing an organizational structure that would allow the attraction of more and different types of customers, deliver integrated efficiency and renewable energy services, enhance customer participation, improve work flow, decrease costs of delivery, transactions and overall acquisition, and create flexibility to address changing market conditions and future opportunities. Energy Trust has also adopted an extensive self-evaluation process and strategic planning methodology. Numerous program evaluations have occurred in the past seven years and a comprehensive organization-wide management audit was completed in 2005.

Energy Trust faces challenges in assuring its future success. Despite the economy, demand for Energy Trust services is growing and remains high, especially for its existing homes, existing commercial buildings and solar electric programs. The economy has had a major impact on opportunities for new residential construction, new commercial construction and some renewable energy investments, as well as forestalling the installation of a number of industrial projects. The

organization is revising its approach and focus to provide programs that are the most beneficial given today's environment.

Although Energy Trust has demonstrated its ability to meet its mission to deliver benefits to Oregonians from saving energy and tapping renewable resources, providing energy solutions that save dollars and protect the environment, there are opportunities for enhanced efficiency and effectiveness. Specific recommendations summarized below and detailed in the following report sections, identify these opportunities:

Recommendation #1:

Energy Trust should work with the Oregon Public Utility Commission (OPUC) to eliminate the opt-in/opt-out provisions of the current information transfer policy.

Recommendation #2:

Energy Trust, after its completed redesign is in place, should conduct an administrative support staffing level needs assessment.

Recommendation #3:

Energy Trust should develop a formal process to document and report how and why specific strategies and approaches are selected for the annual budget and corresponding action plan.

Recommendation #4:

Energy Trust should consider allocating resources to efficiency programs to achieve the greatest overall saving with the lowest overall cost.

Recommendation #5:

Energy Trust should consider increasing utility involvement in strategic discussions by providing a greater opportunity for input and dialogue on issues relating to energy efficiency and renewable energy.

Recommendation #6:

Energy Trust should reassess its current approach to evaluations to identifying opportunities to improve timeliness.

Recommendation #7:

Energy Trust should:

- include, as appropriate, detailed action plans and timeframes as they pertain to specific evaluation recommendations
- develop a follow-up plan for evaluation findings and recommendations.

Recommendation #8:

Policy makers should consider pursuing modifications to existing legislation concerning funding limitations and requirements.

Introduction

Energy Trust of Oregon™

Management Review and Evaluation

INTRODUCTION

The Energy Trust of Oregon initiated a competitive solicitation process for selecting a contractor and chose Talbot, Korvola & Warwick, LLP (TKW) to conduct a management review and evaluation.

PROJECT OBJECTIVES

Objectives

The Oregon Public Utility Commission (OPUC) grant agreement with Energy Trust requires an independent management review and evaluation to be completed every five years. The Energy Trust board audit committee, in conjunction with the OPUC and the management team, developed the following questions as a basis for the review:

1. Is Energy Trust meeting the Oregon legislative initial objectives for public purpose charges and how effectively is it meeting new legislative and contractual requirements?
2. Is Energy Trust operating efficiently, particularly considering the growth in funding and expansion of responsibilities?
   Are there places where Energy Trust can trim cost without adversely affecting results?
   Are there areas where Energy Trust is assuming too much risk and should exercise more restraint?
   Does Energy Trust have well-designed, effective programs to cost-effectively achieve conservation/efficiency and to acquire renewable resources?
   How does Energy Trust compare with other similar organizations?
3. Has Energy Trust effectively allocated its budget among different functions?
4. Is Energy Trust sufficiently open, transparent, and inclusive in its decision-making and other processes helping to gain public confidence that it is effectively accomplishing its mission?
   Does Energy Trust effectively communicate its role and its program results to various stakeholders?
5. Are evaluations funded by the Energy Trust objective, appropriately scoped, sufficiently resourced, independent, and timely?
   Are Energy Trust evaluation procedures geared to produce results that meaningfully inform the OPUC, the Oregon Legislature, Energy Trust and others about program achievements and whether course corrections are needed?
6. Does Energy Trust have the appropriate flexibility and scalability to incorporate new innovations and opportunities into its work as the markets for energy efficiency renewable resources continue to diversify and grow?

PROJECT APPROACH AND METHODOLOGY

To accomplish these objectives, our team conducted in-depth interviews with applicable personnel. Information provided during these interviews became one source for observations found within this report. The information gained from these individuals and from other corroborative sources such as those identified below, provided insight into the issues, needs, and expectations surrounding the study and was invaluable in reaching the conclusions and recommendations presented within this report.

Energy Trust – Board

John Reynolds, Board President
Debbie Kitchin, Board Secretary
Julie Hammond, Board Member
Roger Hamilton, Board Member
Alan Meyer, Board Member

Energy Trust

Margie Harris, Executive Director
Sue Meyer Sample, CFO
Steve Lacey, Director of Operations
Peter West, Director of Programs
Amber Cole, Director of Communications and Customer Service
John Volkman, General Counsel
Debbie Blanchard, IT Director
Fred Gordon, Director of Planning and Evaluation
Phil Degens, Evaluations Manager
Pati Presnail, Controller
Kim Crossman, Sr. Industrial Sector Manager
Matt Braman, Planning Project Manager
Diane Ferington, Sr. Residential Sector Manger
Elaine Prause, Sr. RE Business Program Manager
Greg Stiles, Sr. Business Sector Manager

Other Organizations

John Savage, Commissioner, OPUC
Pat Egan, Vice President, Pacific Power
Bill Edmonds, Environmental Policy and Sustainability Director, NW Natural
Kathie Barnard, Sr. Director of Regulatory Affairs, Cascade Natural Gas
Carol Dillin, VP, Customers and Economic Development, PGE
Bill Nicholson, VP, Distribution, PGE
Michael B. Early, Executive Director, Industrial Customers of NW Utilities
Rachel Shimshak, Director, Renewable Northwest Project
Mike Weedall, Director of Conservation Programs, Bonneville Power Administration
Sara Patton, Executive Director, NW Energy Coalition

Stan Price, Executive Director, Northwest Energy Efficiency Council
Bob Jenks, Executive Director, Citizens' Utility Board of Oregon

In addition, we extensively reviewed various documents and records concerning the history of Energy Trust, current organization and operations, evaluation and performance standards, policies and procedures, and reporting requirements. Specific information obtained and reviewed included:

- Mission and vision statements, objectives, and goals
- Lines of authority, chain of command and span of control
- Job descriptions
- Performance measurement documentation
- Policies and procedures
- Program funding and expenses for the past three years
- Laws, rules, and regulations governing Energy Trust, including SB 1149 and SB838
- Annual Reports/budgets/financial summaries
- Technology utilized for reporting, scheduling, communication, etc.
- Action plan documents
- Available statistical information
- Rules and regulations governing Energy Trust
- Organization charts and position descriptions
- Reorganization documents

Research and analysis conducted by the American Council for an Energy-Efficient Economy (ACEEE) provided additional information regarding energy conservation practices and other states' processes and approaches. ACEEE advances energy efficiency as a means of promoting economic prosperity, energy security, and environmental protection through technical and policy analyses, advising policymakers and program managers, working with businesses, government officials, public interest groups, and other organizations, and educating businesses and consumers.

Our review focused on determining the processes and practices Energy Trust has in place to ensure it is meeting legislative intent, is operating efficiently and effectively, allocating its budget appropriately given its defined objectives, conducting self-evaluations, and communicating/reporting effectively and identifying any opportunities to improve its efficiency and transparency.

The assessments of efficiency and effectiveness contained within this report are, for the most part, qualitative in nature and rely on our experience with similar organizations. Energy Trust practices and processes were assessed based on a review and assessment of:

- Effectiveness

  The overall "effectiveness" of an organization is the determination of how well predetermined goals and objectives for a particular activity or program are achieved. Effectiveness signifies the result of effort rather than the effort itself. It is sometimes characterized as impact, results, or outcome.

- Efficiency

  Efficiency focuses on the maximization of output at minimal costs or the use of minimal input resources for the achievable output.

- Economy

  Economy signifies the acquisition of resources of appropriate quality and quantity at the lowest reasonable cost.

- Accountability

  Public officials and others entrusted with handling public resources are responsible for applying those resources efficiently, economically, and effectively to achieve the purposes for which the resources were furnished.

OTHER STATES

We also inquired of three other similar organizations (Vermont, New York, and Wisconsin) regarding organizational structure, staffing, strategic planning, program development, rules and regulations, benchmarks, and best practices relating to operations. Based on this review, it would appear that Energy Trust is similar to these entities in many ways. Like Energy Trust, these programs have legislative mandates, focus on reducing state energy consumption, increasing energy efficiency, and, in some instances, establishing renewable energy goals, are funded at least partially through a public purpose charge paid by utility ratepayers, and are administered by non-profit organizations. In addition, staff are dedicated to specific programs that provide information, technical support, and assistance to residents, businesses, agriculture and industrial industries, governmental entities, and non-profits. Almost all programs have financial incentives that are available to help promote the program. In addition, most provide a low-income assistance program that assists those with incomes under the federal poverty level to receive

assistance and home weatherization programs. Many have either applied for or are considering applying for federal stimulus grants to help supplement their programs.

Organization charts showed that several entities have an audit committee, an internal audit function, and separate marketing, outreach, and communications from direct program staff. In addition, some states have regional offices.

To ensure programs are meeting goals and objectives, several entities use outside experts and consultants to conduct independent program evaluations. In some cases, panels made of up of industry experts outside the entity and program management review the results of these evaluations and provide guidance to program staff for improving results.

Several entities reviewed had programs that went beyond programs administered by Energy Trust. For example, New York's program includes transportation and is working with the U.S. Department of Energy to clean-up and provide long-term maintenance to the Western New York Nuclear Service Center. In one state, a research center is being built as part of a university, to help promote research in renewable resources. Funding is being provided by the U.S. Department of Energy through a grant.

The economy has had an effect on each entity that we researched and spoke with. Strategic planning documents and annual reports that were reviewed emphasized the need to decrease dependence on foreign oil by increasing awareness and incentives for increasing energy efficiency and renewable energy efforts. Most entities have established goals that decrease the number of kWh, kW, and therms used by a certain percentage and by a certain date. In addition, most included a percentage of the state's energy consumption that would be used using Renewable Energy sources. At least one plan included goals for increasing employment opportunities.

Several entities have an oversight body made of a board of directors. For one entity, the board was selected by the Governor, with Senate approval. In addition, some entities include a representative of the governing body that oversees the non-profit, members from state

commissions related to energy and transportation, and representatives of utilities, at least in an ex officio capacity.

The above provides a broad overview of other state's programs. However, without in-depth analysis of other organizations' business models, organizational structures, operational efficiency and effectiveness, and state-wide policies, meaningful direct comparisons regarding resource allocations, staffing levels, cost allocations, etc. are very difficult to obtain.

The Energy Trust of Oregon

Energy Trust of Oregon™

Management Review and Evaluation

ENERGY TRUST OF OREGON

Mission

To change how Oregonians produce and use energy by investing in efficient technologies and renewable resources that save dollars and protect the environment.

Energy Trust of Oregon, Inc., an independent nonprofit organization, began investing public purpose dollars in March 2002. It invests in cost-effective energy conservation, helping to pay the above-market costs of renewable energy resources, and encouraging energy market transformation in Oregon. Energy Trust provides services and cash incentives to help utility ratepayers use renewable energy and to make improvements to save energy and manage costs in their homes, businesses and communities. The program currently serves 1.5 million Oregonians and over 60,000 NW Natural residential and commercial customers in Clark County, Washington.

