Draft Strategic Plan

July 29, 2009

Executive Summary

Energy Trust of Oregon is an independent, nonprofit organization dedicated to helping ratepayers invest in and benefit from energy efficiency and clean, renewable energy. Created in response to Oregon legislation and overseen by the Oregon Public Utility Commission, Energy Trust opened its doors in 2002. By 2009, it was saving Oregon ratepayers $440 million a year, while helping utility customers keep their energy costs low. Its activities have been guided by a series of strategic plans.

In 2007, the Oregon legislature extended the life of Energy Trust's chief funding mechanism, a public purpose charge paid by electric utility customers. Previously set to sunset in 2012, the fund was extended through 2025. At the same time, the legislature also authorized supplemental funds for certain electric energy efficiency programs. Separate agreements with gas utilities address resource acquisition potential and corresponding funding levels.

This draft strategic plan was developed to give a fresh, long-range perspective to Energy Trust's activities in light of these developments, and a more specific projection of activities over the coming five years.

Our Vision

Energy Trust envisions a high quality of life, a vibrant economy and a healthy environment and climate for generations to come, built with renewable energy, efficient energy use and conservation.

Our Purpose

Energy Trust provides comprehensive, sustainable energy efficiency, conservation and renewable energy solutions to those we serve.

Our Goals

Goal 1: Help utilities and their ratepayers acquire all cost-effective energy efficiency.

- Between 2009 and 2013, save between 200 and 244 average megawatts of electricity, depending on funding, through efficiency and conservation
- Between 2009 and 2013, save between 8.5 million and 19.4 million annual therms of natural gas, depending on funding, through efficiency and conservation

Goal 2: Accelerate the rate at which new renewable energy generation is produced, helping to achieve Oregon's 2025 goal of meeting at least 8 percent of retail electrical load from small-scale renewable energy projects.

- Between 2009 and 2013, achieve an additional 36 average megawatts of renewable energy.

Activities Over the Coming Five Years

To achieve these goals, Energy Trust proposes a variety of 2009-2013 activities, detailed on pages 13-17.

1. Accelerate energy efficiency and renewable energy investments, at a pace consistent with available funding
2. Provide excellent customer service to all Energy Trust participants, with a level of effort that reflects funding
3. Encourage innovative technologies and practices
4. Assure that two-year budgets and action plans are balanced and equitable
5. Support development of clean energy businesses
6. Communicate the value of energy savings and renewable energy generation
7. Maintain an efficient, effective and transparent organization that responsibly invests ratepayer funds

Background

Energy Trust came into being in the aftermath of the 2000-2001 energy crisis, when a decade of underinvestment in energy efficiency and resources, a multi-year drought, and market manipulation cost Northwest electric ratepayers and the Northwest economy billions of dollars (Northwest Power and Conservation Council, *Fifth Power Plan*, volume 1, page 9 (2004)). The first lesson power planners drew from the crisis was that the region would have weathered it much better if energy efficiency investment had not stalled in the 1990s. Going forward, planners said:

> "the region [must] increase and sustain its efforts to secure cost-effective conservation immediately. . . . [I]mproved energy efficiency costs less than construction of new generation and provides a hedge against market, fuel, and environmental risks. To achieve these benefits fully, however, stable and sustained investment in conservation is necessary. Although conservation may result in small rate increases in the short term, it can reduce both cost and risk in the long term. (*Fifth Power Plan*, volume 1, page 4)

In Oregon, lawmakers had not waited for the energy crisis to establish steady funding for energy efficiency and renewable energy. In 1999, the Oregon Legislature required investor-owned electric utilities to collect three percent of their electric rates for investments in new energy efficiency, market transformation, and the above-market cost of new renewable energy.

The Legislature also authorized the Oregon Public Utility Commission (OPUC) to direct most of these public purpose funds to an independent, non-government entity. Because economic pressures had discouraged utilities from investing in energy efficiency during the 1990s, the OPUC determined the three-percent ratepayer charge should be managed by an entity devoted exclusively to ratepayer interests in energy conservation and renewable energy.

Thus, in 2001, Energy Trust, a non-profit organization, was created with guidance from the OPUC to invest in energy efficiency, renewable energy and market transformation programs for Portland General Electric and Pacific Power ratepayers.[1] Energy Trust became the principal administrator of energy efficiency and renewable energy programs for the benefit of ratepayers of Oregon's two largest electric utilities.

Appreciating the benefits of energy efficiency, gas companies—NW Natural in 2003 and Cascade Natural Gas in 2007—asked Energy Trust to offer comparable services to their customers. Energy Trust programs now served customers of the four largest investor-owned utilities in Oregon, or 82% of Oregon's total utility customer base in 2007. Energy Trust also provided a subset of programs to customers of Avista in 2006 and 2007.

In 2007, the Legislature passed the Oregon Renewable Energy Act, which determined that the three-percent charge should be expanded to capture more electric efficiency. The collection of the three-percent charge was extended from 2012 to 2026, and electric utilities were allowed to increase rate collections for energy efficiency above three percent. The resulting increase in electric revenues, combined with gas revenues,

[1] Energy Trust invests about 74 percent of the three-percent fund. Another 16 percent goes to low-income housing and weatherization under the oversight of the Department of Housing and Community Development, and 10 percent goes to weatherization in K-12 schools under the direction of educational service districts.

increased Energy Trust total revenue from about $30 million in 2002 to an expected $94 million in 2009.

The experience of the last seven years has validated the Legislature's foresight. Energy Trust programs have delivered significant benefits to utility ratepayers and broad economic and environmental benefits to every Oregonian.

Since 2002, Energy Trust programs have met almost as much energy demand as an average coal power plant would have—285 average megawatts, enough clean energy to power 221,000 Oregon homes. Total gas savings to date, 8.9 million therms, is enough to provide heat for approximately 18,300 Oregon homes. Starting from 15 average megawatts saved in 2002, Energy Trust expects to save 38.5 average megawatts and 3.3 million therms of gas in 2009, even in a downturned economy.

