



Energy Trust of Oregon

2018 Annual Budget and 2018-2019 Action Plan

APPROVED

**Presented to the Board of Directors
December 15, 2017**

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MEMO

Date: December 15, 2017
To: Board of Directors
From: Michael Colgrove, Executive Director
Subject: Approved 2018 Budget and 2018-2019 Action Plan

I am pleased to present to you Energy Trust of Oregon's Approved 2018 Budget and 2018-2019 Action Plan, which will be the focus of our December 15 board meeting.

The enclosed information provides an update on the draft budget and action plan presented to you on November 8, 2017, including revisions based on stakeholder feedback and public comments. Specifically, the packet includes a handout and slide presentation summarizing changes made to the draft budget and action plan, frequently asked budget questions, a summary of comments received with staff responses, copies of actual comments received and additional details on the budget. Also enclosed is the staffing details memo, planning assumptions memo and an updated memo on current energy-efficiency measure cost-effectiveness exceptions approved by the Oregon Public Utility Commission.

In developing the Approved budget and action plan, the draft annual goals and activities were presented to and reviewed by the board of directors, OPUC, Conservation Advisory Council, Renewable Energy Advisory Council, affiliated utilities and members of the public.

The Approved annual budget and two-year action plan will guide Energy Trust's investment of \$198.9 million to acquire 58.5 average megawatts and 6.91 million annual therms of the lowest-cost and cleanest energy available to utilities and their customers. This budget will further benefit customers by enhancing program methods and strategies, diversifying participation, and managing change and preparing for the future—three key strategies to meet our 2018 savings and generation goals and contribute to our ambitious 2015-2019 Strategic Plan goals.

After board consideration on December 15, 2017, a final 2018 annual budget and 2018-2019 action plan will be submitted to the OPUC by year-end and posted online at www.energytrust.org.

These documents guide Energy Trust in delivering the lowest-cost energy resources available to utilities and their customers, and diversifying Oregon's energy resource mix with small-scale renewable energy generation. The outcomes and benefits of our investments lower participant utility bills, avoid carbon dioxide emissions and strengthen our economy.

I look forward to our discussion next week and welcome your comments and questions.

Thank you,



APPROVED 2018 Annual Budget & 2018-2019 Action Plan

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2018 Budget—Overview

Energy Trust of Oregon’s annual budget and two-year action plan are developed through a transparent, public process. They guide our delivery of low-cost energy efficiency resources for the benefit of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista customers, and diversify Oregon’s energy resource mix with clean power from small-scale renewable energy systems.

Learn more at www.energytrust.org/about/budget.

Areas of Emphasis

Benefit customers and ratepayers by achieving energy goals and operating effectively

This core strategy is central to all other areas of emphasis.

Diversify participation

Increase outreach to small- and medium-sized businesses. Identify and prioritize strategies to increase access to solar in low-income communities. Contract with community-based organizations to reach underserved communities. Drive forward diversity, equity and inclusion strategies.

Enhance program methods and strategies

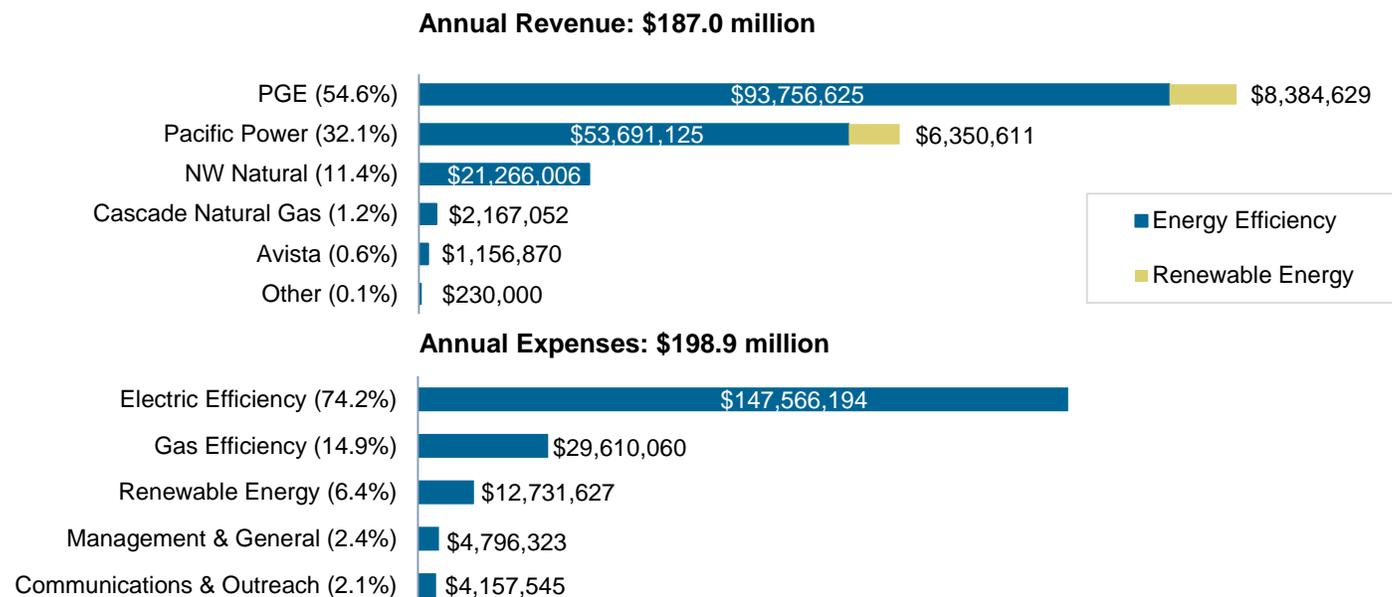
Utilize new, improved data resources in analysis and targeted marketing. Leverage energy-related initiatives spearheaded by others. Foster long-term relationships with business customers and support long-term project planning for communities. Target outreach to irrigation hydropower and biogas projects.

Manage change and prepare for the future

Collaborate with Northwest Energy Efficiency Alliance to identify new measures and strategies. Support targeted demand-side management efforts with utilities. Implement recommendations from internal Organizational Review and Budget Review projects. Implement transitional strategies for key program areas, such as residential and solar.

Revenue and Expenses (Oregon and Southwest Washington)

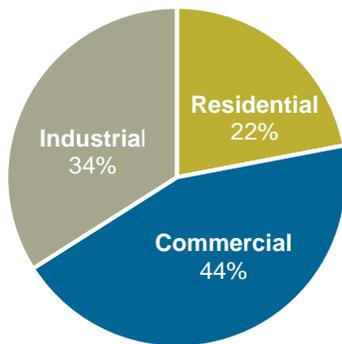
Reserve funds will be used where planned expenses exceed anticipated revenue.



Energy Efficiency and Generation Goals (Oregon and Southwest Washington)

Electric savings

56.59 aMW
(62.92 aMW gross)



Residential

12.4 aMW; 3.4 cents/kWh

Commercial

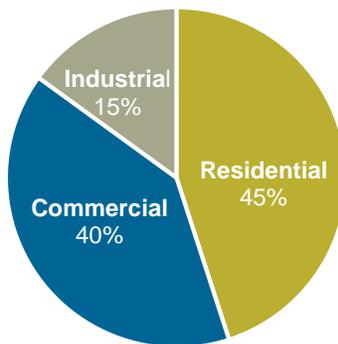
24.8 aMW; 3.5 cents/kWh

Industrial

19.3 aMW; 2.1 cents/kWh

Natural gas savings

6.91 million annual therms
(7.51 million annual therms gross)



Residential

3.10 MMTh; 36.4 cents/therm

Commercial

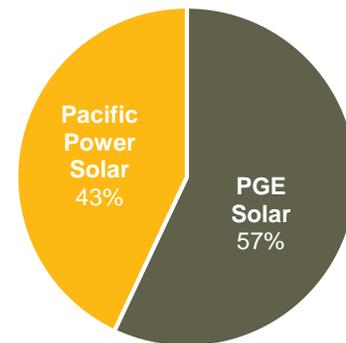
2.74 MMTh; 34.7 cents/therm

Industrial

1.06 MMTh; 24.8 cents/therm

Renewable generation

1.89 aMW



Solar

1.89 aMW

Other Renewables

0.00 aMW

Investing \$198.9 Million to Deliver Significant Benefits

- Participants saving \$698 million on their utility bills over time from projects completed in 2018
- Energy saved at a cost of 3.0 cents/kWh and 33.3 cents/therm, a fraction of the cost of fossil fuels
- Jobs, wages and business income added to the local economy
- Air quality improvements by avoiding 4.4 million tons of carbon dioxide
- Training and support for 2,400 local businesses, many of them small companies employing 12,000 people to work on Energy Trust projects (self-reported by trade allies)

Activities by Customer Type

Homeowners and renters:

Home Energy Reviews; Energy Saver Kits; referrals to trade ally contractors; incentives for equipment, weatherization, LEDs, showerheads, clothes washers and solar; energy performance scoring for new homes, including manufactured; enhanced incentives for moderate-income customers; pilot to upgrade new manufactured homes; rural outreach; coordination with agencies serving low-income customers

Commercial businesses, public entities, nonprofits and multifamily properties:

Energy modeling, design and technical assistance; incentives for equipment, lighting and solar; Strategic Energy Management; Path to Net Zero; Pay for Performance pilot; new construction Market Solutions offering for public sector and low-income multifamily buildings; multifamily rental unit and common-area incentives

Industrial and agricultural businesses:

Technical assistance, studies and analyses; customized solutions for industrial processes; equipment, lighting and solar incentives; Strategic Energy Management; expanded outreach to small industries; rural outreach to businesses, farms and ranches; projects delivered by trade allies