FUNDING

Funding for Energy Trust activities comes from legislation enacted in 1999 requiring the state's two largest investor-owned electric utilities (PGE and Pacific Power) to collect a three percent "public purpose charge" from their customers. Although both companies had historically spent about three percent of customer revenues on energy efficiency, in any one year the amount spent varied widely. The new law provided for consistent, stabilized funding and required the Oregon Public Utility Commission (OPUC) to administer activities.

The law also dedicated a separate portion of the public-purpose funding to energy conservation efforts in low-income housing energy assistance and K-12 schools. A total of 74% is directed to Energy Trust, 16% to low-income housing and weatherization, and 10% to weatherization in K-12 schools. Energy Trust has also funded efficiency improvements and supported solar electric systems in Oregon schools.

Additional funding for natural gas efficiency comes from public purpose charges paid by Oregon customers of NW Natural and Cascade Natural Gas. These companies requested Energy Trust to deliver their energy efficiency programs. These charges were established in 2003 (NW Natural) and 2006 (Cascade Natural Gas) through an OPUC tariff asked for by the utilities.

In 2007, the Oregon Legislature allowed Pacific Power and PGE to seek additional electric efficiency funding and avoid purchasing more expensive electricity. Approved by the OPUC, Pacific Power and PGE's efficiency plans led to an additional $21.8 million for electric efficiency Energy Trust programs in 2009.

ADMINISTRATION

The Oregon Public Utility Commission is responsible for oversight of Energy Trust while a volunteer citizen board of directors and two advisory councils provide it with specific guidance. Energy Trust is required to provide the OPUC with quarterly reports, audited financial statements, and annual reports showing actual performance measured against established target metrics. Independent reports on Energy Trust and all public purpose spending are completed by a third party and submitted biennially by the OPUC to the Oregon Legislature.

The Energy Trust board of directors develops and adopts long-term strategic goals and plans to guide the organization. The board also establishes policies and reviews and approves the annual budget and two-year action plan developed to achieve the strategic plan goals.

The Oregon Public Utility Commission appoints an ex officio member to the Energy Trust board of directors while other directors are independent volunteers. The Oregon Department of Energy appoints a special advisor to the board. Board vacancies are filled consistent with board development guidelines established by OPUC. Board meetings are open to the public with agendas and packets posted in advance on Energy Trust's website. Board minutes are also posted on the website.

Conservation and Renewable Advisory Councils created through the 1999 legislation provide a public forum for program topics, evaluations, organizational policies, and budgetary consideration to be aired. These meetings are held 10 times per year and council members are comprised of energy experts, industry stakeholders, utility and OPUC representatives, and advocacy groups.

PROGRAMS

Energy Trust has developed programs to help keep energy costs as low as possible for ratepayers of Oregon investor-owned utilities. Utilities avoid buying more expensive energy when customers use less energy or tap renewable sources. Utilities also rely on Energy Trust renewable energy generation and gas and electric savings from conservation and efficiency to meet future energy needs for their customers at a cost three-to-four times less than the cost of securing power from new electric generation plants.

Additionally, Energy Trust programs and services deliver significant economic and environmental benefits to Oregonians. Since 2002, investments created more than 1,800 jobs and stimulated $60 million in wages and $9.1 million in new business income. Since 2002, Energy Trust has helped Oregonians avoid emitting three million tons of carbon dioxide emissions - the equivalent of removing 525,000 cars from roads annually.

Primary Programs

Home Energy Solutions

- Existing homes, Home Performance with ENERGY STAR®, manufactured homes and multifamily buildings
- New homes, manufactured homes and multifamily buildings
- ENERGY STAR® clothes washers, refrigerators, freezers and compact fluorescent light bulbs
- Solar electric and water heating systems

Business Energy Solutions

- Existing buildings
- New buildings
- Industrial buildings and processes
- Energy from renewable sources such as solar, organic waste, and wind
- Solar electric and water heating systems

Renewable Energy Solutions

- Solar electric
- Wind generation from single turbines to community scale
- Biopower from wood waste, landfill and wastewater gas, manure and other organic sources
- Small-scale hydropower
- Open Solicitation Program for emerging technologies

Energy Trust offers technical assistance and cash incentives for all of the programs listed above.

PERFORMANCE MEASURES

Energy Trust measures its success in fulfilling Oregon's vision of meeting future energy needs through environmentally sound, clean energy sources through kilowatt hours and therms saved and in renewable energy produced. Energy Trust expects to:

- save 256 average megawatts of electricity, contingent on adequate funding, through efficiency and conservation between 2010 and 2014,
- save 22.5 million annual therms of natural gas, contingent on adequate funding, through efficiency and conservation between 2010 and 2014, and
- achieve an additional 23 average megawatts of renewable energy between 2010 and 2014.

Cumulatively, Energy Trust programs have saved and generated enough clean electricity to power 250,000 homes and saved enough natural gas to heat 18,300 homes. Over 8 megawatts of solar installations have been funded. Since 2002, program participants have saved $440 million by making energy efficiency improvements and generating clean renewable power.

As part of its oversight of Energy Trust, the OPUC has adopted specific performance measures. For 2009, these measures include:

- Save at least 31 average megawatts of electricity, computed on a three-year rolling average basis at a levelized cost of no more than 3.5 cents per kilowatt hour.
- Save at least 1,800,000 therms of gas, computed on a three-year rolling average basis at a levelized cost of no more than 60 cents per therm.
- Secure at least 3 megawatts of new renewable resources per year, computed on a three-year rolling average, from a variety of small-scale projects.
- Earn an unqualified audit opinion.
- Keep administrative and program support costs below 11% of annual revenues.
- Maintain a reasonable level of customer satisfaction, as measured by surveys, and maintain statistics on complaints.
- Report the benefit/cost ratio for conservation acquisition programs based on the utility system perspective and societal perspective; report any significant mid-year changes in benefit/cost performance.

COORDINATION AND COLLABORATION

Energy Trust coordinates and collaborates with other similar organizations to stay current on emerging strategies and approaches within the industry. Since its inception, Energy Trust has

been an active part of the *NW Energy Efficiency Alliance*, a regional market transformation group established about 15 years ago and funded by nearly 30 utilities throughout the Pacific Northwest. Energy Trust activities include an annual funding commitment to acquire electric energy savings, membership on the board of directors and executive and strategic planning committees, staff participation in expert committees corresponding to individual sectors, market research and other joint activities.

Energy Trust actively participates in the *NW Energy Efficiency Task Force (NEET)*, a group convened by the Bonneville Power Administration. The Task Force's intent is to build upon the region's history of energy efficiency accomplishments and achieve even greater acquisition in the future. The Task Force has completed a detailed report identifying joint opportunities for the region to collectively prioritize and pursue. Many of Energy Trust's staff participated in the working groups and helped shape and develop report findings and recommendations. In turn, those recommendations are now being implemented, benefitting participating organizations by pooling resources and collaborating more intentionally to achieve common goals.

The *American Council for an Energy Efficient Economy* (ACEEE) is a non-profit leadership organization dedicated to promoting energy efficiency policy and programs to benefit the economy and the environment. For 30 years, the ACEEE is highly regarded for its research, conferences, training and seminars. Energy Trust staff have prepared and presented papers at the ACEEE Symposium, a gathering of almost one-thousand of the industry's top personnel from around the nation and the world, as well as other ACEEE venues. Conference proceedings, published on the ACEEE website, are highly regarded as a valuable composite of the best thinking and practices relevant to our work.

For the past six years, Energy Trust has also participated in a small and informal three-day gathering with others from the *Vermont Energy Investment Corporation/Efficiency Vermont* and *Wisconsin Energy Conservation Corporation.* These other non-profit organizations have missions most closely aligned with Energy Trust. Participation has been limited to the executive directors and a director of programs from each organization, keeping the size of the group to six. Agendas are developed based upon the common needs and challenges faced by each

organization. Historically, the focus has been on legislative and policy changes, emerging technologies, new program delivery strategies, relationships with utilities, customer service, outreach and community energy strategies, and administrative matters, including organization structure and IT. Because physical locations of the meetings are rotated, one of the states is visited each year, providing for the opportunity to meet staff from each organization. This fosters exchanges and teleconferences among program, marketing, and IT teams.

Results

Management Review and Evaluation

RESULTS

Since its inception in 2002, Energy Trust has invested in energy efficiency, renewable energy, and market transformation programs. Starting with Portland General Electric and Pacific Power and adding NW Natural (2003) and Cascade Natural Gas (2007), Energy Trust now serves 82% of Oregon's total utility customer base[1].

Our review and evaluation has found that Energy Trust has developed a model and approach to meet the legislature's initial intent of investing in new energy efficiency, market transformation, and the above-market cost of new renewable energy. The organization, and its current programs, is effectively providing applicable services. Based on current Energy Trust benchmarks and statistics, its programs have delivered significant benefits to utility ratepayers as well as extensive economic and environmental benefits to Oregonians. Since 2002, specific programs have saved over 285 average megawatts - enough energy to power 221,000 homes – and 8.9 million therms- enough to provide heat for 18,300 homes. The ultimate result of these savings is lower energy costs for utility ratepayers (over $440 million since 2002), economic benefits through the creation of jobs (over 1,800 in Oregon with $60 million in net increase in wages and $9.1 million in new business income), and an impact on the production of carbon dioxide (a reduction of over three million tons).

The American Council for an Energy-Efficient Economy annually publishes a *State Energy Efficiency Scorecard* that ranks states on the adoption and implementation of energy efficiency policies in six categories:

- utility-sector and public benefits programs and policies,
- transportation polices,
- building energy codes,
- combined heat and power,
- state government initiatives, and
- appliance efficiency standards.

Oregon has consistently been ranked in the top ten and in 2009 was ranked fourth.

[1] 2007

An approach of continuous program improvement has been established within Energy Trust. An organizational re-design was recently completed by an eight-person, multi-disciplinary design team comprised of Energy Trust staff. The re-design was focused on developing an organizational structure that would allow the attraction of more and different types of customers, deliver integrated efficiency and renewable energy services, enhance customer participation, improve work flow, decrease costs of delivery, transactions and overall acquisition, and create flexibility to address changing market conditions and future opportunities.

Energy Trust has also adopted an extensive self-evaluation process and strategic planning methodology. Numerous program evaluations have occurred in the past seven years and a comprehensive organization-wide management audit was completed in 2005. That audit identified five general themes to assist the organization in improving operations:

- Establish Sector-Level Performance Measures

  Status: Sector-based goals and benchmarks were established.

- Streamline and Focus Operation Procedures

  Status: Specific written policies and procedures were developed.

- Refine and Define Roles and Responsibilities

  Status: Formal job descriptions were developed.

- Improve Communications

  Status: Internal and external communication has improved.
  Internal - Energy Trust holds monthly all-staff meetings and produces a monthly newsletter.
  External - lines of communication between Energy Trust and the utilities have improved.

- Develop IT Management Reporting Systems and System Availability

  Status: Energy Trust created an IT Director position and IT Steering Committee to oversee IT projects. IT metrics are being developed to evaluate performance.

Energy Trust faces challenges in assuring its future success. Despite the economy, demand for Energy Trust services is growing and remains high, especially for its existing homes, existing commercial buildings, and solar electric programs. The economy has had a major impact on

opportunities for new residential construction, new commercial construction and some renewable energy investments, as well as forestalling the installation of a number of industrial projects. The organization is revising its approach and focus to provide programs that are the most beneficial given today's environment. However, certain constraints[2] do exist that affect its ability to invest in new and emerging technologies:

- The Oregon Renewable Energy Act includes no revenue increases from customers using more than 1 aMW a year. To achieve projected growth rates will potentially require increases in revenues from larger customers.
- The complexity of current planning, oversight, and funding process can limit Energy Trust resources for planning program enhancements.
- Renewable energy investments can be constrained by SB 1149 funding levels. If tax credits are reduced and/or if the BETC sunsets in 2012, as is currently planned, the cost to develop economically viable renewables projects will significantly increase.
- Energy Trust serves the majority of electric customers and gas customers in the state but is unable to serve public utility customers or those customers who use oil, propane, or wood.