These savings translate to lower energy costs for utility ratepayers. In 2008, the combined value of utility bill savings to customers from Energy Trust programs was $144 million. Since 2002, utility customers have saved a total of $440 million as a result of these programs. Nonparticipant ratepayers also benefit because Energy Trust programs help keep utility costs for new energy resources as low as possible. Every dollar invested in electric energy efficiency is now saving residential, commercial and industrial ratepayers more than five times as much in avoided generation and transmission costs. Natural gas efficiency costs about one-third of the cost of gas generation, transportation and storage.

In addition to specific and direct ratepayer benefits, Energy Trust programs deliver a significant side-benefit: helping achieve Oregon's greenhouse gas reduction goals.[2] By delivering energy resources without the need for fossil generation, Energy Trust programs are now keeping an estimated three million tons of carbon dioxide out of the atmosphere—the equivalent of removing 525,000 cars from Oregon roads every year.

These programs also represent a long-term investment in Oregon's economy. The money Energy Trust invests in energy efficiency and renewable energy stays in Oregon, providing Oregon jobs and wages. Since 2002, Energy Trust programs have created more than 1,800 Oregon jobs, stimulated a $60 million net increase in wages and $9.1 million in new business income. The Energy Trust program delivery model developed and continues to build a trade ally network of now more than 1,200 contractors. These are predominantly small businesses throughout the state who install energy-efficient equipment, weatherization, solar systems, and other clean energy improvements in homes and businesses, and they play a pivotal role in Oregon's green economy.

The Draft Strategic Plan

In the years since Energy Trust's first strategic plan was written, the scope of energy efficiency and renewable energy programs has expanded, driven by a collection of economic, environmental and other objectives: saving consumers money; avoiding higher-cost generation, transmission and distribution for new power plants; reducing carbon emissions; and building a clean energy economy. Overall, demand for Energy Trust services and incentives continues to grow, even through the 2008-2009 economic downturn.

[2] By 2010, begin to reduce greenhouse gas emissions, by 2020 achieve greenhouse gas levels 10% less than 1990 levels and by 2050 achieve greenhouse gas levels 75% below 1990 levels.

The Long Term: This strategic plan takes a long-term perspective and acknowledges that a range of factors—the economy in particular, but also policy and regulatory decisions—will shape our work. The vision and purpose described in the plan comprise this long-term perspective. These elements are not quantified because funding decisions, legislation, economic conditions, technological developments, and other unknowns will ultimately guide and determine what we accomplish. The plan describes *how* we expect to leverage developments we can reasonably foresee, without attempting to look beyond five years.

The Coming Five Years: The utilities' integrated resource planning analyses, reviewed by the OPUC, do allow Energy Trust to project quantitative goals for the coming five years. Those analyses assume that utilities will collect, and Energy Trust will invest, sufficient funds to capture all cost-effective energy efficiency. Integrated resource plans, then, foresee Energy Trust programs growing steadily over the coming five years.

Alternative Funding Scenarios: Integrated resource plans are not rate proposals, however, and it will take rate proposals to fund these programs above a base level. Because Energy Trust does not propose or review rates, this plan describes two scenarios for energy efficiency: one in which program funding is essentially *status quo* at 2009 levels and a second in which program budgets grow to capture all the cost-effective energy efficiency foreseen in the utility plans.

Beyond Five Years: It is harder to foresee energy efficiency and renewable energy investment beyond five years. Utility integrated resource plans consider only *known* energy efficiency measures and technologies. For existing homes, buildings, and industry, this "known resource" is largely deployed by 2016 and, in the analysis, forecasted savings diminish after that. However, based on historic experience and the dynamic nature of technology development, there is little doubt that significant energy savings from technologies that are now in development will prove cost-effective and that new efficiency resources will be discovered. While we cannot estimate the size, cost or value of this resource, this plan's five-year objectives include development activities to help ensure that new efficiency resources will be there when needed.

Renewable Energy: Energy Trust's role in renewable energy, which the Legislature changed in 2007, is different than its role in energy efficiency. In 2007, the Legislature adopted a community energy goal: to meet at least eight percent of Oregon's retail electrical load from small-scale renewable energy projects of 20 megawatts and less by 2025. At the same time, the Legislature limited Energy Trust renewable energy investments to projects of that size. As a result, Energy Trust programs evolved away from large-scale utility projects, and in 2008 began to focus on demonstrating smaller, community-scale and distributed-generation projects.

This strategic plan assumes relatively stable funding for these renewable energy projects over the coming five years. Because demand for smaller renewable energy projects is projected to outstrip Energy Trust funding by 2011, Energy Trust will need to reassess its investment strategy, and may re-focus funding on fewer renewable technologies and/or program areas.

In Summary: Looking backward and forward from 2009, the Legislature's original premise in enacting the 1999 law remains compelling. More than ever, energy efficiency is the best energy buy for utilities and their customers—it costs a fraction of new fossil fuel generation, delivers persistent cost savings to consumers and has economic and environmental benefits for the entire state. Smaller, community-scale renewable energy

projects represent more than just economic value, they also help build stable communities. Energy efficiency and renewable energy are largely invulnerable to the volatile fuel prices that plague fossil fuel energy markets. Moreover, because these investments reduce carbon emissions, energy efficiency and renewable energy offer an economic advantage if greenhouse gases are regulated.

Energy Trust envisions a future where homes, buildings and industries have integrated renewable energy and efficiency features that meet their energy needs more intelligently, cleanly and economically. In the remainder of this draft strategic plan, Energy Trust elaborates this vision, outlines different funding scenarios, and discusses its role and opportunities in energy efficiency, conservation and renewable energy.

Our Long-Term Vision

Energy Trust envisions a high quality of life, a vibrant economy and a healthy environment and climate for generations to come, built with renewable energy, efficient energy use and conservation.