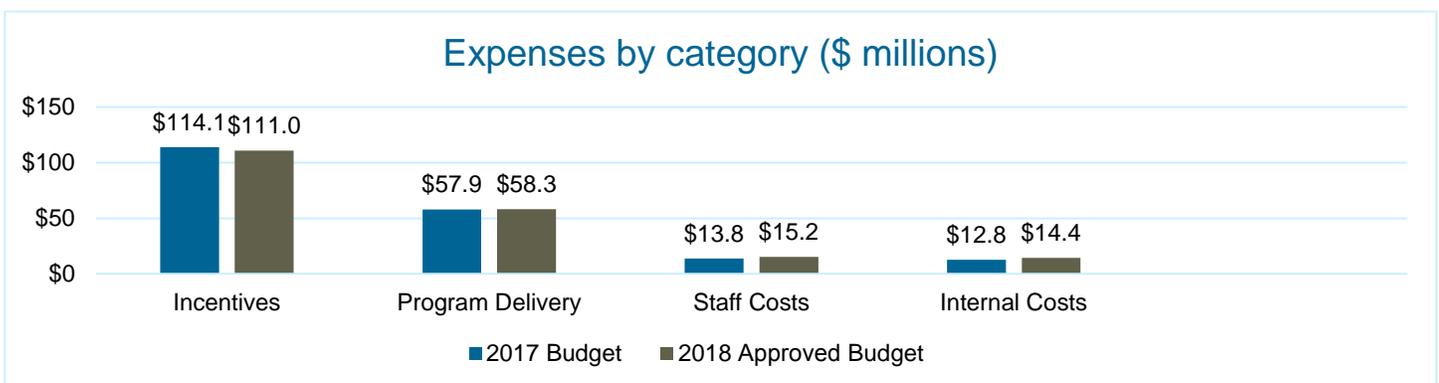
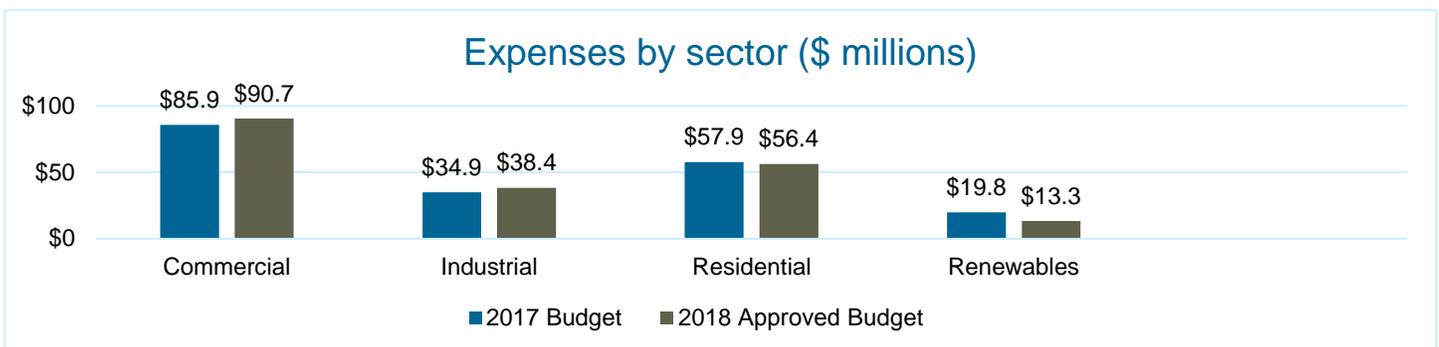
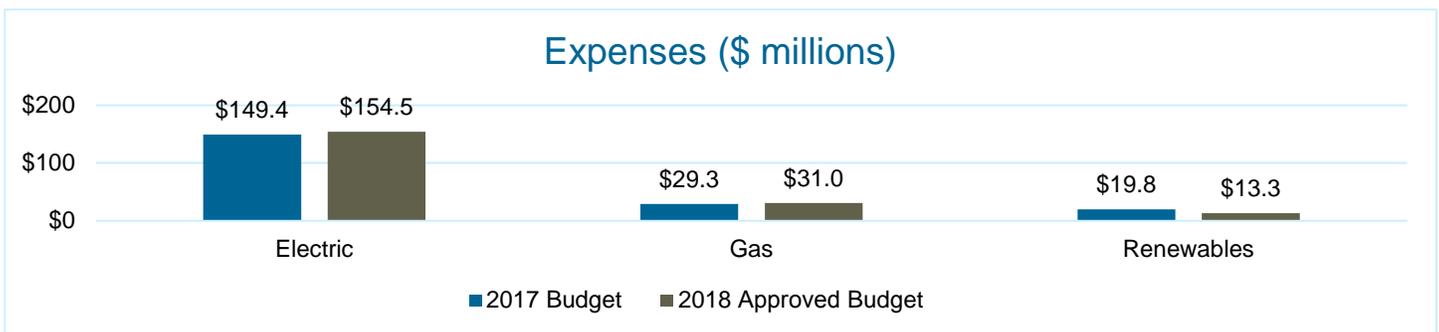
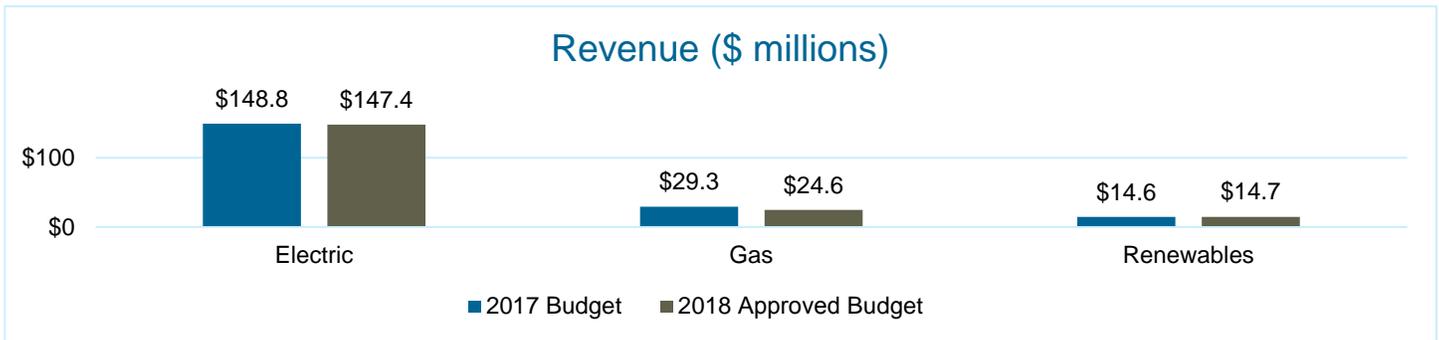
Renewable energy project developers:

Project development assistance; anaerobic digestion at wastewater treatment facilities, irrigation district modernization and hydropower; solar soft cost reduction strategies; moderate-income solar offering

Notes: MMTh (million annual therms), aMW (average megawatt); this document reports in net except where noted. Costs/kWh or therm are levelized.

Year-to-year Comparison of Budgeted Revenues and Expenses (Oregon and Washington)

- Revenues down slightly, decreasing 3.1% over the 2017 budget
- Expenses relatively flat, increasing \$289,000 over the 2017 budget
- Staff and internal costs are up compared to 2017 and remain low compared to the overall budget



Year-to-year Comparison of Budgeted Savings and Generation (Oregon and Washington)

Savings

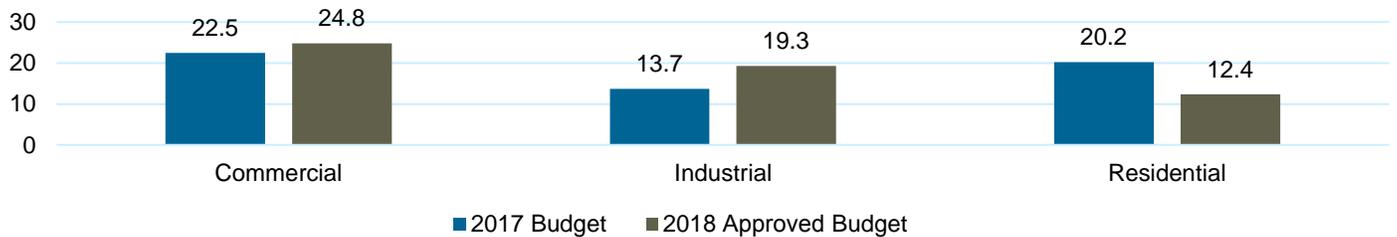
Generation

	Electric (aMW)	Gas (MMTh)	Electric (aMW)
2017 Budget	56.4	7.41	2.86
2018 Budget	56.6	6.91	1.89
% change	0.3%	-6.8%	-33.9%

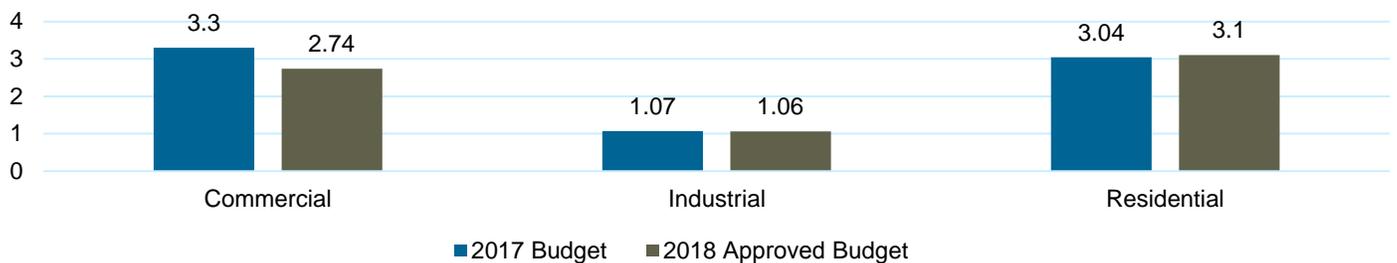
Savings Levelized Cost

	Electric (cents/kWh)	Gas (cents/therm)
2017 Budget	3.0	31.3
2018 Budget	3.0	33.3

Electric savings by sector (aMW)



Gas savings by sector (MMTh)



Staffing Recap

- Increasing areas of new demand on Energy Trust include:
 - Supporting more project volume
 - Performing critical finance tasks while developing more efficient procurement systems
 - Delivering more market data for six utility IRPs
 - Supporting targeted demand-side management projects that provide additional transmission and deferral benefits to the utility grid
 - Supporting increased program utilization of web and email technology for customer transactions
 - Supporting transitions in solar and residential markets
- In 2018, Energy Trust projects meeting the OPUC performance measure to not exceed 7.75% on a 3-year rolling average for staffing costs

	% Annual expenses 3-year rolling avg.	OPUC Performance Measure
2017	6.6%	✓
2018	7.0%	✓

Frequently Asked Questions: Energy Trust Annual Budget and Two-Year Action Plan

December 8, 2017

How is your budget and action plan developed?

Our annual budget and two-year action plan are developed through a transparent, public process that includes stakeholder review and input. Our five-year Strategic Plan and each utility's Integrated Resource Plan (IRP) serve as primary building blocks for the budget.