Energy Trust has demonstrated its ability to meet its mission to deliver benefits to Oregonians from saving energy and tapping renewable resources, providing energy solutions that save dollars and protect the environment. This report identifies opportunities for enhanced efficiency and effectiveness. The following sections detail these opportunities.

Is Energy Trust meeting the Oregon legislative initial objectives for public purpose charges and how effectively is it meeting new legislative and contractual requirements?

In 1999, Senate Bill 1149 was approved to direct the expenditure of public purpose funds for new cost-effective local energy conservation, new market transformation efforts, and the above-market costs of renewable energy resources. The bill gave the option to create a third-party entity to provide services:

> "The commission may also direct that funds collected by an electric company through public purpose charges be paid to a non-governmental entity for investment in public purposes."

This led to the creation of Energy Trust, a tax-exempt nonprofit under the auspices of the Oregon Public Utility Commission (OPUC). Although the bill did not establish specific requirements of

[2] See page 43 for additional information.

the new organization, it did direct the OPUC to establish rules implementing the provisions of the section relating to electric companies.

The OPUC, through a formal agreement with Energy Trust established the following performance measures:

Electric Efficiency Performance Targets:
The Commission expects Energy Trust to obtain electricity efficiency savings of at least 31 MWa, computed on a three-year rolling average.

The Commission expects Energy Trust to obtain electricity efficiency savings at an average levelized life-cycle cost of not more than 3.5 cents per kWh.

Natural Gas Efficiency Performance Targets:
The Commission expects Energy Trust to obtain natural gas efficiency savings of at least 1,800,000 therms, computed on a three-year rolling average.

The Commission expects Energy Trust to obtain natural gas efficiency savings at an average levelized life-cycle Trust cost of not more than 60 cents per therm.

Renewable Resource Development Targets:
The Commission expects Energy Trust's Utility-Scale Program to achieve 9 MWa of new renewable resource development annually, computed on a three-year rolling average,· by funding projects consistent with each utility's acknowledged Integrated Resource Plan. (With the passage of a Renewable Energy Standard in Oregon requiring large-scale renewable energy development through utilities, this target will be eliminated after 2009).

The Commission expects Energy Trust to secure at least 3 MWa of new renewable resources per year, computed on a three-year rolling average, from a variety of small-scale projects.

Financial Integrity:
The Commission expects Energy Trust to demonstrate its financial integrity by obtaining an unqualified financial audit opinion annually.

Program Delivery Efficiency:
The Commission expects Energy Trust to demonstrate program delivery efficiency by keeping its administrative and program support costs below 11 percent of annual revenues.

Customer Satisfaction:
The Commission expects Energy Trust to demonstrate reasonable customer satisfaction rates by surveying its customers as part of its program evaluations. Preferably, the surveys will provide a scale showing the degree of satisfaction with Trust services and allow for open-ended responses. In addition, the Trust will report salient statistics regarding complaints it receives directly, or from utility customer services. Findings are to be reported to the Commission.

Benefit/Cost Ratios:
The Commission expects Energy Trust to report the benefit/cost ratio for its conservation acquisition programs in its annual report based on the utility system perspective and societal perspective. The Commission expects the Trust to report significant mid-year changes in benefit/cost performance as necessary in its quarterly reports.

Incremental Funding:
The Commission expects Energy Trust to report annually on the incremental funding and energy savings achieved as a result of Senate Bill 838 (2007 Session).

In the five years since the first management audit, Energy Trust has met the Oregon legislative initial objectives for public purpose charges and successfully met all but the Renewable Resource Development performance measures[3]. Beginning in 2005, the Oregon Public Utility Commission began establishing annual performance measures for Energy Trust. Savings and renewable resource development benchmarks are adopted by the Commission and computed on a 3-year rolling average. Utility scale renewable resource development fell short in 2005 and 2006 but exceeded OPUC goals for 2007 and 2008. Small scale renewable resource development also fell short of expectations but was more than offset by utility scale gains. Electric and natural gas efficiency met or exceeded OPUC performance measures in all four years. Program delivery efficiency ranged from 5.3% to 6.8% of public purpose revenues, well below the 11% limitation.

The appendix contains a detailed summary of performance for the Energy Trust for the last five years.

Is Energy Trust operating efficiently, particularly considering the growth in funding and expansion of responsibilities?

A variety of approaches are used for the administration of energy efficiency programs throughout the United States. Most states rely principally on utility administration of the programs. Those states choosing some type of non-utility administration primarily use government agencies to manage the programs. Currently, only three states provide energy conservation programs through a third-party delivery model utilizing non-profit structures - Oregon, Wisconsin, and Vermont. The

[3] Performance accomplishments were not independently validated as a component of this audit. All reported savings and generation results were considered accurate.

states of Maine and Michigan have just begun to implement this same model. Oregon chose this approach as it allowed for a single purpose, mission-driven independent organization established to acquire energy efficiency and renewable energy without a potential conflict of interest. Energy Trust also chose to contract for the majority of its program delivery through Program Management Contractors (PMCs) allowing programs and service to be offered within a short period of time of the entity's inception.

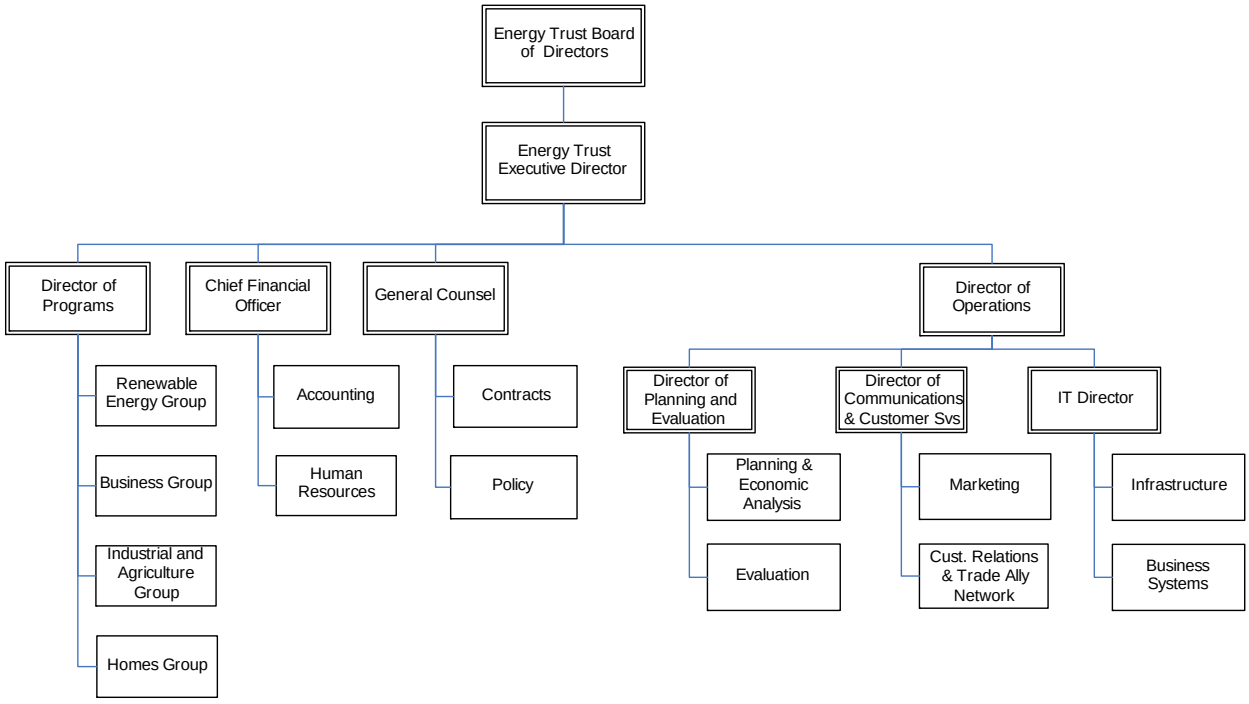
Providing services to Oregon customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas, and as of October 2009, NW Natural customers in Clark County led Energy Trust to develop a business model and accompanying organizational structure. Program delivery is performed through a combination of Energy Trust staff, Program Management Contractors, Program Delivery Contractors (PDCs), and a network of Trade Ally contractors. Overall, program management is the responsibility of the program/project managers in the Renewable Energy, Business, Industrial and Agricultural, and Homes Groups. Program data is tracked using a database known as FastTrack and is entered into the system by Energy Trust personnel and PMC personnel. Although using PMCs requires program staff to manage the PMC contracts as well as ensure that the information provided by each is collected and complete, it allows Energy Trust to stay flexible in its ability to serve its customers. This approach has allowed Energy Trust to provide service efficiently.

Energy Trust has experienced a number of organizational, programmatic, and process changes in its short seven year history. As a start-up organization in 2002, a business model and organizational structure were developed to expedite the delivery of services. Although this structure allowed Energy Trust to begin the accomplishment of established performance measures, it also did not allow for the most effective and efficient operations. Its initial management audit completed in 2005 identified specific needs regarding its organizational structure, staff operations, program design, and operational procedures. Recommendations were focused on a variety of areas including: staffing and support, communication, roles and responsibilities, and program review.

The audit concluded that basic structures were in place but changes were necessary to assure the long-term success of the organization. Energy Trust concurred with the assessment and implemented the majority of the report's recommendations.

Organization Redesign

Energy Trust has continued to evaluate its business model and methods to identify and deliver services. It has recently re-assessed its structure and operations and prepared a redesign plan. The proposed new summary organization chart follows:



Prior to this change, energy efficiency programs were overseen by one director and renewable energy programs by another. The new structure places both types of programs under one director – the Director of Programs. Day-to-day operations of each program are managed by Program Managers. The new structure also includes leads responsible for strategic planning, market analyses, budgeting, goal achievement and team development in each major sector.

A design team comprised of staff, facilitated by outside consultants and guided by an internal steering committee was created to explore ways to increase Energy Trust results. To guide the team, the steering committee outlined a number of fundamental challenges that needed to be addressed, including improving efficiencies, reducing costs, placing less emphasis on individual programs and more on customer service, increasing support for trade allies, expanding efforts to rural areas within the state, strengthening relationships with outside stakeholders, increasing and diversifying its customer base, and fostering continuous improvement practices within the organization. In addition, the redesign was intended to create a more flexible, nimble, and scalable organization, responsive to future opportunities and changing markets.

In an effort to analyze the entire organization, the design team examined three systems including:

- Technical systems
  Workflows, processes, procedures, tools and skills needed to create services and products, including the technical ability to provide information and equipment needed by staff to make the best use of time and resources.
- Business systems
  Energy Trust mission and goals, customers, performance measurement and tracking, and the redesign imperative to better understand what customers value, how to motivate them, and how to attract new and different customers to unlock greater volume of activity and results.
- Social systems
  How Energy Trust staff are organized to operate the technical and business systems, including work roles and teams, authorities and accountabilities, reporting relationships, structure, job satisfaction, values, rewards and other dimensions of culture.

The design team mapped major processes to help identify bottlenecks and inefficiencies. Three all-day work sessions were held with Energy Trust and PMC staff to identify the root causes of issues discovered during the mapping process and to help foster ideas for improvements.