Our Purpose

Energy Trust provides comprehensive, sustainable energy efficiency, conservation and renewable energy solutions to those we serve.

Our Goals

Goal 1: Energy Efficiency

Long-term, Energy Trust aims to help ratepayers acquire all cost-effective energy efficiency. Energy Trust analyzes the cost-effectiveness of its measures and programs, and it coordinates its analysis with Northwest Power and Conservation Council methods and utility integrated resource planning.

Over the coming five years, utility integrated resource plan analyses show a range of potential energy efficiency savings. The following graphs show per-year and cumulative Energy Trust program savings at both ends of the range: the bottom line shows energy savings for five years under 2009 rate assumptions (the “current-funding” line), and the top line shows what we judge to be the fastest feasible acquisition of cost-effective energy efficiency, based on utility integrated resource plans (the “IRP-achievable” line). Because the two lines are contingent on future utility and OPUC rate determinations, we portray both:

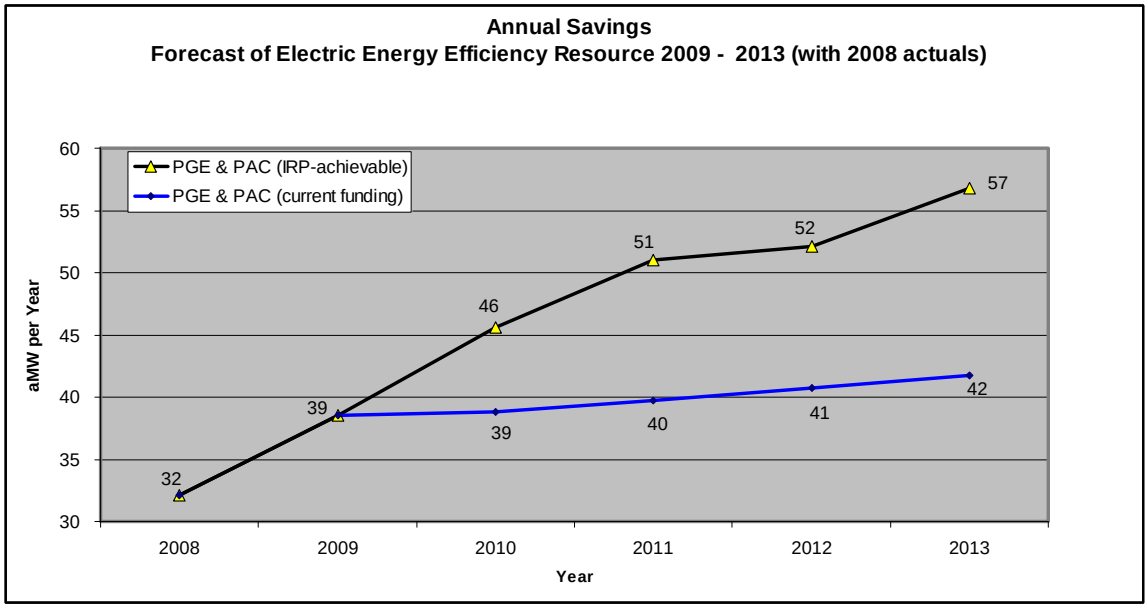

Figure 1

Note: Both the current-funding and IRP-achievable lines are "stretch" goals that aim for high-case energy savings, although at different funding levels. In any given year, actual savings could be lower by approximately 25 percent.

Finally, by the end of 2013, cumulative energy savings would be 432 aMW in the IRP-achievable case or 388 aMW in the current-funding case:

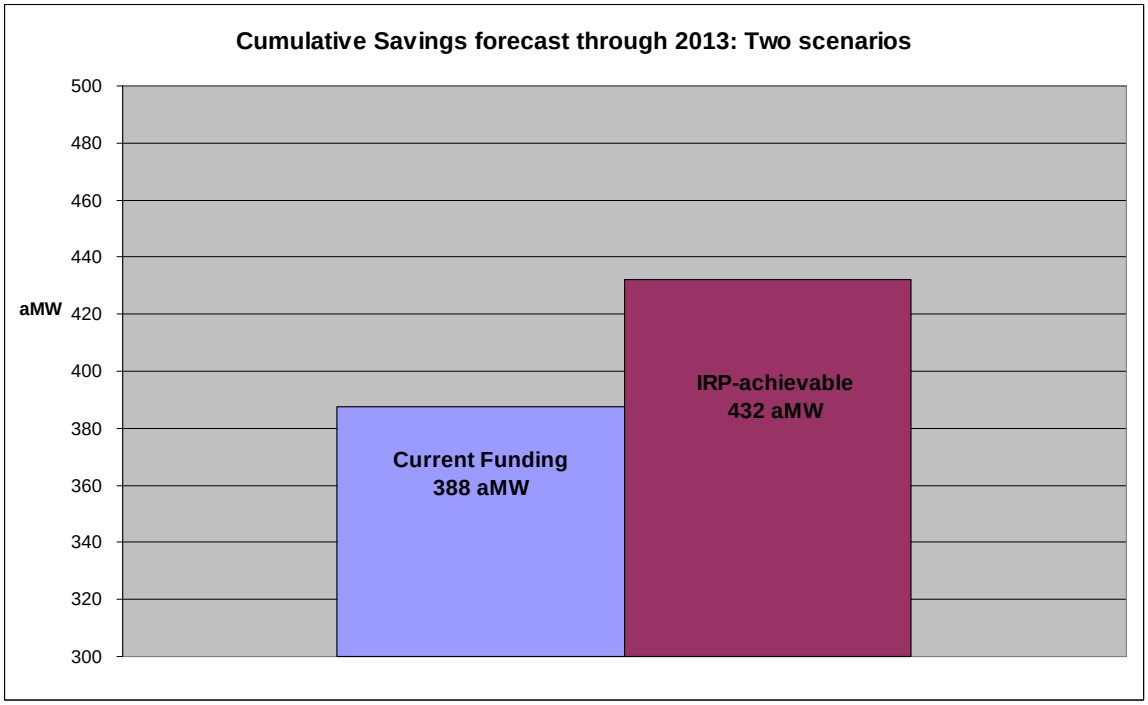

Figure 2

Current-funding case:

- Energy savings/cost: 200 aMW (2009-2013) at a cost of $355 million
- Ratepayer savings: By investing in energy efficiency at this level, ratepayers avoid paying more than $1.2 billion for generation and power delivery. After

deducting the cost of achieving these efficiencies, ratepayers save about $863 million.