Annually starting in July and continuing through December, we work with Portland General Electric (PGE), Pacific Power, NW Natural, Cascade Natural Gas, Avista and our Conservation Advisory Council to build action plans and identify the amount of energy efficiency that can be cost-effectively acquired in the coming year. We also work to determine planned renewable energy generation within PGE and Pacific Power territories. Our budget is submitted for review and comment to the OPUC, is reviewed and approved by our board of directors by December 31 of each year, and is posted online.



How can I participate?

Public comments are actively solicited and help shape our final budget and action plan presented to the board of directors. Public notices and materials for board, Conservation Advisory Council and Renewable Energy Advisory Council meetings are posted on our website in advance of each meeting and every meeting invites public comment. The OPUC hearing is also open to the public.

Written public comments were accepted from November 1 to November 17, 2017, via email to info@energytrust.org, or mailed or submitted in person to Energy Trust of Oregon, 421 SW Oak St., Suite 300, Portland, Oregon 97204.

Who reviews and approves the budget and action plan?

Budget goals and action plans are reviewed by our board of directors, Conservation Advisory Council, Renewable Energy Advisory Council, OPUC, PGE, Pacific Power, NW Natural, Cascade Natural Gas and Avista. We also engage the public and a variety of stakeholders and utility customers. Public comment is actively sought through our website and outreach meetings.

Comments received during the outreach period are summarized, with many incorporated into the approved budget and action plan presented to the board at its public meeting in December. The board approves the final budget and action plan.

Where can I find more information about the 2018 budget and action plan?

Visit our website at www.energytrust.org/about/budget to find the budget and action plan, view the budget schedule and view an on-demand presentation by Executive Director Michael Colgrove. Budget presentations and materials delivered at board and advisory council meetings are available at www.energytrust.org/about/public-meetings.

What do you take into account when setting the budget?

We work closely with all five utilities to update their plans to meet future energy needs for their customers with the goal of acquiring all available cost-effective energy efficiency. Additional information is drawn from renewable resource assessments and the most recent studies produced by the Northwest Power and Conservation Council, which identify energy efficiency and renewable energy potential throughout the Pacific Northwest. These resources drive our five-year strategic plan and guide our annual budget and two-year action plan.

Annual activities are guided by third-party program evaluations, market research, our experience delivering programs, feedback from on-the-ground contractors and customers, and input from our funding utilities, two advisory councils, the OPUC and the board of directors.

What benefits will the budget provide?

Our budget and action plan are designed to help a range of customers save energy and produce renewable power—from homeowners and renters to large businesses around the state. We deliver the low-cost energy efficiency utilities rely on to meet their customers' energy needs, and add clean, renewable power to the electric grid. Projects and actions resulting from our budget reduce participating customer utility bills, help keep energy costs lower than they otherwise would be for all utility customers, avoid carbon emissions and strengthen local economies.

How are programs and services funded?

Funding for our energy-efficiency and renewable energy programs comes exclusively from customers of PGE, Pacific Power, NW Natural, Cascade Natural Gas and Avista in Oregon, and NW Natural customers in Washington.

What accountability measures are in place to ensure funds are spent wisely?

All expenditures must comply with legal requirements guiding our investments and meet minimum annual performance measures established by the OPUC. For instance, administrative and program support costs must be below 8 percent of annual revenues, and we must receive an unmodified financial opinion on annual, independently audited financial statements. In addition, all energy-efficiency investments, excluding pilots and limited activities exempted by the OPUC, are required to be cost effective, meaning that long-term project savings must exceed related costs and be of net financial benefit to the customer. The board of directors reviews monthly financial statements, program impact evaluations and program process evaluations, and updated evaluation factors are applied to our results during an annual true-up process.

How do you report on expenditures and progress to goals and performance measures?

We report quarterly and annually to the board and OPUC on progress to goals, revenues and expenditures, and program and operations activities. We also provide information for a public purpose charge report that is submitted to the Oregon Legislature every two years by the OPUC.

What happens when funds are not spent by the end of the year?

At year-end, any unspent funds are carried over into the following year's budget and offset future revenue needs. Carryover of unspent funds can be a result of many factors, including meeting our savings goals at lower than expected costs or revenue forecasts being higher than projected due to unexpected weather changes. Renewable energy project development often occurs over multiple years and requires an upfront funding commitment.



Approved 2018 Budget & 2018-19 Action Plan

December 15, 2017



Today's Presentation

- Projected 2017 Results and 2018 Context
- Outreach and Comments
- Approved Budget Highlights
- Summary



Projected 2017 Results

- Forecasting to exceed electric savings goal, fall short in gas
- Levelized costs lower than budgeted
- Renewable generation strong with high solar activity and large pipeline of hydro and biopower projects
- Expenditures trending down
- Reserves trending above targets, as anticipated
- On track for 5-year strategic plan goals



Projected 2017 Results by Utility

	2017 Budget Savings & Generation (Net) aMW or MMTh	2017 Budget Levelized Cost per kWh or therm	2017 Forecast Savings & Generation (Net) aMW or MMTh	Forecasted % of 2017 Goals (Net)	Forecasted 2017 Levelized Cost per kWh or therm
PGE (Efficiency)	34.97	3.0¢	41.24	118%	2.5¢
Pacific Power (Efficiency)	21.43	2.9¢	23.00	107%	2.5¢
NW Natural (OR)	6.25	30.6¢	5.43	87%	29.8¢
NW Natural (WA)	0.28	55.9¢	0.35	125%	49.1¢
Cascade Natural Gas	0.56	34.0¢	0.50	89%	29.2¢
Avista	0.32	19.8¢	0.34	107%	24.2¢
PGE (Renewable)	1.23	N/A	1.20	98%	N/A
Pacific Power (Renewable)	1.63	N/A	3.21	197%	N/A

MMTh: million annual therms

aMW: average megawatts

Net savings

Context Driving 2018 Savings & Expenditures

- Stable economy driving high activity in some program areas
- Oregon population diversifying, stakeholder interest growing
- Changing policies, markets and technologies
- Lower savings per project
- Avoided cost shifts
- Cost-effectiveness challenges

2018 Budget Areas of Emphasis



Outreach and Comments

Outreach Activities Completed

Presentations by Audience	Dates
PGE, Pacific Power, NW Natural, Cascade Natural Gas, Avista	Aug – Nov
Oregon Public Utility Commission Informal Workshop	Oct 24
Renewable and Conservation Advisory Councils	Oct 25, Nov 17
Promotion of and Public Access to Online Information, On-demand Webinar	Nov 1 – 17
Board of Directors	Nov 8
Oregon Public Utility Commission Public Workshop	Nov 16

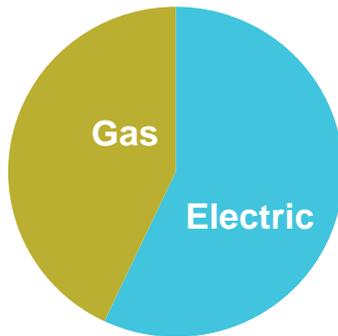
Highlights from Budget Comments

- **Overall support** for budget and action plan
- Concerns with changes in **gas costs and savings**, particularly residential
- Ensure stakeholders understand **residential lighting** changes
- Additional discussion with utilities on strategy to increase **low-income participation**
- Review with OPUC **use of interest** earned on public purpose funds
- **Process improvements** for advisory councils, stakeholders

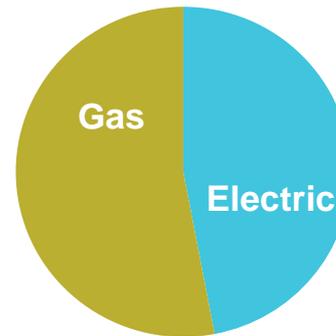
Factors Shifting EPS New Homes Costs, Savings

1. State energy code update
2. Energy Trust avoided cost changes

Sample EPS Incentive Payment Split Before Avoided Cost Updates



Sample EPS Incentive Payment Split After Avoided Cost Updates



3. New homes volume forecast

12% ↑ budget to budget

EPS New Homes Allocated Cost Changes

- Updated EPS incentive allocations

	2017 EPS		2018 EPS	
Total Weighted Avg Allocation	% Electric	% Gas	% Electric	% Gas
	65%	35%	50%	50%



OPUC Comments

- Summarized status of last year's recommendations
- Supported 2018 budget and 2018-19 action plan
- Concern about staffing and administrative costs
- Requested prioritization of the following activities in 2018:
 - Continue in-progress responses to 2017 recommendations
 - Reduce pace of growth in staffing costs in 2019
 - Revise two performance metrics: staffing costs; administrative and program support costs
 - Report on Diversity, Equity and Inclusion activities, LED lighting trends across all sectors and solar system project installations



Approved Budget Highlights

Approved 2018 Budget Summary

- Investing \$198.9 million
- Saving 56.59 aMW and 6.91 MMTh
 - Electric savings up by 0.3%
 - Gas savings down by 6.8%
- Delivering highly cost-effective energy
 - 3.0 cents/kWh levelized
 - 33.3 cents/therm levelized
- Generating 1.89 aMW
 - Renewable generation down 34%, largely due to solar state tax credit expiration and tighter budgets



Approved 2018 Budget Summary

- Overall spending up 0.1% due to increased project volume and an increase in internal costs
 - Incentives are 55.8% of total planned expenditures
 - Internal and external program delivery costs up slightly
- Revenue down 3.1%; reserves up 20%
- Low administrative and program support costs at 6.6%
- Three-year rolling staffing costs at 7.0%, below OPUC performance measure



Highlights of Changes Made to Draft Budget

	Draft Budget	Approved Budget	Change	% Change
Revenues	\$185.7 million	\$187.0 million	\$1,262,516	0.68%
Expenditures	\$199.6 million	\$198.9 million	(\$741,895)	(0.37%)
Gas Savings	6,882,066 therms	6,911,850 therms	29,784 therms	0.43%
Electric Savings	56.52 aMW	56.59 aMW	0.07 aMW	0.12%
Gas Levelized Costs	33.49¢	33.29¢	(0.20¢)	(0.61%)
Electric Levelized Costs	3.0¢	2.97¢	(0.03¢)	(0.82%)
Generation	2.18 aMW	1.89 aMW	(0.29 aMW)	(13.18%)
NEEA Allocation (PGE; Pacific Power)*	4.51 aMW; 2.65 aMW	4.10 aMW; 3.06 aMW	--	--
Staffing Costs	\$15.6 million	\$15.2 million	(\$377,155)	(2.42%)

* Change in allocation methodology shifted savings goals and budget between PGE and Pacific Power; overall NEEA goal and budget did not change