The design team presented its findings and recommendations to a steering committee and management team to address how Energy Trust could improve productivity, focus more on the customer experience and achieve both cultural and structural changes in support of these

outcomes. After additional analysis and refinements were made with the design team and based on guidance from the steering committee, management presented findings and proposed solutions to the Energy Trust Board of Directors in the fall of 2009.

The new structure includes work groups to provide support, technical assistance, and training to a variety of customers in specific sectors including:

- Homes Group
  Serves single family homeowners, homebuyers, and renters.
- Business Group
  Provides services to commercial business owners in existing facilities, new commercial building developers, and property managers including in the multi-family sector. This area also assists the public sector and non-profit organizations.
- Industry and Agriculture Group
  Serves the wood products industry, food processors, high-tech, plant nurseries, wineries, farms, dairies, and other similar enterprises, including publicly operated water and wastewater treatment facilities.

- Renewable Energy Group
  Responsible for all renewable energy assistance, with the exception of solar for homes and businesses.

Solar staff and marketing efforts are assigned to both the Home and Business Groups, tying performance goals and reporting to each. The Communications and Customer Services team will dedicate marketing support to both the Industry and Agriculture and Renewable Energy Groups.

Operations analysts are assigned to both the Homes and Business groups. This is intended to provide more time for Program Managers to plan, strategize, and manage their areas more effectively, while improving data management, analysis and reporting, and the quality of data collected by Program Management Contractors (PMCs).

Determining Cost Effectiveness

To help evaluate the programs administered by Energy Trust, the Planning and Evaluation Group has leadership and quality control responsibility for efforts throughout the organization to explore possible new efficiency measures and initiatives that might be widely

applicable and assess their potential value and cost-effectiveness. The redesign identified the need for additional resources in this department to develop new initiatives at an accelerated pace, support and assess programs on a timely basis, and provide feedback to program staff more quickly. Other responsibilities of the Planning and Evaluation Group include market research, program evaluation, data development, savings and generation supply assessment, cost, savings and generation forecasting, strategic planning utility integrated resource planning support, utility funding negotiations, OPUC oversight processes, and coordination with several national and regional initiatives integral to Energy Trust operations.

To ensure the Energy Trust achieves its organization goals approved by the board of directors, as well as the performance measures established by the Oregon Public Utility Commission (OPUC), quantifiable savings and generation targets are identified for each program. Based on these measures, program budgets are developed. Other considerations for developing the budget include utility Integrated Resources Plan goals, revenue projections, legislative requirements for public purpose and supplemental efficiency funds, market conditions and how targeted industries will react to resource allocations.

In summary, based on overall guidance regarding key goals and targets, budgets and action plans are developed bottom-up for each program and non-programmatic department, with attention to the strategic plan and the many initiatives, markets, and utilities that each program serves. The aggregate results are analyzed for ability to meet goals, relative cost, for redundancies and any potential gaps. Then budgets are internally shaped to create a more cohesive and coherent plan to meet goals. Draft budgets and action plans receive extensive external, board and advisory committee review, and are then presented to the Board for final review and approval.

Action plans are also developed for each program area, as well as other departments within the organization. Action plans include a purpose statement, a strategy for implementing the program, actions to be taken over the next two years, targeted savings and generation to be achieved, and corresponding budget details.

Operational Efficiencies

Because of the proposed organization redesign, it was not yet possible to review and evaluate proposed changes to processes and practices recommended to gain efficiency improvements. Although, the rationale for these changes appear to be reasonable, the new structure is just starting to be implemented and has not been in place long enough to determine whether the intended benefits will be achieved. Energy Trust plans to evaluate results stemming from the redesign over time.

Energy Trust's approach to identifying an organizational structure that would improve efficiencies, reduce costs, emphasize customer service, diversify its customer base, strengthen relationships, and foster continuous improvement was thorough and well designed. It appears that, in concept, the new organizational structure will allow appropriate operational controls, administrative oversight, reporting, and accountability to occur. In addition, the new design should allow Energy Trust to meet future growth needs.

For those areas that could be reviewed, our evaluation found that Energy Trust does have well-designed, effective programs to cost-effectively achieve conservation/efficiency and to acquire renewable resources. However, two possible opportunities were noted:

Information Transfer Policy

Energy Trust currently relies upon utility consumer information to design and develop energy efficiency and renewable energy programs. Under current Oregon Administrative rules, the utilities are required to provide information such as consumer name, service address, 18 months of the most recent historical usage data, etc. The utilities obligation to provide this information is subject to certain restrictions. For consumers whose demand is less than one megawatt, the information must be provided unless the customer opts-out of information transfer. For consumers whose demand is greater than one megawatt, the information must be provided only if the consumer opts-in to information transfer. All such information must be protected.

Because of the opt-out/opt-in policy, Energy Trust only receives partial listings of potential program participants and must obtain information from other sources. Some of the issues associated with the partial listings include:

- Inefficiencies in targeting potential participants.
- Delays because Energy Trust does not have the necessary information to verify participant eligibility.
- Inability to identify consumers using more than one megawatt. Restrictions under section 46 of the Oregon Renewable Energy Act prevent supplemental energy efficiency funds from being spent on these consumers.
- Inefficiencies in program design.
- Additional costs to administer the program.

To assure that all ratepayer and utility usage information is available for accurate program qualification determination and the correct evaluation of savings, the opt in/opt-out policy should be eliminated.

Recommendation #1:

Energy Trust should work with the Oregon Public Utility Commission (OPUC) to eliminate the opt-in/opt-out provisions of the current information transfer policy.

Administrative Support

The ability of any organization to operate efficiently depends on many factors: management, communication, training, record keeping, automation, etc. A major contributor of efficiency is administrative support. Internal and external service delivery can be extensively impacted by the support provided by non-direct service staff.

Administrative support at Energy Trust appears lean. Several instances of administrative functions being performed by interns, contracted employees, or functions combined under a single position were noted. However, a thorough review of administrative staffing levels was not performed as Energy Trust was in the process of reorganizing. While the scope and purpose of the organizational redesign did not include a detailed assessment of administrative staffing, resulting changes in business processes will impact

administrative needs. Administrative staffing levels were not benchmarked due to an inability to identify a comparable organizational structure.

While Energy Trust should be commended for its efforts to increase program efficiency, a point can be reached where program effectiveness may be compromised. New initiatives may require Energy Trust to add additional administrative staff. For example, Energy Trust is considering pursuing additional federal grant funding under the American Recovery and Reinvestment Act (ARRA). Federal grant funding reporting requirements would place an additional administrative burden on Energy Trust. In addition to complying with the provision of Office of Management and Budget (OMB) circular A-122, Energy Trust would have ARRA reporting requirements. Under the ARRA reporting requirements, quarterly reports must be completed with the following information;

- the total amount of recovery funds received from that agency;
- the amount of recovery funds that were expended or obligated to projects or activities; and
- a detailed list of all projects or activities for which recovery funds were expended or obligated, including
    a. the name of the project or activity;
    b. a description of the project or activity;
    c. an evaluation of the completion status of the project or activity;
    d. an estimate of the number of jobs created and the number of jobs retained by the project or activity.
- Detailed information on any subcontractors or sub grants awarded by the recipient.

These added reporting requirements will also place an additional burden on administrative staff.

An assessment of administrative staffing levels should be conducted by Energy Trust once its redesign is complete and information regarding administrative activities and requirements are known. A thorough review will allow a detailed understanding of various aspects including:

- required administrative activities
- tasks and activities performed by current administrative staff
- tasks and activities performed by contracted personnel

- interrelationships between administrative staff functions, identification of overlapping and/or closely related functions, and staff redundancies
- communication and information pathways within Energy Trust
- workloads
- resources necessary to accomplish identified tasks and activities

Recommendation #2:

Energy Trust, after its completed redesign is in place, should conduct an administrative support staffing level needs assessment.

Has Energy Trust effectively allocated its budget among different functions?

Energy Trust allocates its budget among various functions and programs. This allocation allows program expenses, consisting of both energy efficiency and renewable energy, program support and administrative expenses to be included. Consistent with Generally Accepted Accounting Principles (GAAP) for non-profit organizations, administrative expenses consist of both management and general expenses and also include general communication and outreach. The allocation between these functions is performed as part of Energy Trust's annual budget process. Several factors are considered including meeting OPUC minimum performance benchmarks, achieving Energy Trust strategic plan goals adopted by the board of directors, meeting utility Integrated Resource Plan (IRP) goals, revenue projections, and legislative requirements for public purpose funding.

First and foremost, Energy Trust budgets to exceed annual minimum performance measures required under agreement with the Oregon Public Utility Commission (OPUC). These include performance measures for natural gas and electricity efficiency gains as well as new renewable energy production. Benchmarks also establish a maximum price per unit for these gains. The budget also recognizes efficiency gains and new renewable energy production gains included in utility Integrated Resource Plans. Funding sources clearly provide separate accounting for resources between energy efficiency and renewable energy. All of these factors are considered in the development of Energy Trust's budget.

Budgets for administrative functions are developed by the manager or director responsible for each area. Budgets for payroll and related expenses for the entire organization are developed by the Chief Financial Officer and are based on a variety of factors, including comprehensive annual salary surveys. Assumptions used to anticipate payroll and performance/merit allocations are discussed and approved by the Management Team using current industry market data and to achieve consistency and fairness across the organization. Individual administrative function budgets are then discussed by the Executive Director and Management Team as part of finalizing the draft budget for board consideration and approval.

Program budget development begins with new project planning within the various sectors. Program Managers, with input from Program Management Contractors (PMCs) and Program Delivery Contractors (PDCs), develop cost and energy savings projections for individual programs. Planning and Evaluation staff provides savings and generation goals by utility and sector based opportunities stemming from Integrated Resource Plans. Program Managers for each sector will then meet to determine the best combination of program proposals to achieve sector/utility savings and generation goals.

Once completed, energy efficiency and renewable energy budgets are reviewed by the Director of Programs and then by the Management Team.

The draft budget is presented for comment to the following stakeholder groups:

- Board Finance Committee
- Board Policy Committee
- Renewable Energy Advisory Council (RAC)
- Conservation Advisory Council (CAC)
- Oregon Public Utility Commission (OPUC) and sponsored public workshop
- PGE
- NW Natural
- Pacific Power
- Cascade Natural Gas
- Bonneville Power Administration (BPA)
- Presentations offered and historically made to the Oregon Department of Energy and the NW Energy Efficiency Alliance

The budget is also posted on the website, presented at two board meetings, and open for public comment with final approval by the board in December.

Overall, Energy Trust appears to be effectively allocating its budget among its different functions. Budgets appear to be established appropriately based on its goals to obtain gas and electricity efficiency savings, annually develop new, renewable resources, and obtain reasonable customer satisfaction rates. The success in meeting or exceeding the initial legislative objectives throughout the organization's history also indicates that current resources are being allocated in an effective manner. However, the following opportunities were noted:

Budget Process

Energy Trust evaluates proposed energy efficiency and renewable energy program elements for inclusion or exclusion from its operating budget. The program evaluation and selection process is performed separately for each of the sectors. The legal framework for investment drives a very different set of criteria for selecting efficiency and renewable measures. Energy efficiency measures must be cost effective while new renewable energy resources include only the above market costs. Current Integrated Resource Plan (IRP) guidelines call for Energy Trust to acquire all cost-effective efficiency measures. Thus, in principle, all measures with utility and societal benefit cost ratios exceeding one are eligible for programs. However, to work within budgets on an annual basis, prioritization is necessary. Efficiency program determination is based on both the certainty and the cost of the energy savings. Ideally the measures and initiatives incorporated in budgets and action plans will accelerate savings at the desired rate at the lowest overall cost. However, an individual program with a lower cost of savings may be rejected due to a high level of uncertainty associated with it. The individual Sector Managers make the final recommendations on the mix of initiatives within a sector.