- Effect on load growth: Energy demand declines modestly in the low-load-growth scenario (see figure 3)
- Effect on carbon: Avoids about 664,000 tons of CO2 that would be emitted to generate equivalent amounts of grid energy (comparable to taking 117,000 cars off the road)

The current-funding case represents a "stretch" savings goal and assumes *status quo* revenues. To achieve it, Energy Trust would continue to refine and target its programs, streamline internal processes to remain competitive and be nimble, maximize energy savings for residential, commercial and industrial customer sectors, and dedicate modest effort to identify new efficiency technologies.

IRP-achievable case:

- Energy savings/cost: 244 aMW (2009-2013), 44 aMW more than with current funding, at an additional cost of $138 million
- Ratepayer savings: By investing in energy efficiency at this level, ratepayers avoid paying about $1.5 billion for generation and power delivery. After deducting the cost of achieving these efficiencies, ratepayers save about $996 million, $133 million more than the current-funding line.
- Effect on load growth: Loads decrease in all but high-growth scenarios (see figure 3)
- Effect on carbon: Avoids about 812,000 tons of CO_2, comparable to taking 143,000 cars off the road

The IRP-achievable case shows a 77% increase in annual energy savings between 2008 and 2013. To achieve these savings, Energy Trust would require about $138 million of additional funding over five years, compared to 2009 revenue levels. Energy Trust would still enhance program offerings, streamline processes and maximize savings for residential, commercial and industrial customer sectors. Energy Trust also would broaden and deepen its program portfolio by expanding efforts to test new markets, technologies and innovative approaches.

The following table summarizes and compares the costs and benefits of the two cases:

		Economic Savings to Ratepayers (million $)				
Funding Scenario	**Cumulative 5 Year Energy Savings**	**Cost of Equivalent Generation**	**ETO Program Costs**	**Net $ Savings**	**Avoided Carbon (tons)**	**Load-Growth Offset**
IRP-achievable	244	$1,489	$492	$996	812,000	Low and Medium Growth Scenario
Current Funding	200	$1,218	$355	$863	664,000	Low Growth Scenario
Difference	**44 aMW**	**$271**	**$138**	**$133**	**148,000**	

Effect on load growth and fossil fuel use:

The following graph compares projected electric savings under the current-funding and IRP-achievable cases to a range of Oregon loads, as forecast by the NW Power and Conservation Planning Council. Though the load forecasts cover both investor-owned and consumer-owned utility territories (Energy Trust serves primarily investor-owned utility customers), they are nevertheless helpful in understanding the significant difference between the current-funding and IRP-achievable scenarios.

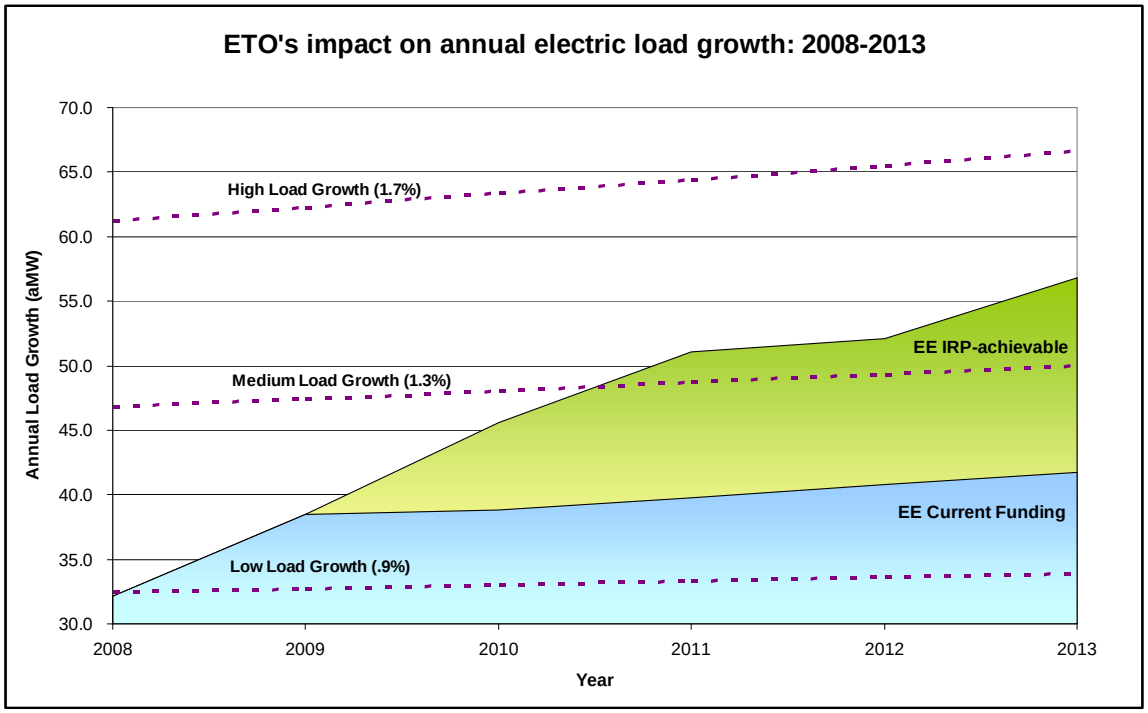

Figure 3

In the IRP-achievable case, Energy Trust's efficiency programs more than offset utility electric growth in all but the high-load-growth scenario. In terms of Oregon greenhouse gas reduction and renewable energy goals, the IRP-achievable case would avoid increasing fossil fuel use in most growth scenarios and help minimize the investment necessary to achieve renewable energy goals. A combined strategy in which energy efficiency is accelerated at IRP-achievable levels and Oregon's renewable energy goals are met would not just offset growth in fossil-fuel energy use, it would reduce carbon emissions in absolute terms and materially contribute to Oregon's greenhouse gas reduction goals.