Changes Made to Staffing, Administrative Costs

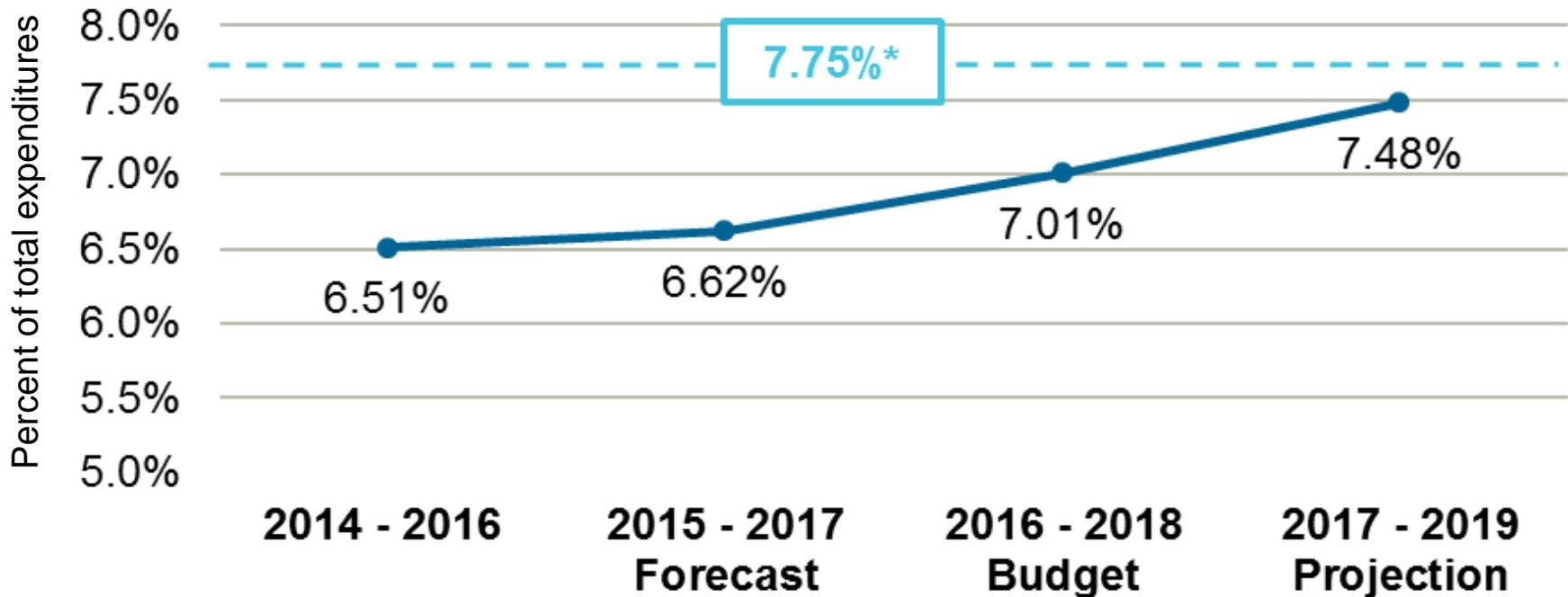
Reduced staffing costs \$377,000 from draft budget:

- Lowering staffing compensation budget by 2%
- Thinning travel and conference budgets
- Slowing pace of targeted demand-side management work, web tool development, targeted marketing support
- Delaying budget system upgrade
- Minimizing time spent as an expert resource on policy or stakeholder topics related to our work, such as residential pay-for-performance



Staffing Costs & OPUC Performance Metric

- Staffing costs increasing due to growing resource demands, healthcare cost, compensation adjustments and agency contractors
- Below OPUC performance measure



Staffing costs are embedded in internal program delivery, general communications and outreach, and management and general.

*** 3-year rolling average performance measure**

Action Plan Highlights

- Foster long-term relationships with business customers
- Focus outreach to irrigation hydropower and biogas projects
- Drive forward organizational diversity, equity and inclusion activities
- Utilize new, improved data resources in analysis and targeted marketing
- Collaborate with NEEA to identify new measures
- Implement recommendations from Org. Review and Budget Review Projects



2018 Utility Savings & Generation Summary

	2017 Budget Savings & Generation (Net) aMW or MMTh	2017 Budget (\$ Million)	2018 Approved Budget Savings & Generation (Net) aMW or MMTh	2018 Approved IRP Target* (Net) aMW or MMTh	2018 Approved Budget (\$ Million)	2018 Approved Budget Levelized Cost per kWh or therm
PGE (Efficiency)	34.97	\$93.61	36.40	32.40	\$96.67	2.9¢
Pacific Power (Efficiency)	21.43	\$55.80	20.18	19.76	\$57.85	3.2¢
NW Natural (OR)	6.25	\$23.89	5.66	4.44	\$24.79	32.5¢
NW Natural (WA)	0.28	\$2.08	0.36	0.36	\$2.37	51.6¢
Cascade Natural Gas	0.56	\$2.47	0.55	0.53	\$2.72	37.2¢
Avista	0.32	\$0.90	0.35	0.35	\$1.14	21.9¢
PGE (Renewable)	1.23	\$10.03	1.08	N/A	\$6.81	N/A
Pacific Power (Renewable)	1.63	\$9.80	0.82	N/A	\$6.52	N/A

aMW: average megawatts
MMTh: million annual therms
Net savings

* IRP targets reflected in net savings using 2018 Energy Trust net-to-gross ratios. These net targets align with the energy efficiency potential incorporated in current utility IRP filings.

Utility Rate Information

	PGE	Pacific Power	NW Natural	Cascade Natural Gas	Avista
Estimated incremental collection adjustment	\$0	-\$3.2M	\$2.0M	\$0	\$0
Estimated PPC* for Energy Trust efficiency only	5.8%	4.2%	4.0%	4.3%	1.1%
Estimated PPC* for Energy Trust efficiency and renewable generation	6.3%	4.7%	N/A	N/A	N/A
Estimated total PPC* <i>(includes schools, low-income and Energy Trust for electric utilities)</i>	7.1%	5.5%	4.0%	4.3%	1.1%
Anticipated effective date, pending OPUC action	Jan. 1	Jan. 1	Jan. 1	Dec. 1	Jan. 1

*Public Purpose Charge (PPC) is a percentage charge on utility customer bills.

Note: PPC rates shown above are based on best available estimates at time of approved budget publication. Actual rates may vary. These estimated rates do not include utility administered low-income program funds.

2019 Budget Projection

- Expenditures are projected to increase 0.3%
- Savings expected to decrease
 - Electric savings down 9.5%
 - Gas savings down 8%
- Levelized costs projected to increase
 - Electric increasing to 3.1¢/kWh (3.0¢/kWh in 2018)
 - Gas increasing to 39.5¢/therm (33.3¢/therm in 2018)
- Renewable generation is expected to increase 50%



Summary

Approved Budget Key Takeaways

1. Sustaining a high level of savings with lower revenues
2. Overall savings stable even with significant decline in residential savings; downturn in overall savings expected in 2019
3. Residential lighting transition underway, earlier than estimated
4. Volume of energy efficiency projects and customer transactions remains high
5. Increasing cost per unit of savings
 - Due to market transformation successes, lower avoided costs, fewer savings per project
6. Underserved markets a strong focus moving forward
7. Solar market in transition; challenging renewable project economics
8. Resource demands on organization continue growing

Customer Benefits from 2018 Investments

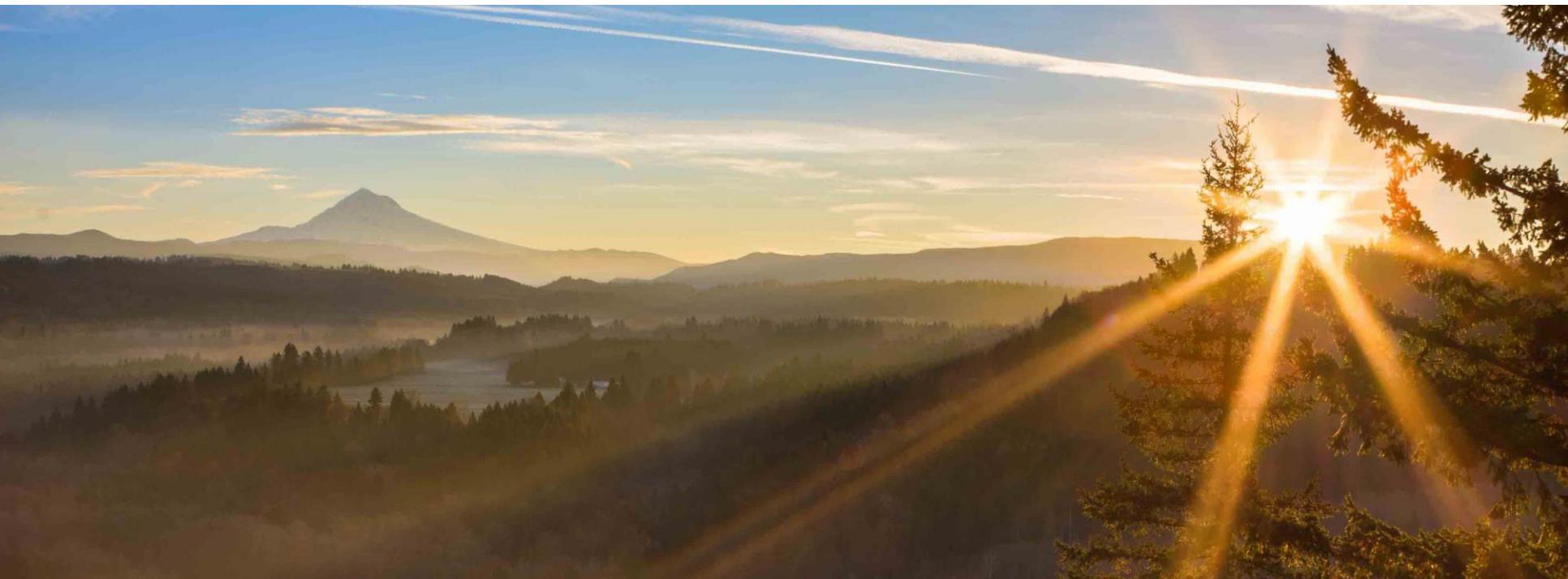
- **\$698 million in future bill savings** from energy improvements made in 2018 with help from Energy Trust
- Improved air quality by avoiding 4.4 million tons of carbon dioxide
- Enough energy to power 45,000 homes and heat 12,900 homes
- Continued high customer satisfaction
- Expanded access and participation statewide
- Training and support for 2,400 local businesses



Questions and Discussion

Staff recommends the Board of Directors adopt Resolution 827:

The Final Proposed 2018 Budget, 2019 Projection and 2018-2019 Action Plan



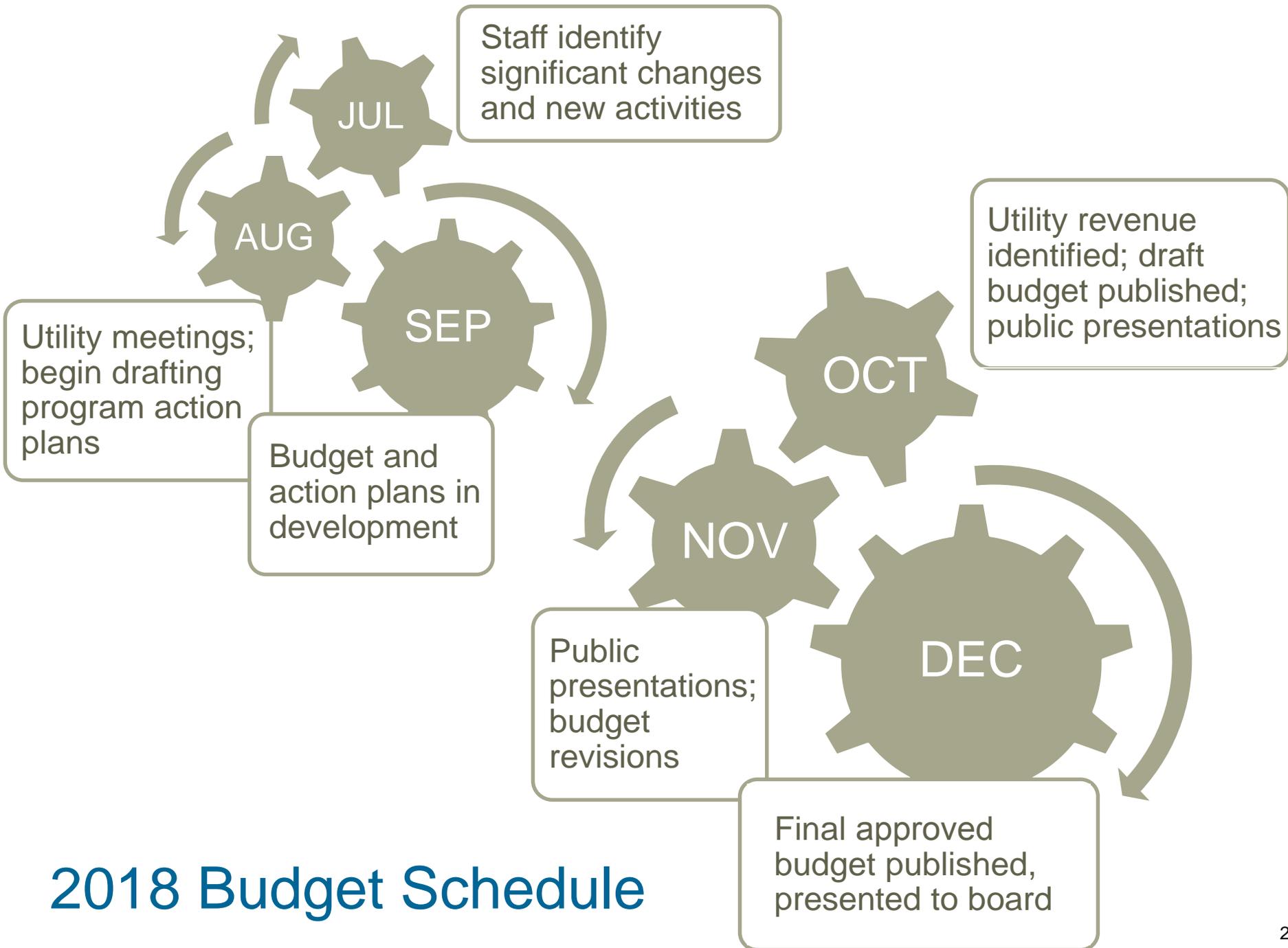
Thank You

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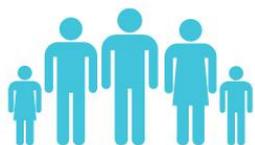
Supplemental Slides:
Approved
2018 Budget and
2018-2019 Action Plan



2018 Budget Schedule

15 Years of Affordable, Clean Energy

\$1.5 billion investment delivers these customer benefits:



More than 660,000 homes and businesses served

10,000 clean energy systems generating renewable power from the sun, wind, water, geothermal heat and biopower



\$6.9 billion in savings over time on participant utility bills from their energy-efficiency and solar investments

