

## 4.06.000-P Cost-Effectiveness Policy and General Methodology for Energy Trust of Oregon

<b>History</b>			
Source	Date	Action/Notes	Next Review Date
Board Decision	February 27, 2002	Approved (R83)	March 22, 2002
Board	March 22, 2002	Reviewed, Revised	April 3, 2002
Board	April 3, 2002	Reviewed, Revised (Minutes)	April 2005
Board	September 7, 2005	Revised (R353)	September 2008
Board	February 13, 2008	Revised (R464)	February 2011
Board	December 16, 2011	Revised (R596)	December 2014
Board	December 12, 2014	Amended (R731)	December 2017
Board	March 07, 2019	No Changes	March 2022

### ***Introduction***

The Energy Trust of Oregon seeks a future that includes sufficient, stable, and affordable power available to all customers through sustained investment in energy efficiency and renewable resources that reduce the economic and environmental costs of using gas and electricity. To properly evaluate such investments, Energy Trust compares the cost of energy-saving programs and measures to the cost of alternative sources of natural gas and electric energy. The cost of alternative sources is known as “avoided cost”. The Oregon Public Utility Commission (PUC), the Washington Utilities and Transportation Commission (WUTC), the Northwest Power and Conservation Council (NPCC) and the Northwest Energy Efficiency Alliance (Alliance) use similar approaches and assumptions to analyze the cost-effectiveness of energy efficiency investments. Consistent with these approaches, this policy encompasses two tests to determine cost-effectiveness and describes the key variables or economic model inputs that define these tests in Energy Trust analysis.

The Oregon Renewable Energy Act of 2007 (SB 838) allows supplemental energy efficiency funding, i.e., more than the three-percent public purpose charge authorized in the 1999 law. The 2007 Act, together with the agreements that fund Energy Trust natural gas efficiency programs in Oregon, support Energy Trust programs that help utilities meet goals that are determined through Integrated Resource Planning. In that process, the OPUC reviews and may acknowledge avoided cost forecasts from each utility. Because Energy Trust funding is significantly affected by this process, the following policy is designed to be consistent with OPUC guidance and, to the extent practical, with utility integrated resource plans. Energy Trust may consider prospective costs and benefits over a period of more than one year, as appropriate, for emerging technologies and market transformation ventures.

### ***Policy***

Energy Trust adopts the Utility Cost Test (UCT) and Total Resource Cost Test (TRC), as described below, as its primary determinants of whether efficiency investments meet cost-effectiveness criteria. The economic comparison will be presented as a benefit-to-

cost ratio. Programs and measures that pass both tests, or are likely to over time, are eligible for Energy Trust investment. Both tests consider energy impacts on customers who are influenced by the program, and long term market effects of programs and measures (e.g., sales, or efficacy of efficient technologies beyond the direct program participants) where such effects are significant and likely. The difference between the UCT and TRC is that the TRC includes all costs (not just Energy Trust costs) and savings of program participants and others who were influenced to act by Energy Trust programs. The UCT includes Energy Trust costs only, and savings from program participants and others who were influenced to act by Energy Trust programs.

For programs and measures that pass these cost-effectiveness tests, in configuring programs Energy Trust may consider other factors identified in its strategic plan and action plans.

### **Costs**

The total resource cost definition is in alignment with the OPUC docket no. UM-551's definition as including total costs and total benefits in cost effectiveness calculations.<sup>[1]</sup> The following costs will be included in the TRC perspective:

1. Total cost of efficiency measures and actions,<sup>[2]</sup> including costs to Energy Trust and participants
2. Energy Trust administrative costs
3. Energy Trust program management costs

The utility cost test includes only the Energy Trust incentives and items 2 and 3, above, i.e., all Energy Trust efficiency costs, not those paid by consumers.

Costs excluded: The value of Oregon and/or Federal tax credits will be deducted from the cost of measures because similar tax credits are not included in avoided costs used by Energy Trust. Program administration or management costs of local programs that are paid by federal or state agencies will not be included, as they are often associated with non-energy considerations such as equity, employment, etc., and are not included in the benefit/cost tests under PUC guidance.

### **Benefits**

In the total resource cost test, Energy Trust will include the following benefits:

1. The value of the electrical and/or gas energy saved based on the avoided cost forecasts of the utilities whose customers are served by the Energy Trust, as reviewed and approved by the PUC.<sup>[3]</sup> Periodically, Energy Trust will work with the utilities and PUC to develop an average, or merged cost forecast. This will be done separately for the electric utilities and gas utilities, so that Energy Trust program decisions are based on a single set of price forecasts for each fuel. Energy Trust may include factors such as hedge

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<sup>[1]</sup> In Washington, the primary cost/benefit criterion is the total resource cost test, but where there are significant non energy benefits the WUTC will consider using the utility cost test.

<sup>[2]</sup> For equipment or structures that would be purchased regardless of efficiency actions, this is the incremental cost of upgrading the efficiency of the purchase beyond common practice.

<sup>[3]</sup> This includes the value of avoided peak energy use.

- value, if not considered in the utility forecasts, based on agreement with the utilities and PUC.
2. Non-energy benefits will be quantified by a reasonable and practical method. Where non-energy benefits are clear, large, but difficult to quantify, Energy Trust will document this to the Oregon and/or Washington Commissions and propose cost-effectiveness exceptions in Oregon, and application of the UCT in Washington. .
  3. For electricity, both line losses and avoided Transmission and Distribution construction.
  4. Natural gas capacity benefits and benefits from reduced transmission and delivery losses will be included where significant and quantifiable.
  5. In addition, the Energy Trust will apply in its analysis the 10% credit for energy efficiency as required under the Northwest Power Act and OPUC docket no. UM-551. This credit recognizes the benefits of conservation in addressing risk and uncertainty.

Avoided costs based on integrated resource planning will be provided to the Energy Trust by utilities. The utility cost test will include items 1, 3, 4 and 5, above.

Currently, utility avoided costs include the forecast value of reduced carbon dioxide emissions. Oregon PUC guidance provides that other environmental pollutant costs may be considered only when specified by the PUC.

### ***Discount rates***

Energy Trust will revise avoided costs and discount rate from time to time to be consistent with the cost of capital used in the utilities' Integrated Resource Plans.

In analysis and reporting, Energy Trust will use a discount rate based on OPUC-reviewed integrated resource planning discount rates used by the utilities whose customers are served by the Energy Trust. Periodically, Energy Trust will work with the utilities and OPUC to derive a single discount rate close to those employed by the utilities. This discount rate will be used to compare the costs and benefits of efficiency investments to other investments.

In conclusion, Energy Trust programs and measures will be reviewed using both the Utility Cost and the Total Resource Cost tests. If the benefit-to-cost ratio is greater than 1.0, a program should be considered cost-effective and may be considered for Energy Trust efficiency funding.