Beyond five years

Although it is more difficult to predict costs and savings beyond 2013, utility integrated resource plans suggest the following savings through 2016:

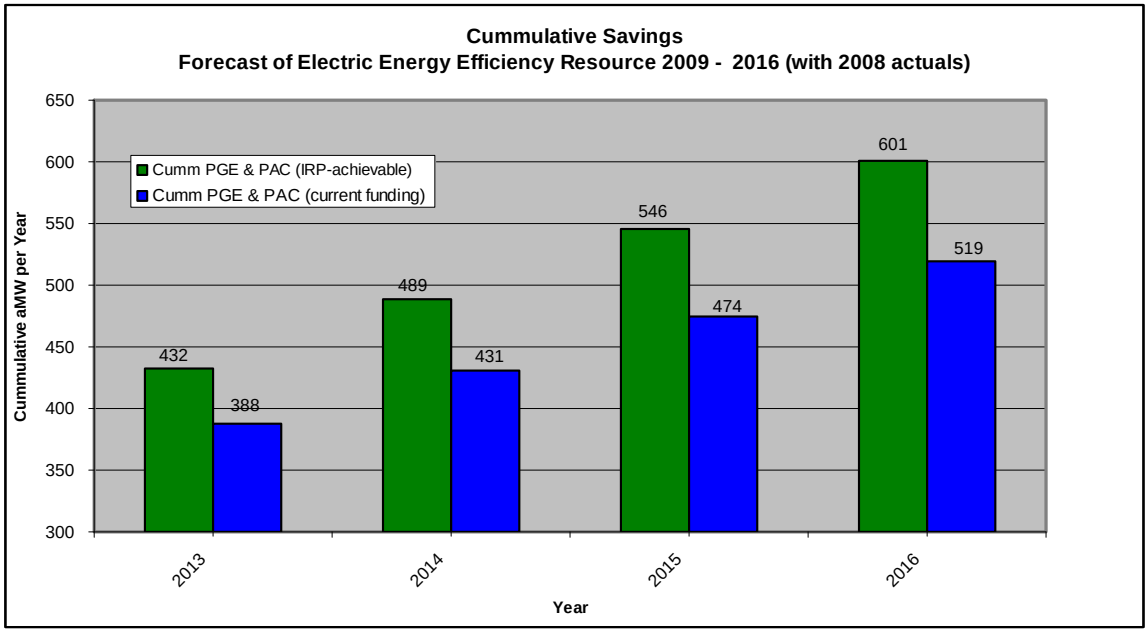

Figure 4

Savings beyond 2016 are yet more difficult to predict. Efficiencies in new buildings can be estimated. However, for existing structures, integrated resource planning considers only *known* energy efficiency measures and technologies. Most of this "known resource" for existing homes, buildings, and industries is deployed by 2016, and the post-2016 known resource therefore looks smaller. However, we consider this supposed decline to be artificial because additional savings from new technologies are highly likely to emerge in the coming years.[3] As has been the case historically, measures being tested now will be validated, new measures will be discovered, and efficiency resources will replenish. This limitation in the integrated resource planning analysis underscores the importance of investing in innovation to ensure that efficiency resources regenerate into the future.

B. Five-year gas efficiency goals

The following graphs show per-year and cumulative Energy Trust natural gas program savings at both ends of the range. The IRP-achievable line assumes increased revenues to support resource acquisition going forward. The current-funding line shows savings declining by 2010 as gas carry-over funds are exhausted, and then experiencing incremental growth. Discussions with gas utilities are underway to explore additional funding options to maintain or increase savings beyond 2009.

[3] E.g., ductless heat pumps, heat pump water heaters, efficient electronic equipment, advanced gas water heaters and condensing boilers for rooftop heating in commercial buildings.