Although it appears that the current process for evaluating and ranking individual proposals considers various options, relative strengths and weaknesses, impacts, and costs, the selection criteria are not documented. It is uncertain to various interested parties of Energy Trust how

and why specific projects or programs were chosen and ultimately funded. This lack of documentation can impair transparency.

While the Energy Trust is not a government organization, it operates in a similar environment and has many of the same constraints expected of it. The use of Public Purpose funds and oversight of the Oregon Public Utility Commission require Energy Trust to operate in an open and transparent manner similar to that of a government agency. For that reason, it is important to provide interested parties with the rationalization of how specific decisions are made. Documenting and sharing details concerning the analysis used to determine what strategies, programs, and activities will best achieve desired results that are readily available through the current selection process should be reported. Documentation should provide information on overall strategies, including those that were not included in the first iteration of the budget. Sufficient detail should be provided so that interested parties, including those not involved in the Energy Trust budget process, can understand why specific approaches were included or excluded from the budget. Documentation should include qualitative rankings and a clear cut-off between what was included and excluded. This information should be posted on the Energy Trust website so that it is available to all interested parties.

Recommendation #3:

Energy Trust should develop a formal process to document and report how and why specific strategies and approaches are selected for the annual budget and corresponding action plan.

Resource Allocation

Currently, the Energy Trust is tasked with accelerating efficiency in the commercial, industrial, and residential sectors. Although the Oregon Public Utility Commission (OPUC) establishes annual performance goals, no specific distinction between savings in these sectors is made. The OPUC Performance Measures include the following statement[4]:

"Savings targets for energy efficiency programs and development targets for renewable resource programs are set at an aggregated level rather than at a sector level to allow the Energy Trust flexibility to pursue programs in different sectors as market forces and

[4] Proposed 2008 – 2009 Performance Measures for the Energy Trust of Oregon

technological advances would dictate. Implicit in these target levels is the assumption that Energy Trust will provide programs for all customer sectors, including those that have historically been underserved."

While the OPUC does recognize the need to provide programs for customers in all sectors, it does not set sector level performance measures. As a result, Energy Trust has formally adopted a policy to allocate its resources to all three sectors. The following principles are included in the Energy Trust Equity Policy[5]:

- Make programs available to all electricity and gas customer classes by implementing programs in the residential, commercial, and industrial sectors.
- Design and implement programs for private utility electricity and gas customers that have not had access to prior conservation programs and/or where penetration rates have been historically low, such as rural or agricultural customers.
- Monitor penetration rates for all programs and adjust them as needed to ensure that all private utility electricity and gas customer classes are being served. Energy Trust will pay particular attention to programs for underserved electricity and gas customers to ensure that they achieve penetration rates that are comparable to other successful programs operating to serve these markets.
- Improve program effectiveness to increase conservation savings and reduce costs, thereby making it possible to serve more households and businesses.
- Improve and disseminate information about the cost and availability of conservation in each private utility electricity and gas customer class.

This approach has historically worked well. However issues of sector equity still arise when year-to-year funding is limited. Allocation of resources issues are sometimes raised regarding the relative generosity and value of incentives for various customer groups.

Allocating resources to all three sectors may not always yield the greatest savings or the lowest cost. Reasons for allocating resources to all sectors include achieving a more balanced portfolio to weather economic downturns, and maintaining the necessary infrastructure to acquire all savings over a number of years. For example, the recent economic downturn has reduced the amount of capital available for funding of large scale industrial projects. These large scale projects have historically achieved higher levels of savings at a lower cost. Due to the scale of these projects, it may be several years before

[5] 4.08.000-P Equity Policy

funding is available. While activity may be sporadic from year-to-year, maintaining infrastructure and capacity is consistent with a longer-term strategy.

In this example, resources are allocated to a program that may be underperforming in the short-term as part of a long-term strategy. The justification for this resource allocation is strategic rather than for the purpose of maintaining sector equity. The merits to this approach should be demonstrated through a long-range cost/benefit analysis. Merely citing sector equity as justification for a program that appears to be underperforming impairs transparency in the resource allocation process.

While the Energy Trust's policy provides guidance in the form of the above listed principles, it does not establish quantitative criteria for maintaining sector resource allocation. However, it was noted throughout interviews with staff that Energy Trust attempts to roughly maintain an approximately equal distribution between the three sectors. The following table summarizes Energy Trust's 2009 budget for energy efficiency programs by sector.

2009 Energy Efficiency Budget

	Electric		Gas		Total	
	$	%	$	%	$	%
Commercial	28.1	36%	5.8	30%	33.9	35%
Industrial	21.4	27%	1.1	6%	22.5	23%
Residential	28.4	36%	12.7	65%	41.0	42%
Total Energy Efficiency	77.9	100%	19.5	100%	97.4	100%

Although this resource allocation approach has provided Energy Trust with a method to achieve its established goals, it may not be providing the greatest return on the entity's investment. Consideration should be given to identifying programs that could potentially achieve greater savings regardless of the sector.

The least-cost-option in one sector may in fact be more expensive than the highest-cost-option in another sector. For example, the industrial sector has historically had the lowest cost of savings. However, some of the lowest-cost Energy Trust programs have been

residential market transformation programs, and some industrial transactions are cost-effective, but expensive.

2009 Budgeted Energy Efficiency Levelized Costs

	Electric Savings		Gas Savings	
	Levelized Cost ($/kWh)		Levelized Cost ($/Therms)	
	Conservative	Stretch Goal	Conservative	Stretch Goal
Commercial				
Business Energy Solutions – Existing Buildings	0.027	0.020	0.456	0.342
Business Energy Solutions – New Buildings	0.041	0.030	0.592	0.444
Mkt Transformation (Alliance)	0.099	0.074	N/A	N/A
Industrial				
Production Efficiency	0.035	0.026	0.582	0.437
Mkt Transformation (Alliance)	0.018	0.013	N/A	N/A
Residential				
Home Energy Solutions – Existing Homes	0.043	0.032	0.724	0.543
Home Energy Solutions – New Homes & Products	0.068	0.051	1.203	0.902
Mkt Transformation (Alliance)	0.007	0.005	N/A	N/A

Maximizing savings is consistent with the Energy Trust mission "To change how Oregonians produce and use energy by investing in efficient technologies and renewable resources that save dollars and protect the environment." The maximization of energy savings reduces the need for additional energy production thereby reducing energy costs for all Oregonians. Allocating resources to all three sectors may limit Energy Trust's overall energy savings and their ability to respond to a rapidly changing environment. To maximize efficiency and effectiveness, programs should be evaluated across the sectors to achieve the lowest overall cost of savings over the long-term. While the Energy Trust's Equity Policy does address the OPUC's desire to provide programs to customers in all sectors, it does not necessarily meet the need to maintain flexibility. Both of these objectives have been articulated through the statement included in the OPUC performance measures. Adopting a more restrictive policy than is necessary my limit the Energy Trust's ability to achieve its overall objective.

Recommendation #4:

Energy Trust should consider allocating resources to efficiency programs to achieve the greatest overall saving with the lowest overall cost.

Is Energy Trust sufficiently open, transparent, and inclusive in its decision-making and other processes helping to gain public confidence that it is effectively accomplishing its mission?

Through its decision making process, Energy Trust of Oregon provides multiple opportunities for stakeholder input. The primary decision making body at Energy Trust is the Board of Directors. Board meetings are held approximately eight times per year and are open to the public with the exception of executive sessions to discuss various matters such as personnel issues. The board currently consists of up to 13 voting directors, one non-voting ex officio member from the Oregon Public Utility Commission, and one non-voting special advisor from the Director of the Oregon Department of Energy (ODOE). Directors are elected by a majority vote of board members in office at the time. Directors serve rotating three-year terms and may serve successive terms. Agendas and meeting minutes for all board meetings are available on Energy Trust's website.

Two standing advisory committees, the Conservation Advisory Council (CAC) and the Renewable Energy Advisory Council (RAC), provide additional opportunities for stakeholder input. These advisory councils assist the board of directors and staff in developing and implementing strategic plans, adopting policies, establishing budgets and implementing programs. These councils each conduct public meetings approximately 10 times per year. The Conservation Advisory Council currently consists of 17 members representing the following stakeholder groups:

- Fair and Clean Energy Coalition
- Oregon Department of Energy
- Building Owners and Managers Association
- Industrial Customers of Northwest Utilities
- International Brotherhood of Electrical Workers
- Oregon Public Utility Commission
- NW Power Planning and Conservation Council
- City of Portland Bureau of Planning and Sustainability
- Pacific Power
- Oregon Remodelers Association
- Bonneville Power Administration
- NW Natural
- Northwest Energy Efficiency Council

- Portland General Electric
- Northwest Energy Coalition
- Eugene Water and Electric Board

The Renewable Energy Advisory Council currently consists of 15 members representing the following stakeholder groups:

- Pacific Power
- Oregon Department of Energy
- Bonneville Environmental Foundation
- EnXco
- Oregon Public Utility Commission
- Northwest Environmental Business Council
- Portland General Electric
- Clean Energy Services
- Northwest Power and Conservation Council
- Renewable Northwest Project
- Bonneville Power Association
- Energy Trust Board of Directors
- Weyerhaeuser
- University of Oregon
- Solar Monitoring
- Oregon Solar Energy Industries Association

As noted previously, decisions are also made through the budget development process. While this process does allow for stakeholder input in its later stages through Board and Advisory Council meetings, preliminary decisions are not sufficiently documented. A formalized process for evaluating and ranking program proposals would improve transparency in the decision making process.

Energy Trust operates in an environment that requires open, transparent decision making. Its budget process, board meetings, and extensive reporting requirements effectively establish a mechanism for inclusive stakeholder input. However, the relationship between the utilities and Energy Trust has changed considerably since its inception. Energy efficiency and renewable energy goals become increasingly important to utilities as they commit to these projections in their Integrated Resource Plans submitted to the OPUC. Customer perceptions and awareness of the role the utility plays in helping customers to access renewable energy and conservation programs. The perceptions also impact the utilities' J.D. Power and Associates customer

satisfaction ratings, an important performance measure for the utilities. Utilities also believe they have a specific responsibility to represent their customers and that both now and in the future, there will be a greater focus on energy conservation, renewable energy and carbon regulation.

The initiatives undertaken by Energy Trust have evolved to being an integral part of the utilities business model. This relationship elevates the utility to a higher level of stakeholder and creates the need for greater participation in Energy Trust's decision making process. Because the Board's focus is on policy that has a tremendous impact on the utilities, greater input into strategic discussions appears warranted. Increased involvement by utilities will increase understanding and improve communication and awareness at the board level and help assure Energy Trust continues to successfully define and achieve its objectives.

Given the complexity of energy and industry, it may be advantageous to gain more knowledge and insight of experience of utilities. A number of options exist to increase utility input:

- Creation of utility voting seats (one seat chosen by the utilities or one seat per utility).
- Creation of utility non-voting seats (one seat chosen by the utilities or one seat per utility).
- Creation of an advisory committee specifically focused on assuring utility input is received.
- Creation of a quarterly, semi-annual, etc. opportunity to allow communication at strategic level.

Recommendation #5:

Energy Trust should consider increasing utility involvement in strategic discussions by providing a greater opportunity for input and dialogue on issues relating to energy efficiency and renewable energy.