20 million tons of carbon dioxide emissions kept out of our air



Building Blocks for Budget and Action Plan

1

2015-2019
Strategic Plan
goals and
strategies

2

Utility
Integrated
Resource
Plans
Renewable
resource
availability

3

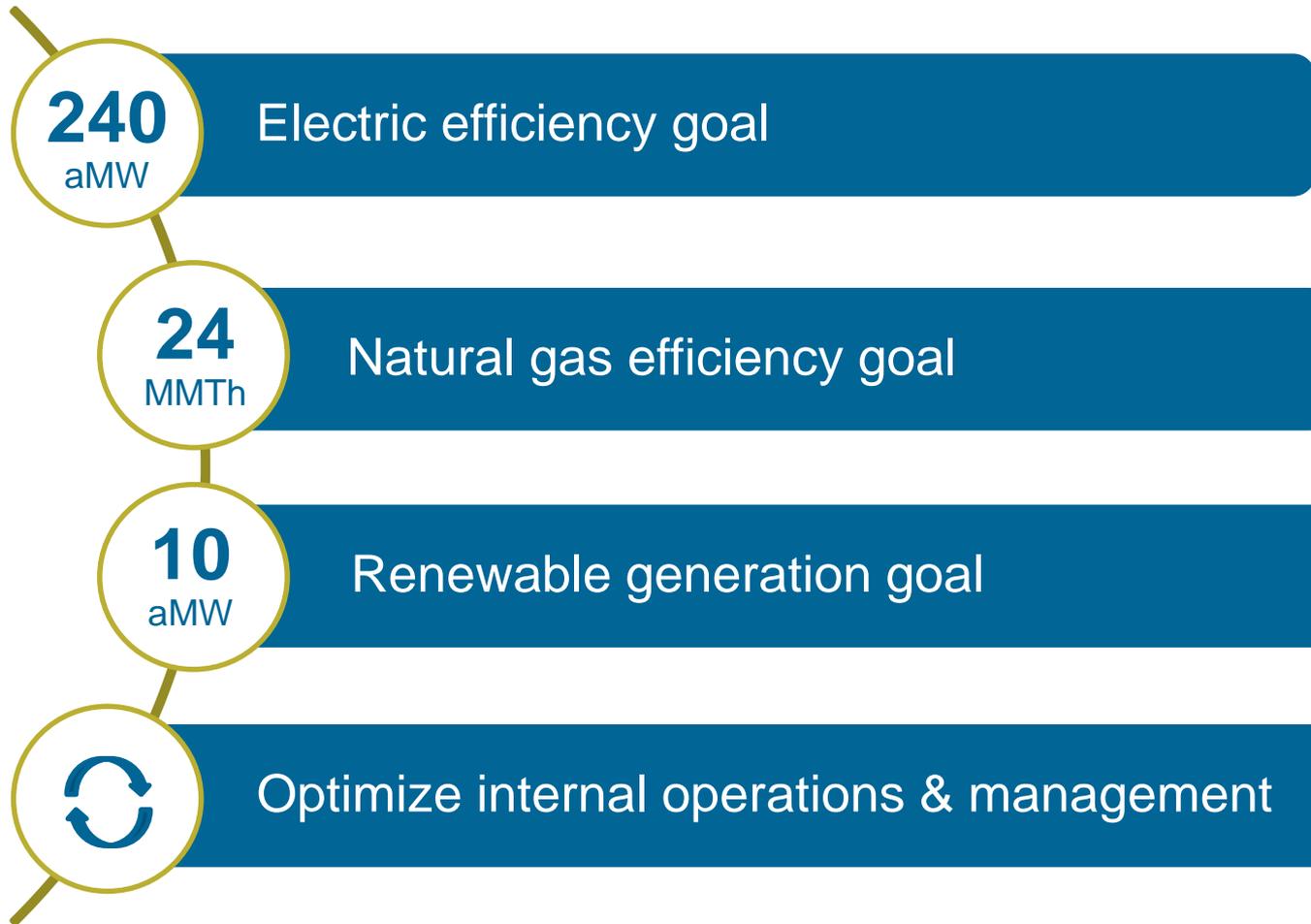
Market
knowledge
and context

4

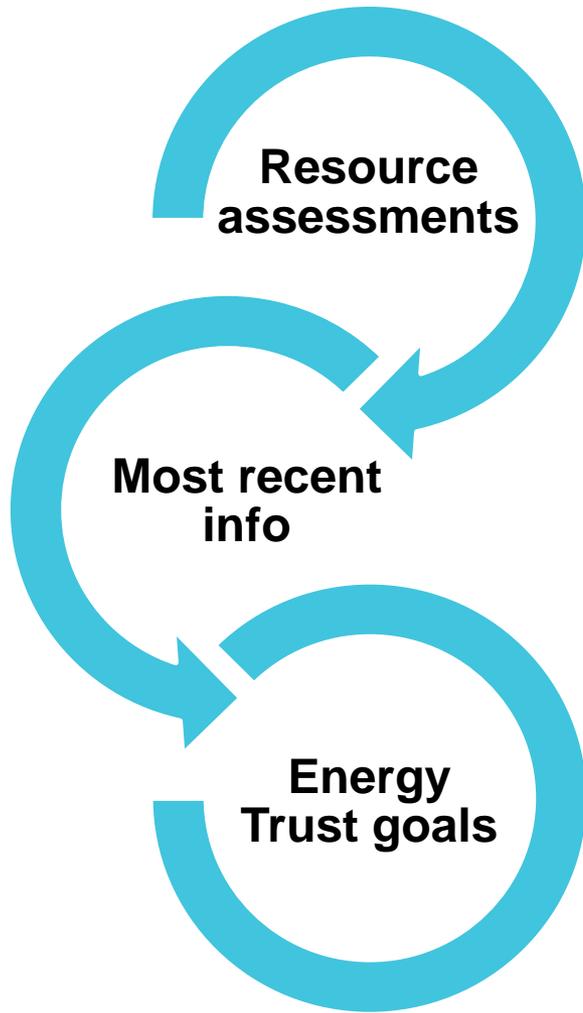
Areas of
emphasis

Based on
goals,
strategies
and context

2015-2019 Strategic Plan Goals



Annual Goal Setting



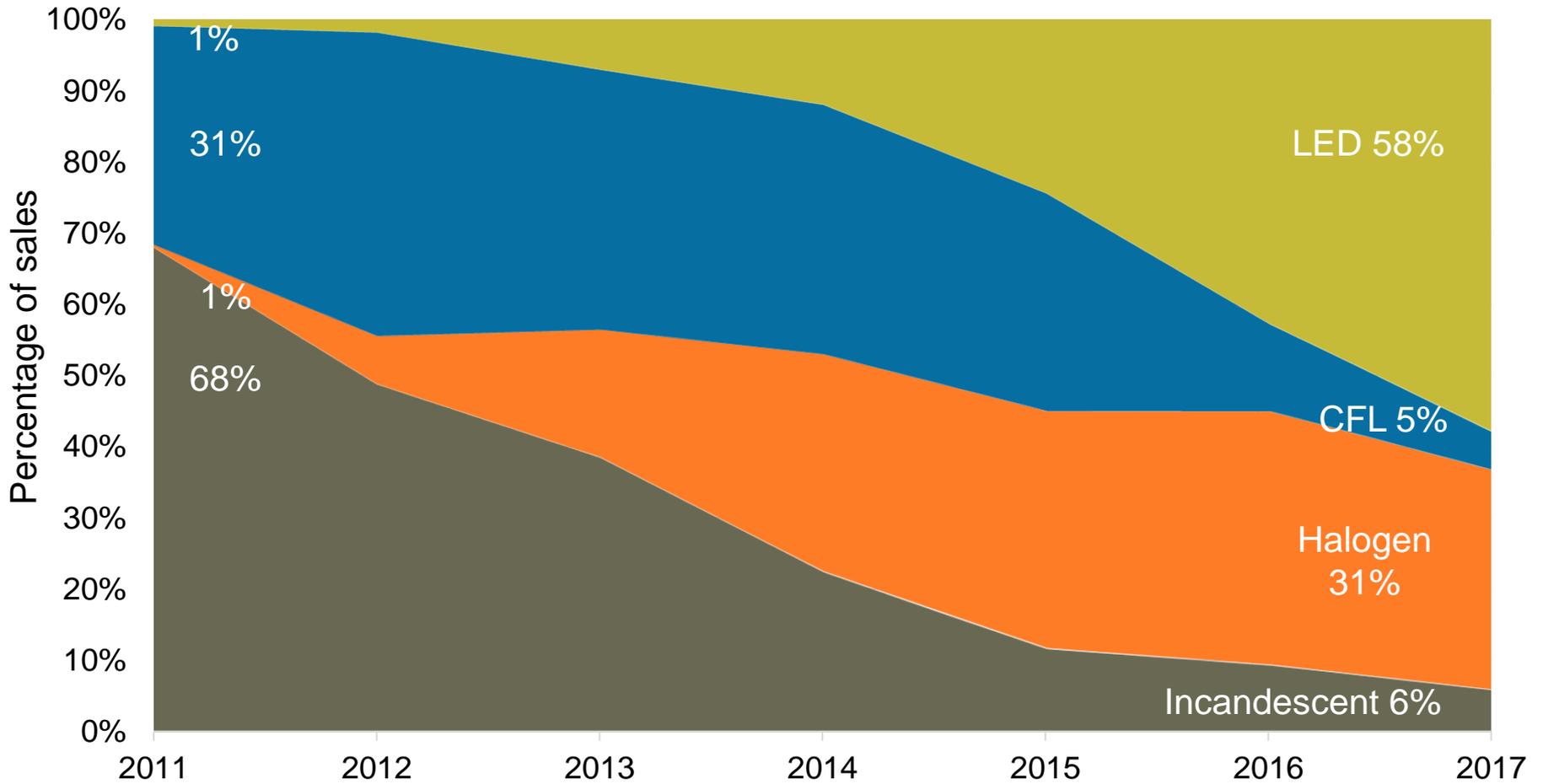
- Annual savings goals related to each utility's Integrated Resource Plan (IRP) target
 - Staggered two-year IRP cycles
 - Energy Trust annual goals can be higher because of new information
 - Utilities file tariffs to collect funding necessary to meet annual goal
- Generation goals informed by resource availability and market drivers

Market Knowledge and Context

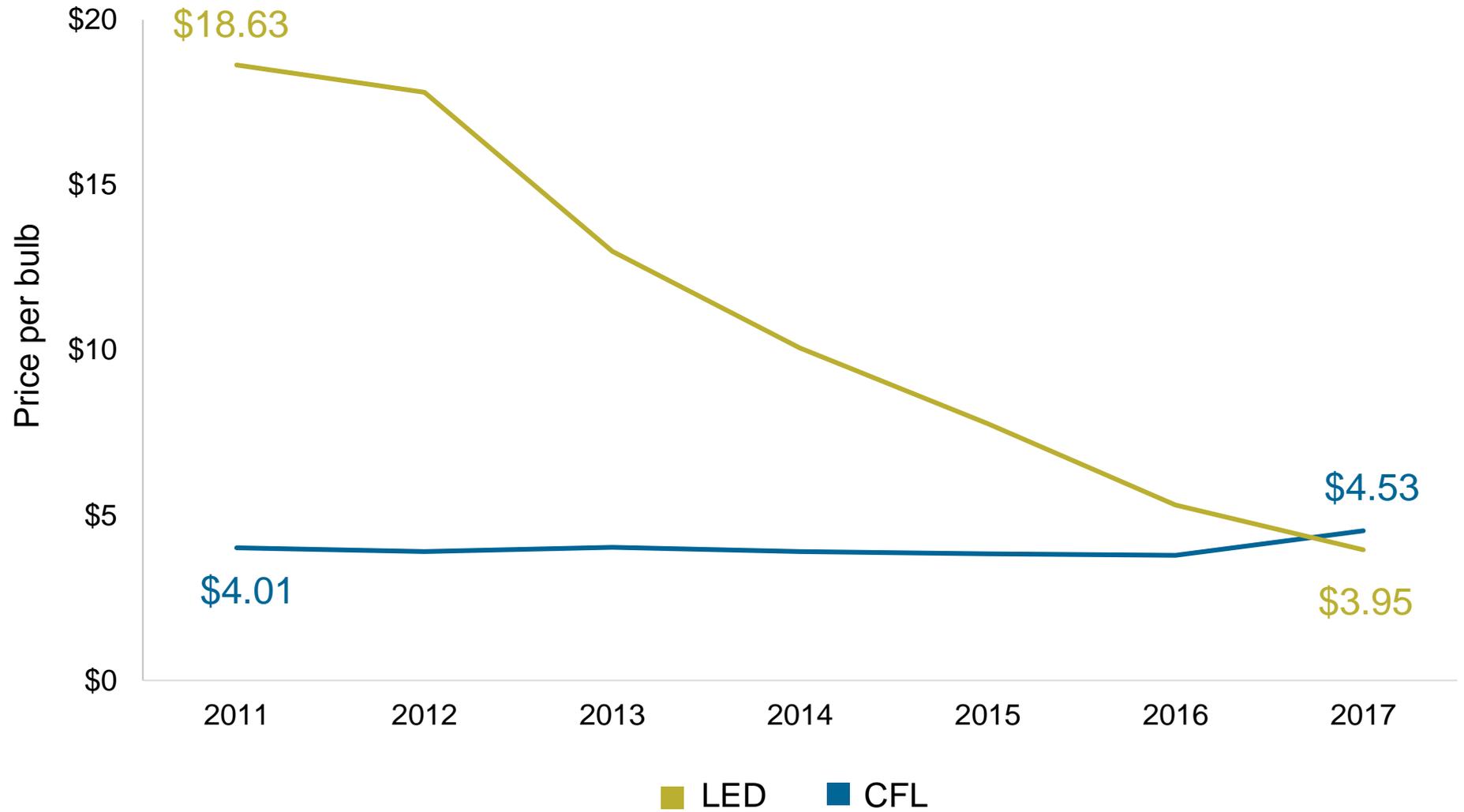
- 4th year of strategic plan
- Stable economy driving high activity in some program areas
- Oregon population diversifying, stakeholder interest growing
- Changing policies, markets and technologies
- Lower savings per project
- Avoided cost shifts
- Cost-effectiveness challenges



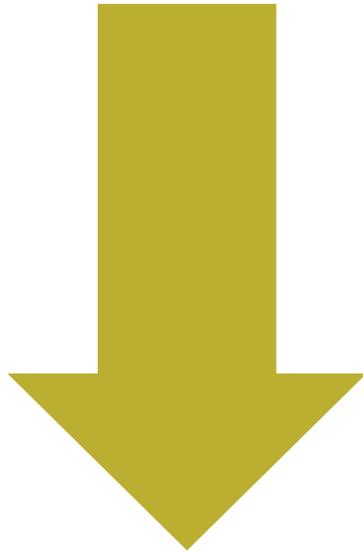
Changes in Retail LEDs: Regional Market Share



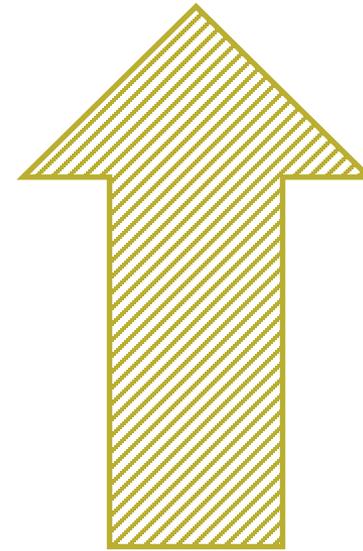
Changes in Retail LEDs: Regional Pricing