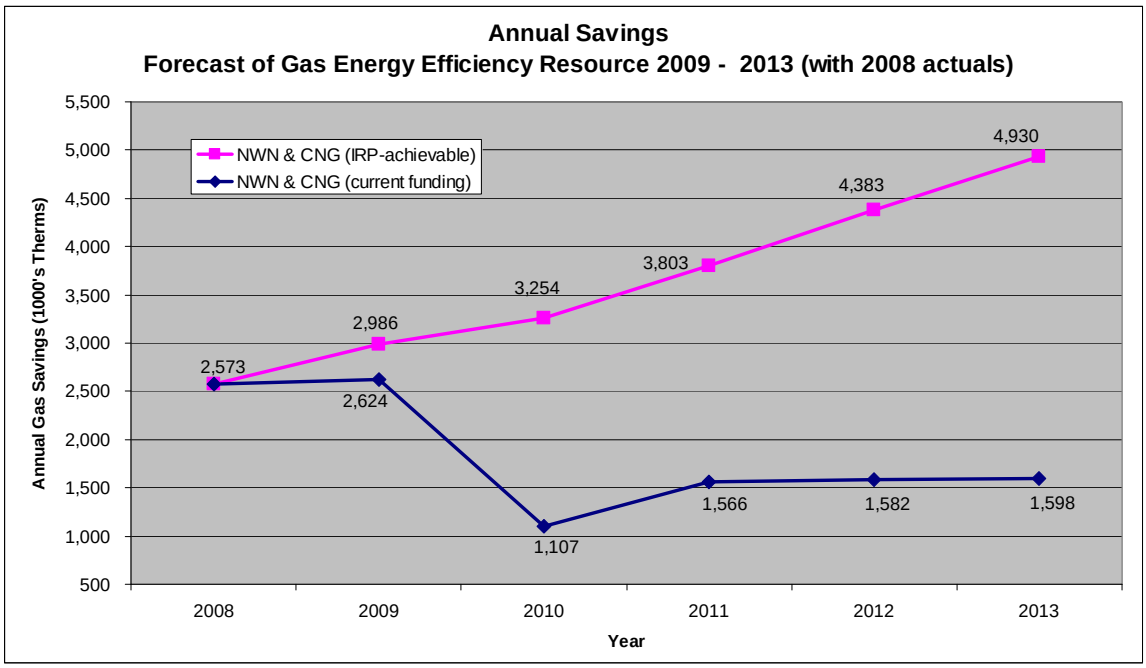

Figure 5

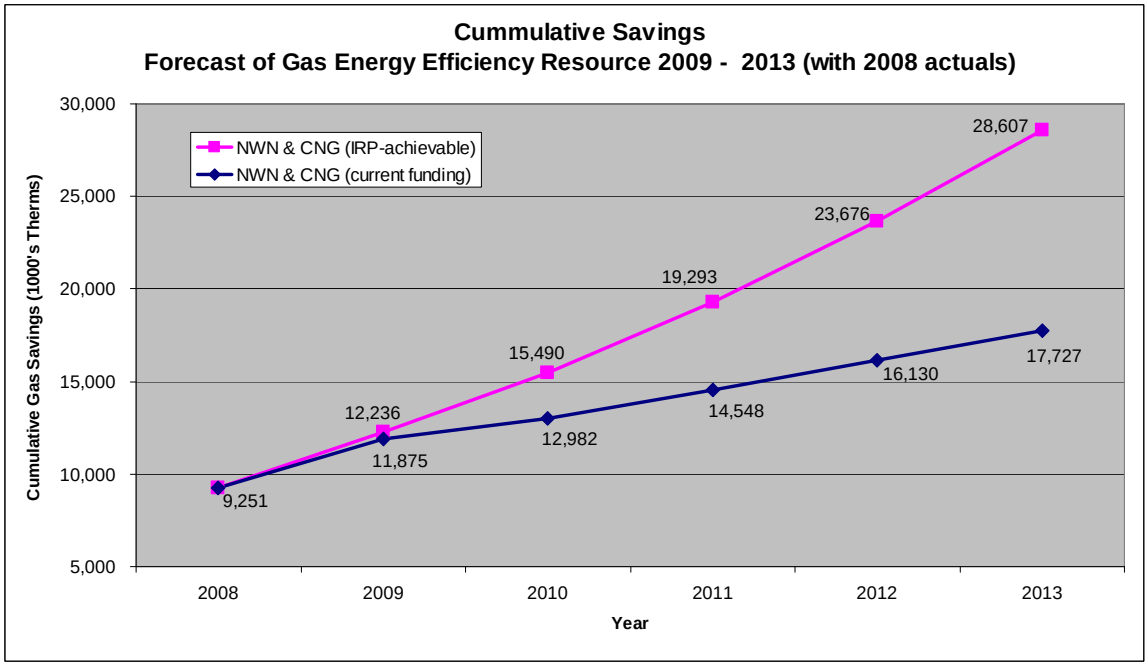

Figure 6

Current-funding case:

- Energy savings/cost: 8.5 million therms (2009-2013), at a cost of $58 million
- Ratepayer savings: $24 million (net of cost)
- Avoided energy cost: $82 million to purchase, store and deliver this amount of natural gas on the open market
- Effect on carbon: Avoids about 50,000 tons of CO2 that would otherwise be emitted (comparable to taking 9,000 cars off the road)

As with the electric goal, the current-funding case represents a "stretch" goal given 2009 revenues, and would require similar program enhancements, streamlining, and level of effort to identify new efficiency technologies.

IRP-achievable case:

- Energy savings/cost: 19.4 million therms (2009-2013), 10.9 million more than flat-funding, at a cost of $132 million
- Ratepayer savings: $56 million (net of cost), $32 million more than flat-funding
- Avoided energy cost: $188 million to purchase, store and deliver this amount of natural gas on the open market
- Effect on carbon: Avoids about 113,000 tons of CO2 that would be emitted to generate equivalent amounts of energy, comparable to taking 20,000 cars off the road

The IRP-achievable case would achieve a 92% increase in annual savings between 2008 and 2013. It would capture all the cost-effective savings identified in the gas utilities' integrated resource plans, and require an estimated $73 million more funding, spread over five years. Energy Trust would still streamline its processes and maximize savings for residential, commercial and industrial customer sectors, and it also would broaden and deepen its program portfolio by expanding efforts to test new markets, technologies and approaches.

The following table summarizes and compares the costs and benefits of these two cases:

		Economic Savings to Ratepayers (million $)			
Funding Scenario	**Cumulative 5 Year Energy Savings**	**Cost of Equivalent Generation**	**ETO Program Costs**	**Net $ Savings**	**Avoided Carbon (tons)**
IRP-achievable	19.4 million therms	$188	$132	$56	113,000
Current Funding	8.5 million therms	$82	$58	$24	50,000
Difference	**10.9 million therms**	**$106**	**$74**	**$32**	**63,000**

Goal 2: Renewable Energy

Energy Trust's goal is to accelerate the rate at which renewable energy resources are acquired, helping to achieve Oregon's 2025 goal of meeting at least eight percent of retail electrical load from small-scale renewable energy projects.