Are evaluations funded by the Energy Trust objective, appropriately scoped, sufficiently resourced, independent, and timely?

Energy Trust has initiated multiple program evaluations of its various programs including:

- Building Efficiency
- New Building Efficiency
- Production Efficiency
- Home Energy Solutions
- Efficient New Homes
- Solar Photovoltaic Impact Evaluation
- Contracting and Delivery Models
- Annual Trade Ally Surveys
- Gas Furnace Market Transformation
- Small Compressed Air Market Assessment
- Management Audit

Evaluations are primarily conducted by independent, third-party analysts and focus on specific scopes of work established by Energy Trust and other parties.

Energy Trust conducts two primary types of evaluations – process and impact. Evaluations are primarily conducted by contractors to Energy Trust. Process evaluations focus on a thorough review and assessment of the efficiency of specific programs, whether they meet established goals, and are effective in their delivery. Impact evaluations center on determining what outcomes have resulted once the programs have been in place. Additionally, Energy Trust evaluations estimate the proportion of savings/generation that would have happened without incentives and deducts that amount from savings/generation totals. Known, as "free riders," this group of participants is also compared to the "spillover" effect, where consumers influenced by Energy Trust programs take actions without Energy Trust incentives.

A number of future evaluations are also anticipated:

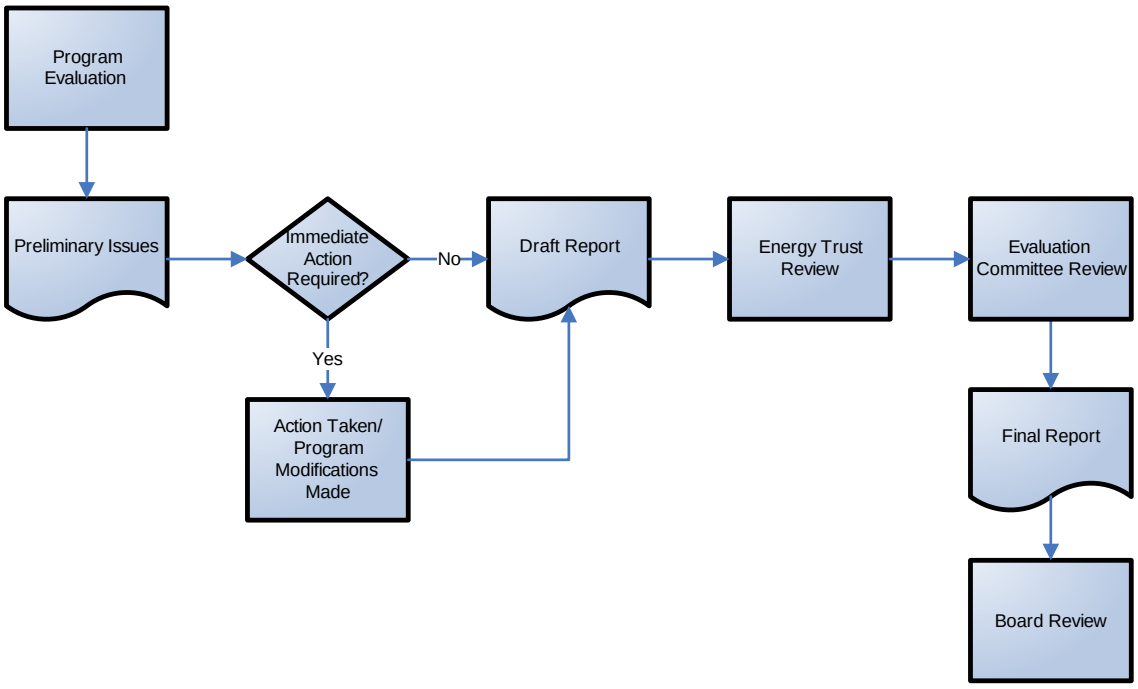
Program	Evaluation/Market Research	Quarter
Residential		
Home Energy Solutions	2007 and 2008 Process and 2007 Impact 2008 Process and Impact	Q4 2009 Q2 2010
Billing Analysis Review	White Paper on Billing Analysis	Q4 2009
Refrigerator Recycling	Process	Sept 2009
Efficient New homes	EPS Review Process Evaluation	Oct 2009 Q4 2009
Energy Star Homes	NEEA Impact Evaluation	Q3 2009
Ductless Heat Pump NEEA	Metering Report Lab Monitoring Memo Interim Billing Analysis Final Billing Analysis Process Evaluation 1 Process Evaluation 2	Q4 2010 Q4 2009 Q4 2010 Q4 2011 Q4 2009 Q2 2010

	Process Evaluation Final Final Report	Q4 2011 Q4 2011
Consumer Electronics NEEA	Baseline Study Impact Evaluation	Q3 2009 Q2 2010
Multifamily Billing and Savings Analysis	Report	Q4 2009
Segmentation Study	Report	Q2 2009
Residential Awareness Survey	2009 Survey Results	Oct 2009
Home Energy Monitor Pilot	Final Report (1 year post)	Oct 2009
Air and Duct Sealing-only Billing Analysis	Final Report	Q4 2009
Commercial		
Existing Buildings	2009 and 2010 Process and 2008 and 2009 Impact Evaluation : • RFP • Interim Report 1 • 2008-9 Impact and 2009 Process Report • Interim Report 2 • 2010 Process report	 Sept 2009 Q1 2010 Q2 2010 Q3 2010 Q1 2011
New Buildings	2009-10 Process and 2008-2009 Impact • RFP • Interim Report 1 • 2008-9 Impact and 2009 Process report • Interim Report 2 • 2010 Process Report	 Sept 2009 Q1 2010 Q2 2010 Q3 2010 Q1 2011
Existing Commercial Baseline Update (CBSA)	NEEA Report	Q3 2009
Commercial Lighting Market Assessment	Final Report	Q4 2009
Vending Machines	Research West Coast United Front	In process
Industrial		
Production Efficiency	2008 PE Impact and Process Report	Q2 2010
PE Pilots	• PE: Kaizen Pilot • PE: Compressed Air Pilot • PE: Continuous Energy Improvement	Q4 2009 Q3 2010 Q4 2010
Industrial and Commercial		
C & I Lighting Market Assessment	Final Report	Q4 2009
Fast Feedback Participant Survey Pilot	Interim Report Final Report	Oct 2009 Feb 2010
Renewables		
Solar	Internal Solar Market Review	Q4 2009
Solar Home Valuation Extension	Process Evaluation	Q3 2009
Other		
Trade Ally Survey	2010 Trade Ally Report	Q2 2010
Staff Satisfaction Survey	2010 Staff Satisfaction Report	Q2 2010
Community Pilots	Corvallis Process Evaluation	Q3 2009
SB 838	Process Evaluation	Q3 2009
Clean Energy Fund	Evaluation Plan Process Evaluation	Q3 2009 Q3 2010
RTF End Use Load Shape Study		Q3 2009
Ongoing		
Evaluation Committee Meeting	Monthly Meetings	
Utility Billing Data	• Data sharing agreement Amendments • Weather Normalize All · Residential · C&I	 Q4 2009 Q4 2009

	• Obtain bills for participants that are not contained in current data set • Geocode all account addresses	 Q4 2009
FastTrack/Goldmine	• Group measures into Hierarchy codes • Geocode participant addresses • Review for anomalous data • Measure Attributes continuous improvement	Q4 2009 Q4 2009 Q4 2009 Q4 2009
Market Intelligence Database Development and Analysis	Merge FT and utility bills with: • Metroscan tax assessor files • Census tract and region files • InfoUSA database of businesses • Other databases (e.g. WWT plants) Residential awareness survey, ODOE BETC and RETC participants etc.) • Analysis of Data	 Pilot July 2009
Communications & Customer Service Support	Solutions Campaign Analysis Website Survey Home Energy Makeover Support	

Over time, the evaluation process has undergone multiple changes. Energy Trust's current philosophy is continuous program improvement and independent reviews and analyses provide the ability to identify opportunities to redesign or refocus programs. Currently every major program is evaluated for every program year, although sometimes a single evaluation covers more than one year.

In an attempt to ensure that evaluation results can be used to identify program changes and assist in program design and planning, Energy Trust has requested evaluators to provide preliminary results as soon as they are identified. Draft evaluations are initially reviewed by the evaluation manager for clarity and completeness. A technical review is performed in parallel by Energy Trust program managers and evaluation staff and the Energy Trust Evaluation Committee. This committee, consisting of two outside energy experts and four board members, meets monthly (if necessary) to discuss conclusions and actions. The final report is reviewed by the Energy Trust Board. Final reports are also posted on the Energy Trust website.



A review of a sample of previous evaluations funded by Energy Trust indicated that they are objective, appropriately scoped, sufficiently resourced, and independent. Evaluation results provided reliable, meaningful information to various users including program personnel, Energy Trust management, OPUC, and the Oregon Legislature. Methodologies appear to be appropriate and assessment models applicable. However, two areas could be strengthened - timeliness and follow-up.

Timeliness:

Although Energy Trust has modified its evaluation process to receive interim results - specifically any issues relating to the need for immediate program changes - there continues to be a lag in the receipt of timely information. Impact evaluations rely on access to utility data and the need for historical comparisons using pre and post meter usage data. The actual reporting of results can occur almost a year later. Evaluators may be reluctant to provide preliminary information until they are certain of the validity, further impacting timeliness. The value of the results and recommendations is lessened the longer the data is unknown.

For example, the evaluation phase of the *Impact and Process Evaluation of the 2006-2007 Building Efficiency Program* was completed in October 2008. However, a final report was not issued until August 2009 and was presented to the Energy Trust Board at its November 2009 meeting. Although the evaluation was completed in a timely manner, the timeliness of the reporting of the information lagged. Other examples include:

Evaluation	Analysis Completed	Report Completed
Impact and Process Evaluation of the 2006-2007 Building Efficiency Program	October 2008	August 2009
Impact and Process Evaluation of 2006 and 2007 New Building Efficiency Program	2008	June 2009
Evaluation of Building Efficiency Program 2004 & 2005	2006	February 2008
Impact Evaluation of New Building Efficiency Program for 2004 and 2005	2006	February 2008
2006 Production Efficiency Program Process and Impact Evaluation	2008	August 2008
2003-2005 Production Efficiency Program Evaluation Report	2007	December 2007

Program evaluations greatly improve the management and effectiveness of an organization and its programs. Well-run organizations and effective programs are those that demonstrate the achievement of results. Results are derived from good management which is based on good decision making. Good decision making depends on good information and careful analysis of the data.

As mentioned previously, our review of evaluations found each to be beneficial and applicable in identifying program success and opportunities for improvement. However, evaluations lose their effectiveness and benefits if results are not presented in a timely manner. To enhance timeliness, Energy Trust should reassess its current approach to evaluations and consider such process modifications as: revising the scope of assessments to decrease time required for completion, adjusting sample sizes/confidence levels, etc.

Recommendation #6:

Energy Trust should reassess its current approach to evaluations to identifying opportunities to improve timeliness.

Follow-up:

Evaluations of Energy Trust programs and operations provide specific recommendations to improve efficiency, effectiveness, and success. Energy Trust provides a written staff response to each evaluation and also includes a specific comment to individual recommendations. However, no detailed action plans or timeframes are provided.

Energy Trust's current evaluation process also does not include any specific follow-up to the status of recommendations. When used effectively, evaluations promote a culture of organizational learning and enhance accountability for results. In order for evaluations to fully play this role, management needs to document and report the status of evaluation findings, recommendations, and lessons learned. A formal follow-up process provides interested parties - both internally and externally - with an understanding of the actions taken by Energy Trust to realize efficiencies or cost savings as a result of identified recommendations.