Changes in Retail LEDs: Draft 2018 Budget

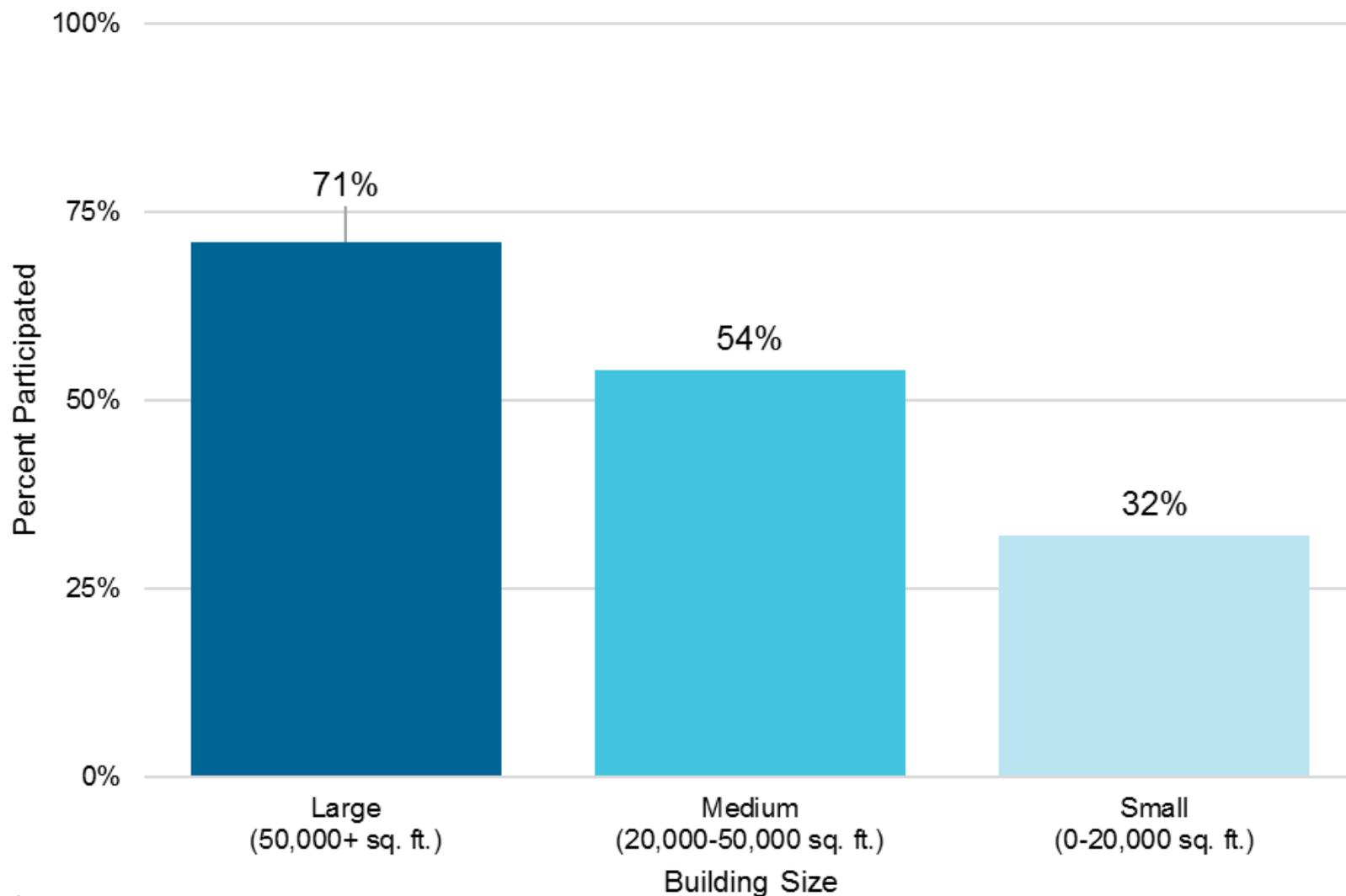


Average savings per LED bulb
reduced approx. 66%
compared to 2017



Average incentive cost per kilowatt
hour increased approx. 51%
compared to 2017

Business Participation by Building Size



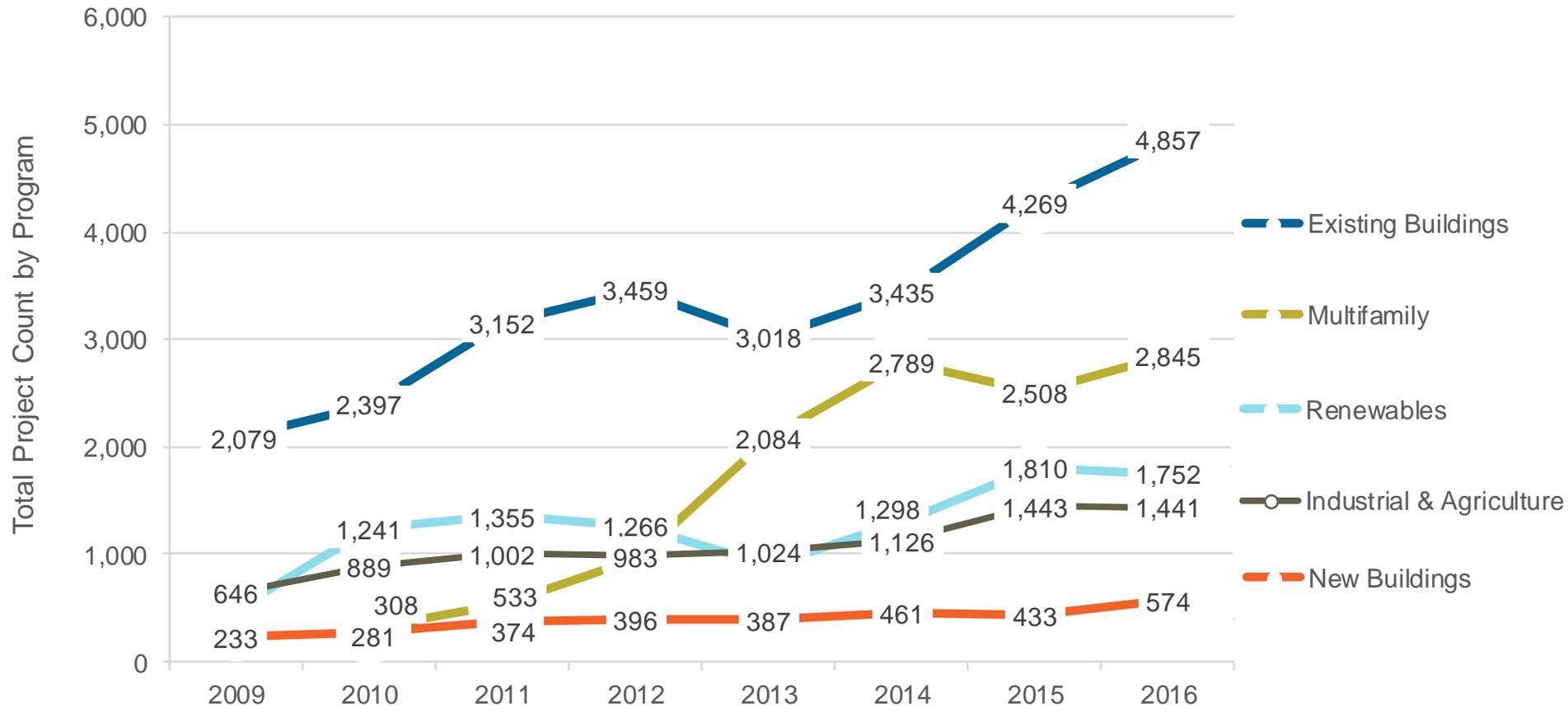
Sq. ft. of participating buildings in study:

290 million sq. ft.

64 million sq. ft.

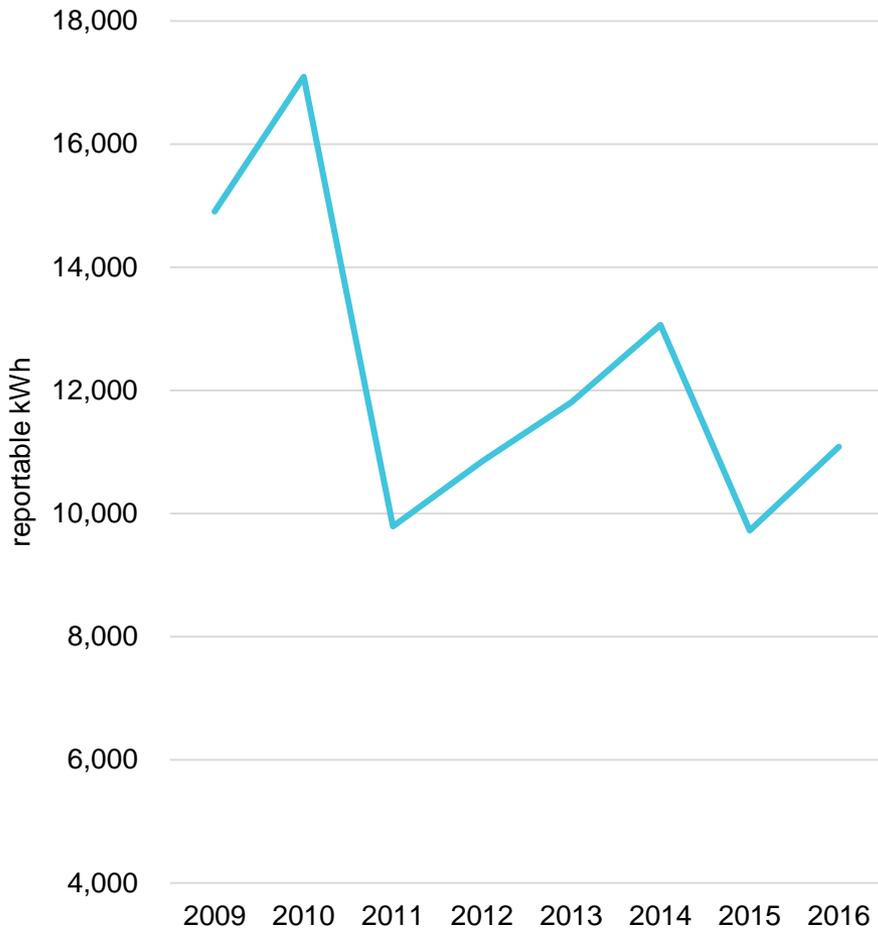
48 million sq. ft.