Since 2008, Energy Trust's renewable energy programs have been limited by the 2007 Oregon Renewable Energy Act to projects of 20 MW or less. Unlike electric efficiency, the Act provides no additional sources of funds for renewable energy development. Thus, the graph below assumes current-level funding, current programs and modest increments of new generation. Given these assumptions, Energy Trust estimates that it can acquire another 36 aMW of renewable energy between 2009 and 2013, for a cumulative total of 133 aMW:

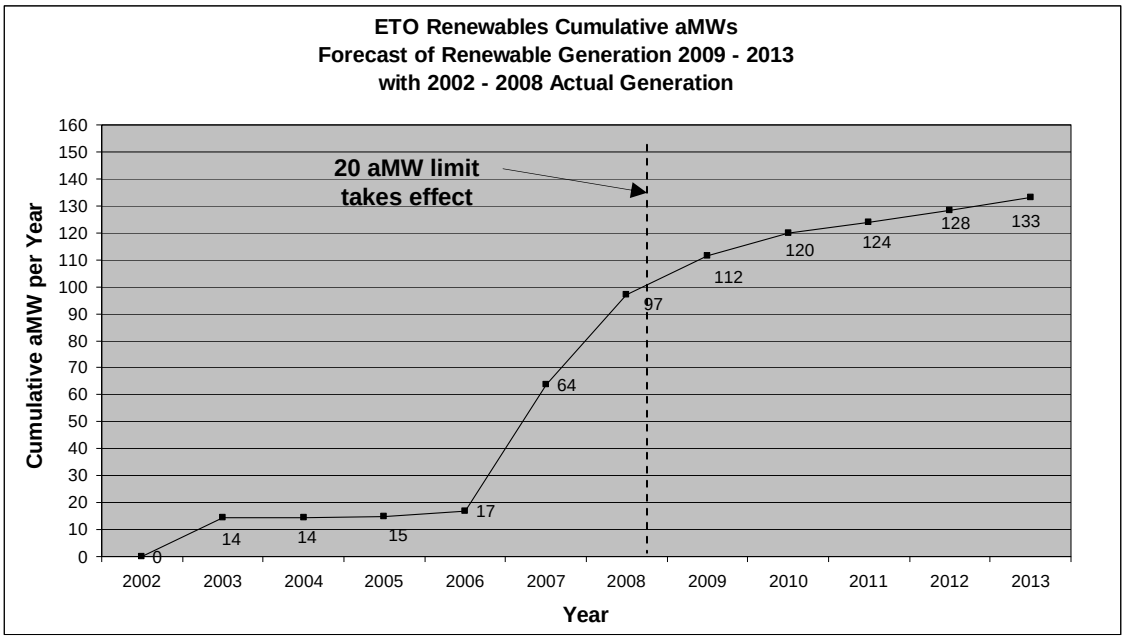

Figure 7

Even before the 2009 Oregon legislative session concluded, demand for renewable energy projects was expected to outstrip projected funding by 2011. It is now apparent that new legislation could affect demand for Energy Trust funds. On the one hand, changes to state tax credit programs could significantly increase demand for Energy Trust renewable energy funds. On the other hand, new legislation requiring utilities to pay for small solar photovoltaic systems could free up Energy Trust funds. Whether the net effect is positive or negative, it is clear that before 2011 Energy Trust will need to reassess its investment strategy, and may re-focus limited renewable energy dollars on fewer technologies and/or program areas.

Five-Year Activities

Under either funding scenario, Energy Trust would have to stretch to meet the goals of this plan. This section outlines the activities Energy Trust expects to undertake, although the scope of these activities depends on funding levels. In future two-year action plans and annual budgets, Energy Trust will establish quantitative objectives consistent with this plan and then-current utility funding projections.

1. Accelerate energy efficiency and renewable energy investments.

a. Acquire ***more standard efficiency measures*** through retrofit and new building and facility programs
   - Current funding: Maintain, refine and gradually expand Energy Trust programs, which are well-geared to reach these savings.
   - IRP-achievable: Simultaneously expand efforts in multiple, additional markets. As necessary, invest significantly more in research, provide customer information, offer technical and other assistance and/or incentives to remove barriers and better reach all markets, especially those who have been underserved, as in smaller communities.

b. Acquire efficiency savings through ***existing supply chains*** for equipment and services (e.g., designers, distributors and contractors) for equipment and

services that are generally sold directly to customers at times of initial purchase or replacement and reach niche markets:

- Current funding: Energy Trust programs are well geared to work with the largest and most promising supply customers and niche markets. Develop approaches for additional supply chains and customer opportunities at a modest pace. Coordinate to avoid duplication with the Northwest Energy Efficiency Alliance.
- IRP-achievable: Make significant, multi-year investment effort in developing relationships and supplying efficient products through a greater array of supply chains and work with additional customer associations, chains, and individual customers, including more extensive regional or national coordinated intervention, e.g., electronics sold business-to-business, hospital equipment, specialized industrial production equipment, advanced design in national chains.

c. Acquire efficiency through ***behavioral and operational measures***
   - Current funding: Continue limited, gradual research-intensive efforts to explore home energy monitors, smart power strips, tune-up of commercial rooftop systems and other approaches.
   - IRP-achievable:
     - Explore diverse opportunities to accelerate behavioral research and technology through field testing, refining or reinventing program systems, testing standards of proof, in coordination with demand management and utility AMI metering and regional efforts. Develop metrics to guide and manage behavioral measures.
     - Work with utilities to help delay or reduce fossil load growth to meet peak or integrate renewables by using demand response, load management, and storage technologies, as these resources become cost-effective (next 3-5 years).
     - Work with utilities to identify opportunities for energy efficiency, renewable energy and conservation in coordination with utility SmartGrid investments.