Energy Trust has endorsed the concept of conducting evaluations to obtain information about its programs to make sound decisions about the implementation of those programs. A follow-up process provides a mechanism to report actions taken, assure accountability, and justify value for dollars spent.

Energy Trust should develop a formal process to provide a consolidated response to the reported findings, conclusions, and recommendations, as well as planned corrective actions. Specifically, Energy Trust should:

- Assign responsibility for the implementation of recommendations accepted to a single person.
- Develop an action plan which includes a timetable for implementation and clearly outlines roles and responsibilities for the implementation of each recommendation accepted.
- Include in the plan, mechanisms to monitor and report on results against key indicators where they have been identified in the evaluation.

- Allocate sufficient resources to implement the plan and set realistic and achievable timeframes and targets.
- Have the plan endorsed by the Executive Director and, where appropriate, the Board.
- Incorporate the plan in other planning documents such as the business plans or performance agreements.
- Use the existing Audit or Evaluation Committees to monitor and report on progress.
- Provide regular reports on the progress of implementation of the recommendations to the Executive Director and where appropriate, the Board.

Recommendation #7:

Energy Trust should:

- **include, as appropriate, detailed action plans and timeframes as they pertain to specific evaluation recommendations, and**
- **develop a follow-up plan for evaluation findings and recommendations.**

Does Energy Trust have the appropriate flexibility and scalability to incorporate new innovations and opportunities into its work as the markets for energy efficiency and renewable energy continue to diversify and grow?

Energy Trust has worked diligently at analyzing its performance against identified measures, ensuring resources are dedicated to effective programs, and ensuring it is prepared to meet future needs.

Growth has occurred within Energy Trust since its inception in 2002. Natural gas programs were first established in 2003 through an OPUC tariff allowing NW Natural to collect a public purpose charge from its ratepayers to fund their efficiency programs. In 2003, NW Natural asked the Energy Trust to administer its energy efficiency programs, and Cascade Natural Gas had the same request in 2006. With a pilot program launched October 2009 in conjunction with NW Natural, Energy Trust's service territory has expanded its customer base into Clark County, Washington to serve residential and commercial NW Natural gas customers there. In 2007, the Oregon Legislature allowed Pacific Power and PGE to seek additional electric efficiency funding and avoid purchasing more expensive electricity. This led to additional funding of $21.8 million for electric efficiency programs administered by Energy Trust starting in 2009.

Energy Trust is also considering applying for federal grant money available through the stimulus package. Energy Trust will need to weigh the benefits of applying for federal grant money with the extensive reporting requirements imposed on those who directly receive these monies. However, the funding could allow Energy Trust to venture into new areas of renewable resources, energy efficiency and conservation.

In an effort to respond to economic and market conditions, Energy Trust creates an annual budget to fund areas that it believes will be equitable to all customer segments and will help meet their mission and goals in the most cost-effective, and efficient means possible.

To ensure Energy Trust staff stays informed on current and emerging renewable energy and energy efficient technologies, it subscribes to industry periodicals, sends staff and management to training and trade shows, and is a member of industry associations. In addition, the Program Management Contractors (PMC's) are experts in energy efficiency and conservation, (note: there are no renewable energy PMC's) who keep up-to-date on emerging technologies, and share what they have learned with program staff. Staff participates in the Northwest Energy Efficiency Alliance (NEEA) emerging technology advisory group. Energy Trust also helps fund NEEA's emerging technology field testing program in addition to its own efforts.

The Energy Trust's current business model and organizational structure appear to allow for the appropriate flexibility and scalability to incorporate new innovations and opportunities. However there are certain constraints that affect its ability to invest in new and emerging technologies:

- **Large Customer Efficiency Funding**
  SB838, the 2007 the Oregon Renewable Energy Act, includes no revenue increases from customers using more than 1 aMW a year. Although data is incomplete regarding these sites, it is estimated that there are approximately 94, of which 26 are self-directing on the efficiency side, 39 on renewable, and 14 doing both.

  To meet Energy Trust's Integrated Resource Plan goals, savings from this group will need to increase in the future. However, these larger customers are also able to self-direct under SB 1149 allowing them to opt out of the Energy Trust portion of electric energy efficiency public purpose fund collections and elect to do their own projects

instead[6]. The IRP deployment scenarios concerning savings forecasts indicate an increase in savings from sites using more than 1 aMW over time:

	2010	2011	2012	2013	2014
aMW	12	13	14	18	18

Energy Trust projects that the overall five-year growth rate (a 50% increase in annual savings) is not likely to be feasible with large customers' historic shares of SB1149 spending alone. Achieving this projected growth rate will likely require some revenue increase, potentially from large customers. Policy and legislative changes would be necessary for larger customers if additional revenue to fund acquisition of savings from larger customers was considered to help meet these IRP targets.

- **Complexity and Multiplicity of Funding and Contractual Processes**
  SB1149 sets a fixed charge for electric efficiency while SB838 allows electric utilities to add funding, through proposals developed through the IRP Process that are reviewed and approved by the OPUC. The Energy Trust's agreements with gas utilities also base funding levels on proposals developed similarly through the IRP process that are reviewed and approved by the OPUC. Funding decisions for each utility are on schedules that are sometimes staggered and sometimes overlapping. The complexity of this planning, oversight, and funding process can limit Energy Trust resources for planning program enhancements. This complexity is also impacted by the diversity of funding vehicles, increased utility, legislative, and stakeholder interest in detailed, separate oversight processes, additional legislative mandates and initiatives, and the need to integrate with new federal stimulus funding initiatives.

  In addition to creating reporting complexity and burdens on information, financial, accounting, and reporting systems, these components fragment programs. Initiatives have different goals, stakeholders, accountabilities, and reporting frameworks adding time and inefficiencies. Combined, these factors make it more difficult to focus time and effort on goals to accelerate savings and renewable generation in efficient, effective, and consistent ways while maintaining reasonable administrative costs.

- **Limited Renewables Funding**
  Renewable energy investments can be constrained by SB 1149 funding levels. Energy Trust believes that if tax credits are reduced and/or if the BETC sunsets in 2012 as is currently planned the cost to develop economically viable renewables projects will significantly increase. This may result in fewer completed projects and slower development of small renewables energy industries. Additionally, limited annual funding impacts the ability of Energy Trust to pursue higher-cost, longer-term, higher-payoff approaches to developing renewable markets.

- **Co-Funding of Renewable Projects with Utilities**
  Energy Trust currently believes that, at times, the most cost-effective way to gain experience and build market infrastructure for smaller renewables is to pay enough to

[6] Provided such projects are approved by the Oregon Department of Energy

make industry's early projects competitive with larger renewables for utility purchase under the Renewable Energy Standard. Whether Energy Trust continues to play a role in supporting utility acquisition of renewable energy projects is currently under review by the OPUC, with legal interpretations being refined. The outcome is not yet known. Absent this type of co-funding, Energy Trust may pay more for certain classes of projects resulting in fewer projects being completed.

- **Direct Use Renewables**
  Renewables that directly replace space or water heat or electric lights are considered to be efficiency measures under SB1149. As such, they must meet cost-effectiveness tests and are eligible for smaller incentives than are sometimes available by paying above market costs for renewable energy. Energy Trust has achieved modest success in implementing solar hot water systems and significant success with commercial daylighting. However, minimal progress has occurred with passive solar heating, which is more of a custom measure for homes. Because renewable energy funding is finite and a significant demand for it exists, treatment of such projects as a renewable may or may not increase available funding.

- **Current Laws Limit Scope and Opportunity**
  Energy Trust serves the majority of electric customers and gas customers in the state but is unable to serve public utility customers or those customers who use oil, propane, or wood. Although it coordinates with others who work to serve those markets, a more comprehensive and effective approach would be to fully-integrate all-fuel programs. Increased funding to help conserve these additional resources would have to be identified through a change in legislation and corresponding funding mechanisms.

Recommendation #8:

Policy makers should consider pursuing modifications to existing legislation concerning funding limitations and requirements.

Appendix

Management Review and Evaluation

Energy Trust Performance – FY2006-FY2008

	FY 2006		FY 2007		FY 2008	
	OPUC Performance Measure	**Energy Trust Results**	**OPUC Performance Measure**	**Energy Trust Results**	**OPUC Performance Measure**	**Energy Trust Results**
Electric Efficiency	At least 20 aMW electricity saved	29.5 aMW electricity saved	At least 20 aMW electricity saved	34 aMW electricity saved	At least 31 aMW electricity saved	31 aMW electricity saved
	Average levelized life-cycle cost not exceeding 2¢/kWh	1.6¢/kWh average levelized life-cycle cost	Average levelized life-cycle cost not exceeding 2¢/kWh	1.4¢/kWh average levelized life-cycle cost	Average levelized life-cycle cost not exceeding 3.5¢/kWh	2.1¢/kWh average levelized life-cycle cost
Natural Gas Efficiency	At least 700,000 annual therms saved	1.4 million annual therms saved	At least 700,000 annual therms saved	2.0 million annual therms saved	At least 1.8 million annual therms saved	2.4 million annual therms saved
	Average levelized life-cycle cost not exceeding 30¢/therm	28.4¢/therm average levelized life cycle cost	Average levelized life-cycle cost not exceeding 40¢/therm	33¢/therm average levelized life cycle cost	Average levelized life-cycle cost not exceeding 60¢/therm	45¢/therm average levelized life cycle cost
Renewable Resource Development	9 aMW new utility scale projects	Behind 2006 targets; expected to exceed by 2007 with projects under construction for Pacific Power and in development for PGE*	9 aMW new utility scale projects	16 aMW from new utility scale projects	9 aMW new utility scale projects	25.6 aMW from utility scale projects
	3 aMW new small scale projects		3 aMW new small scale projects	.09 aMW from small scale projects	3 aMW new small scale projects	1.8 aMW from small scale projects
Financial Integrity	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion
Program Delivery Efficiency	Administrative and program support costs below 11% of revenues	Administrative and program support costs were 6.5% of public purpose revenues	Administrative and program support costs below 11% of revenues	Administrative and program support costs were 6% of public purpose revenues	Administrative and program support costs below 11% of revenues	Administrative and program support costs were 5.3% of public purpose revenues
Customer Satisfaction	Reasonable customer satisfaction rates	Documented high levels of customer satisfaction	Reasonable customer satisfaction rates	Documented high levels of customer satisfaction	Reasonable customer satisfaction rates	Documented high levels of customer satisfaction
Benefit/Cost Ratios	Value of energy saved must exceed cost	Value of energy saved exceeded cost	Value of energy saved must exceed cost	Value of energy saved exceeded cost	Value of energy saved must exceed cost	Value of energy saved exceeded cost

Energy Trust Performance – FY2004-FY2005

	FY 2004		FY 2005	
	OPUC Performance Measure	**Energy Trust Results**	**OPUC Performance Measure**	**Energy Trust Results**
Electric Efficiency	N/A	23.77 aMW electricity saved	At least 20 aMW electricity saved	27.15 aMW electricity saved
	N/A	1.7¢/kWh average levelized life-cycle cost	Average levelized life-cycle cost not exceeding 2¢/kWh	1.3¢/kWh average levelized life-cycle cost
Natural Gas Efficiency	N/A	737,730 annual therms saved	At least 700,000 annual therms saved	752,807 annual therms saved
	N/A	25.5¢/therm average levelized life cycle cost	Average levelized life-cycle cost not exceeding 30¢/therm	28¢/therm average levelized life cycle cost
Renewable Resource Development	N/A	27.093 aMW from new projects	15 aMW new utility scale projects	4.95 aMW from new utility scale projects
Financial Integrity	N/A	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion	Unqualified Financial Audit Opinion
Program Delivery Efficiency	N/A	Administrative and program support costs were 6.8% of public purpose revenues	Administrative and program support costs below 11% of revenues	Administrative and program support costs were 6.8% of public purpose revenues
Customer Satisfaction	N/A	N/A	Reasonable customer satisfaction rates	Documented high levels of customer satisfaction
Benefit/Cost Ratios	N/A	N/A	Report benefit/cost ratios for larger conservation acquisition programs for 2005	Reported benefit/cost ratios for larger conservation acquisition programs for 2005

Management Responses
TKW Management Review and Evaluation Report

March 26, 2010

Talbot Korvola & Warwick (TKW) completed a Management Review and Evaluation Report for Energy Trust of Oregon, in which a number of recommendations were made. All recommendations and corresponding management responses appear, as follows:

1. Energy Trust should work with the Oregon Public Utility Commission (OPUC) to eliminate the opt-in and opt-out provisions of the current information transfer policy.

   Response: We agree with the review's analysis and recommendation, and have been actively encouraging that next steps be taken with the utilities and OPUC to address these concerns. OPUC staff concur that this is a high priority project for 2010. We expect these issues to be fully resolved through a staff-led OPUC public workshop process engaging the utilities, Energy Trust and all interested parties.

2. Energy Trust, after its completed redesign is in place, should conduct an administrative support staffing level needs assessment.

   Response: Energy Trust agrees that an assessment of staffing should be conducted. The organization conducts workload capacity assessments on a regular basis as part of its formal individual annual performance work plan development process. The mid-year work plan check-in process and other recurring meetings between staff and managers provide opportunities to reassess priorities, revise workload demands, and develop alternatives, as needed. Any requests for additional staffing, both administrative and operational, result from such assessments. Detailed justifications and position descriptions for any new positions are provided as part of the annual budget process and subject to board consideration for approval. This process will occur this fall after the structure of the redesign has been in place for several months and will include an assessment of administrative staffing levels. In the interim, managers have been asked to identify any administrative needs currently unmet that could potentially be addressed in other ways between now and the next budget preparation cycle.

   Energy Trust agrees that additional staff will likely be required should Energy Trust become the recipient of ARRA or other federal funds related to our mission. However, until the specific nature and scope of such potential work is better known and evaluated in more detail, it is not clear whether the impact would be on administrative staff only and/or impact other tasks and responsibilities throughout the organization. Until Energy Trust actually pursues and receives direct ARRA funding, we continue to collaborate with other organizations who are direct funding applicants and recipients and to monitor compliance requirements, which appear to be different for different

opportunities. We understand that there may be a time when the benefits of federal or other opportunities outweigh the costs associated with administrative or other requirements and a deeper assessment would then be warranted and completed.

3. Energy Trust should develop a formal process to document and report how and why specific strategies and approaches are selected for the annual budget and corresponding action plan.

Response: Energy Trust's strategies and approaches to achieve savings and generation goals are currently informed by regional resource assessments, utility integrated resource plans, funding levels and State policies. Energy Trust's strategic plan guides overall direction and specific actions at the customer and technology levels. The two-year action plan and budget details the allocation of resources to implement the strategic plan and achieve shorter term savings and generation targets. This process is both formal and highly transparent.

Over the course of the year, we utilize Energy Trust's Conservation and Renewable Advisory Councils to share evaluation and research findings, vet new ideas and re-define actions. The advisory councils consistently provide key input for sector strategies and help identify and shape alternative and new approaches.

As part of targeted annual outreach to a variety of interested parties, individual presentations are made to the officers and staff of each utility regarding the status of our accomplishments, planned strategies, draft budget and action plan. A public hearing is sponsored each year by the OPUC to ensure opportunities for other stakeholders to comment on Energy Trust draft plans and budget. Feedback received and staff responses is summarized each year as part of the budget and action plan development process and provided to the board for their consideration prior to adoption of the final budget and plan.

After a comprehensive and transparent process with significant input from stakeholders, the Advisory Councils and the public, Energy Trust's board adopted a new five-year strategic plan in December, 2009 and a corresponding two-year action plan and budget for its initial implementation.

In response to this recommendation, Energy Trust will more thoroughly document the selection criteria used to evaluate and adopt major budget initiatives.

Also in response to this recommendation, Energy Trust will consider other ways to engage stakeholders as part of our annual budget and action plan development process to improve the communication of those decisions, such as:

- Summarize and review information presented at the Advisory Committees during the year, highlighting changes

- Provide summary program-specific information on relative cost per kWh and cost per therm of savings acquired
- Provide technology specific information on renewable energy program achievements
- Specifically link proposed actions to the strategic plan
- Continue to invite and respond to public comments received

4. Energy Trust should consider allocating resources to efficiency programs to achieve the greatest overall saving with the lowest overall cost.

Response: Energy Trust's Board of Directors has adopted an equity policy to guide the allocation of resources among energy efficiency programs. As a result, Energy Trust makes programs available to all electricity and gas customer classes by implementing programs in the residential, commercial, and industrial sectors. Within this policy, Energy Trust strives to obtain the greatest savings with the lowest cost. When presented with opportunities to enhance the amount of low cost savings through special projects, the organization takes advantage of those opportunities where reasonable. Energy Trust believes this allocation of resources creates a healthy tension between short-term and long-term goals and between achievable and cost-effective savings. The equity policy is reviewed on a regular basis by a subcommittee of the board of directors. The allocation of resources among programs is also considered by the full board in its approval of the annual action plan and budget.

Energy Trust is charged with acquiring *all* cost-effective efficiency measures that reduce the overall costs to utilities of providing electricity and natural gas. As part of meeting ambitious Integrated Resource Plan targets for each utility, we are committed to accelerating acquisitions at an already challenging rate. We are attempting to do so at the lowest possible overall cost.

Questions of minimizing cost vs. achieving equity between different ratepayer groups were more meaningful when Energy Trust funding was a fixed percentage of electric revenues. Over time efficiency funding has been distributed nearly equally across residential, commercial and industrial/agricultural sectors, corresponding to the opportunities for cost-effective savings acquisition proven in each sector. Such choices are made consciously to balance opportunities to acquire savings with OPUC performance measures such as levelized costs, anticipated industrial "mega-projects", the economy, the status of projects in the pipeline and other factors.

Industrial customers continue to receive benefits far greater than their direct public purpose fund contributions given that such savings are often at the highest volume and lowest cost and benefit all ratepayers. For example in 2007, revenue and expense by electric efficiency sector were:

	Revenue		***Expenses***	
Commercial	$15.2	37.5%	$9.5	26.0%
Industrial	$5.2	12.9%	$12.2	33.6%
Residential	$20.1	49.6%	$14.7	40.4%

There are also initiatives for harder-to-reach consumers, some of which have lower costs and some of which have higher costs per kWh or therm. Reaching these markets is an integral part of achieving the overall objective. This overall approach has not prevented Energy Trust from reaching its annual goals at a very reasonable cost.

5. Energy Trust should consider increasing utility involvement in strategic discussions by providing a greater opportunity for input and dialogue on issues relating to energy efficiency and renewable energy.

Response: Beginning in the spring of 2009, the board policy committee led an effort to analyze and discuss different options to further engage utility representatives in joint discussions and planning opportunities of a strategic nature. In December, 2009, the board formally adopted guidelines for a Strategic Utility Roundtable to focus utilities and other stakeholder interests on strategic Energy Trust issues. The Roundtable met for the first time in January, 2010, and is scheduled to meet again in April. Utilities are also expected to be key participants in the board of directors' annual strategic planning meeting in June.

Energy Trust and the utilities remain committed to this approach for a two-year period, to determine if it is an effective way to promote strategic communications. In addition, Energy Trust has recommended individual joint planning sessions with each utility to further build upon existing efforts and strengthen both coordination and collaboration. This suggestion was met with enthusiasm and the first such meeting has taken place in March 2010 with others to follow.

6. Energy Trust should reassess its current approach to evaluations to identifying opportunities to improve timeliness.

Response: Energy Trust agrees with this recommendation and has taken several steps to improve both performance and timeliness. Those steps include:

- Work with utilities to streamline procedures to receive energy use data from utilities in a readily usable format.
- Develop a more production-oriented process to clean and analyze data.
- Through training and experience, enhance staff evaluation capabilities, enabling staff to overcome significant technical difficulties in evaluation.
- Developed a new process to provide portions of evaluation findings and corresponding documentation available to program staff sooner, allowing them to incorporate results faster.
- Completed the "Fast Feedback" pilot to provide more timely information on customer satisfaction and free rider statistics; this approach will be implemented for all programs where applicable.

Energy Trust's standard process for review of evaluation results allows for the Board Evaluation Committee and technical review of preliminary results with time to incorporate relevant feedback. We recognize this vetting process may

sometimes result in delays in the finalization of evaluations. However, it also provides earlier Board and staff access to draft evaluations which we believe is valuable to continue.

Energy Trust welcomes further, specific suggestions to improve the timeliness and maximize the effectiveness of evaluations.

7. Energy Trust should:

- include, as appropriate, detailed action plans and timeframes as they pertain to specific evaluation recommendations, and

Response: Energy Trust agrees that appropriate actions should and will be incorporated into program management plans. Higher level structural or financial changes are reflected in the annual budget and action plan. More detailed responses, where appropriate, are addressed through program operations and are documented in operations manuals.

- develop a follow-up plan for evaluation findings and recommendations.

Response: As noted in our response to item #6, where possible, Energy Trust is moving toward iterative evaluation reporting to programs based on draft and Fast Feedback evaluation products. Program staff will incorporate the most important findings in response memos and include corresponding timeframes for completion of tasks.

Previous work preparing point-by-point response memos, as recommended by the Management Reviewer, resulted in detailed documents attempting to address too many issues, many of which were not strategic. This created more debate than action and did not prove to be productive for stakeholders, staff or the board.

Since then, response memos were revised to focus on the major lessons learned from evaluations and to emphasize key plans going forward. We rely on the evaluation committee to review this document and ensure that important evaluation points are addressed. We also rely on the subsequent evaluation to confirm the key findings and assess progress. Experience has demonstrated that this system provides more effective communication and is more efficient for stakeholder staff and board alike.

With regard to this evaluation, Energy Trust agrees and will create an action plan and timeline for addressing the recommendations provided in this document.

8. Policy makers should consider pursuing modifications to existing legislation concerning funding limitations and requirements.

Response: Energy Trust agrees with the analysis underlying this recommendation. The Energy Trust strategic plan specifically points to one such issue:

> The electric utilities' integrated resource plans include energy savings for sites that use more than one average megawatt per year. Because the 2007 Oregon Renewable Energy Act restricts energy efficiency funding for these large energy users, it is unclear whether all of the energy savings shown in Figures 1 and 2 (page 7) can be achieved, or whether the same goals can be achieved with increased energy savings from smaller customers. (Energy Trust Strategic Plan, Dec. 18, 2009, p. 5)

Energy Trust also agrees that the various requirements associated with different funding streams increase the cost of providing energy efficiency programs and will look for valid avenues to clarify and amend appropriate regulations.

At the same time, however, Energy Trust's grant agreement with the OPUC provides:

> No part of the Funds may be expended by the Energy Trust for lobbying or for any other political purpose, such as endorsing or opposing candidates for public office or ballot measures.

Because of this provision, Energy Trust will provide information to legislators about these issues only upon request, and does not intend to urge or take positions on any such legislation.