d. ***Increase comprehensiveness***: install more energy measures per customer served:
   - Current funding: Some deep-savings initiatives are in place (e.g., custom commercial) and more are developing (e.g., zero net energy new building, Portland residential pilot program), but many initiatives rely on vendors to sell efficiency. Continue and refine efforts to encourage vendors to increase the number of energy measures installed per customer.
   - IRP-achievable:
     - Expand efforts to overcome limitations inherent in vendor-driven programs.
     - Develop tools and business cases for vendors to sell technologies and design approaches with deeper savings.
     - Work directly with larger and more sophisticated customers.
     - Develop templates to simplify and standardize approaches to deeply-efficient design.
     - Integrate efficiency and renewable opportunities for customers in holistic approaches to energy and resource management.

e. ***Link to larger-scale initiatives***, including regional/interstate collaborations, natural partners, codes, standards, and interactions with clean energy markets:

- Current funding: Energy Trust works extensively with other energy and carbon-related initiatives, and investigates links to grid, land, water, waste and transportation management only in limited ways.
- IRP-achievable:
  - Integrate efficiency into related initiatives (e.g., demand reduction, smart growth, resource recovery/conservation, transportation, land use planning).
  - Monitor trends in government policy and industry investment to anticipate and build on developments that further energy saving and renewable energy.
  - Engage green workforce initiatives to invest in and ensure availability of well-trained, educated and competent trade allies to deliver energy benefits.

f. ***Renewable energy***. Given current funding**:**
- Target medium-to-large (up to 20 MW) renewable projects, such as biopower and hydropower for irrigation-districts and municipal water delivery systems.
- Continue standard photovoltaic (PV) and small wind programs, adjusting budgets in light of market conditions and legislation.
- If funding and/or tariff mechanisms allow, integrate PV into leading-edge construction projects to demonstrate innovative applications and/or in connection with initiatives such as zero-net energy.

2. ***Provide excellent customer service*** to Energy Trust program participants to maximize energy savings and renewable energy benefits**.** While the level of effort will vary with funding, improving service is a priority in all dimensions. In particular, Energy Trust will seek to:

- Better understand how different customers make decisions, and what barriers, if removed, would lead to greater participation.
- Use different messages to motivate different energy users and developers to generate small-project renewable power and cost-effectively conserve energy:
  - Understand consumer behavior and response through market research and intelligence
  - Test and develop new messages focused on the connection between energy and sustainability
- Pursue innovation in program delivery:
  - Simplify participation in Energy Trust programs
  - Move to automated, on-line forms
  - Offer appropriate financing tools, including those that allow owners to invest in a full spectrum of clean energy improvements
  - Help interested customers access and participate in a fuller spectrum of energy and resource efficiency, renewable and, in coordination with utilities, demand management options
  - Build long-term relationships with customers, organizations with linked missions, and pivotal equipment and services supply organizations
  - Fully integrate program services delivery across efficiency and renewable energy where appropriate to ease and facilitate consumer access

3. ***Encourage innovative technologies*** and practices that create significant, additional and diversified renewable energy and efficiency opportunities. Making investments in these technologies and methods is key to moving beyond current energy efficiency resource projections, which are based on known technologies, and meeting renewable

energy goals. This is also an area in which level of effort depends to a great extent on funding:

- Current funding: Energy Trust dedicates considerable effort to a small group of high-priority measures, but constrains renewable energy efforts to encourage innovative technologies and applications.
- IRP-achievable:
  - Explore a full range of innovations, and leverage the work of other organizations such as the NW Energy Efficiency Alliance, the American Council for an Energy Efficient Economy, the Consortium for Energy Efficiency, the US Department of Energy, the US Environmental Protection Agency, national laboratories and others
  - Develop metrics to guide and manage technology development activities.
  - In deciding where to focus efforts in efficiency technology, consider whether it is likely to (as applicable):
    - significantly reduce energy load growth
    - provide alternative approaches and technologies, including commercializing promising renewable technologies, such as low-temperature geothermal or farm biomass
    - bring products to our market in the near term
    - appeal to users
    - not to developed or be demonstrated without our involvement
    - produce measureable savings
    - be cost-effective
    - be critical for a key initiative (e.g., zero-net commercial buildings)
    - balance intermittent renewable generation with load

4. *Bring a broad perspective* to two-year action plans and annual budgets by considering their overall balance:

- Long-term and short-term perspectives: Do they include an appropriate mix of initiatives and measures with near-term (1-3 years) and longer-term benefits?
- Sector and geographic diversity: Will all customer sectors that contribute funding to Energy Trust have equitable opportunities to participate in programs? Is there sufficient emphasis on geographic diversity and customers whose participation previously was limited?
- Reach upstream: Is there appropriate emphasis on reaching upstream to manufacturers and supply chains?

5. *Support industry and business infrastructure* that delivers energy efficiency and renewable energy products and services to contribute to a strong economy***.***

- Support clean energy business infrastructure development:
  - Cultivate and support training for trade allies
  - Invest in market transformation to help create and develop future markets
- Help businesses integrate efficiency and renewable energy profitably into their business plans.
- Provide responsive services to a wide array of businesses with different energy needs
- Work with businesses to identify efficiency investments with deeper energy benefits and longer paybacks (e.g., zero-net energy buildings), which may be achieved through incremental investments

6. *Communicate the value of energy savings and renewable energy generation*

- Develop a communications strategy to reach utilities, consumers/ratepayers, decision-makers and other stakeholders and constituents about the benefits of and opportunities in energy savings and renewable energy
- Quantify and report in easily understood language the economic, environmental and other benefits of and opportunities in energy savings and renewable energy
- Leverage relationships with other organizations to reach a range of audiences

7. *Maintain an efficient, effective and transparent organization* that responsibly invests ratepayer funds

- Regularly evaluate and refine Energy Trust's efficiency and effectiveness compared to relevant energy and non-energy businesses
- Continue to foster transparency through open meetings, advisory councils, reports and other publications, and other means
- Demonstrate a high standard of organizational ethics
- Periodically assess organizational opportunities and risks
- When considering expansion opportunities, use Energy Trust's core mission and competencies as touchstones