Increasing Volume of Projects Continues

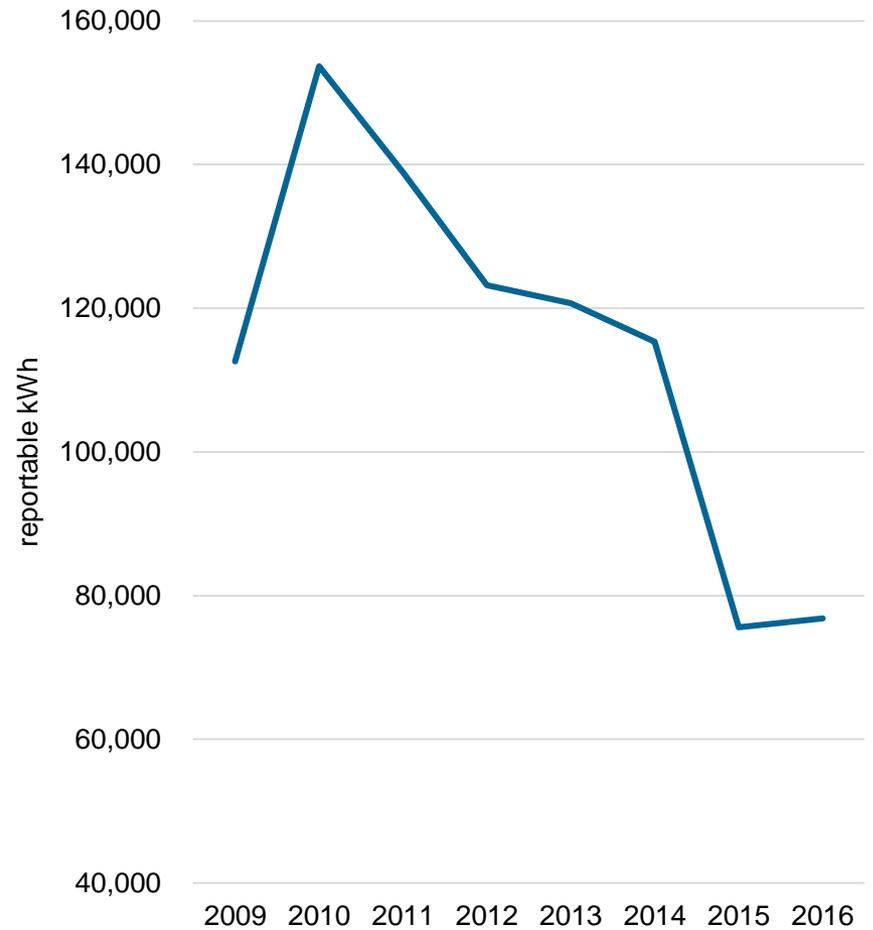


Savings per Project Trends

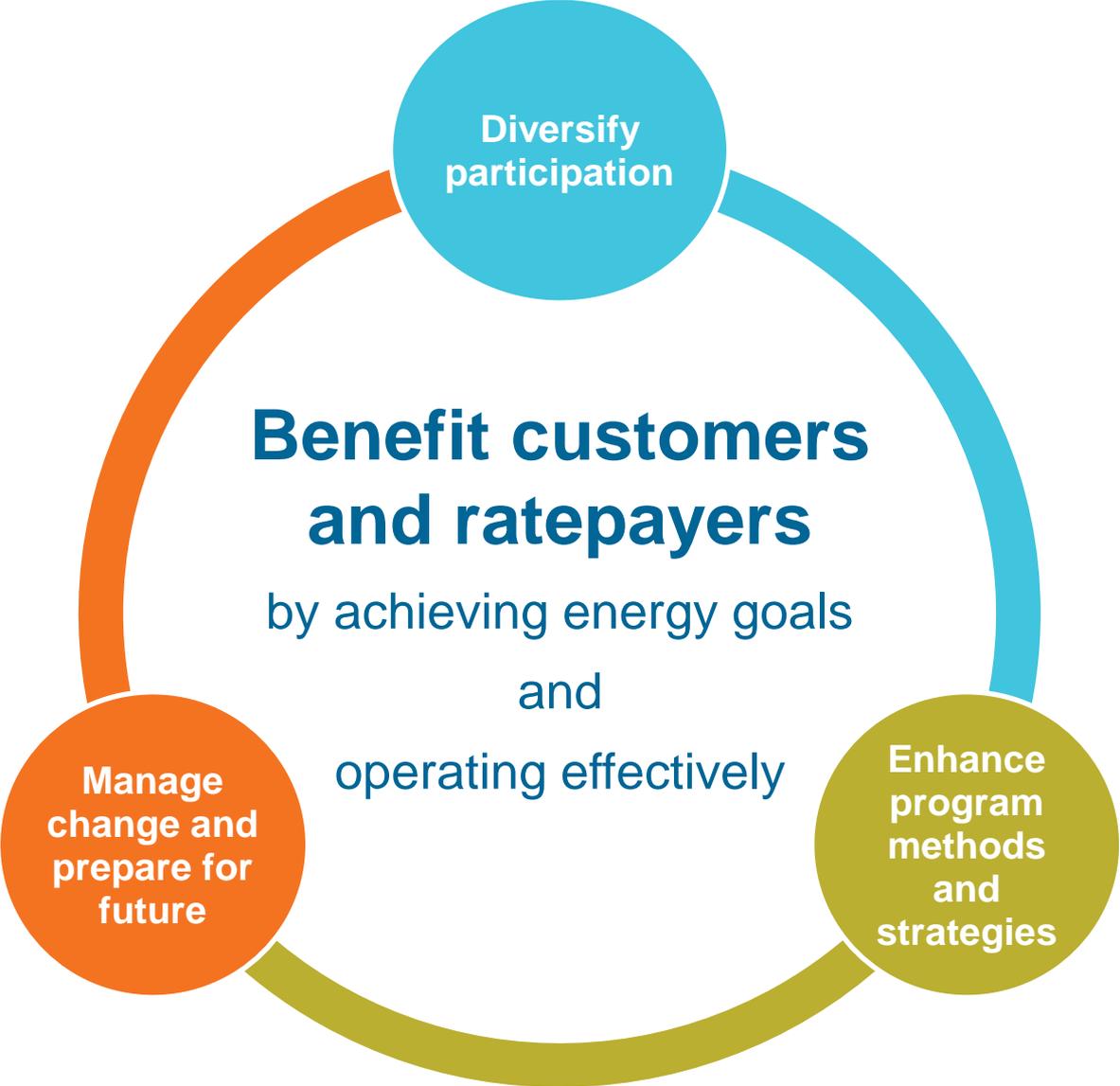
Existing Buildings program:
Average Electric Savings per Project



Production Efficiency program:
Average Electric Savings per Project



2018 Areas of Emphasis



1) Diversify Participation

- Increase outreach to small/medium businesses and agriculture
- Identify and prioritize strategies to increase access to solar in low-income communities
- Contract with community-based organizations to reach under-served communities in residential sector
- Drive forward organizational diversity, equity and inclusion strategies and activities



2) Enhance Program Methods and Strategies

- Utilize new, improved data resources in analysis and targeted marketing
- Leverage energy-related initiatives spearheaded by others
- Foster long-term relationships with business customers and support long-term project planning for communities
- Focus outreach to irrigation hydropower and biogas projects

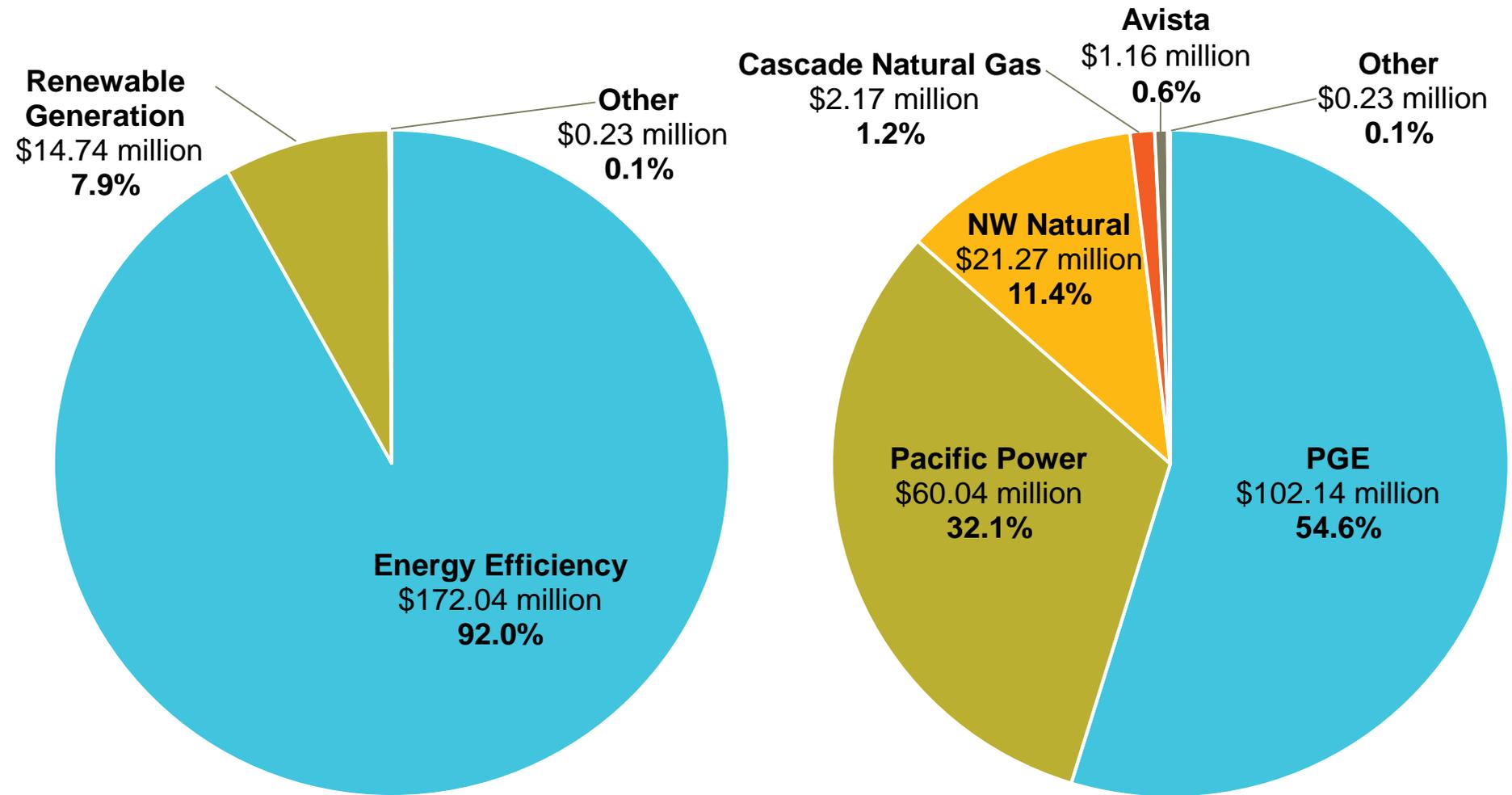


3) Manage Change and Prepare for Future

- Support targeted demand-side management efforts with utilities
- Collaborate with NEEA to identify new measures and strategies
- Implement recommendations from internal Organizational Review and Budget Review Projects
- Implement transitional strategies for key program areas (ex. solar, residential)

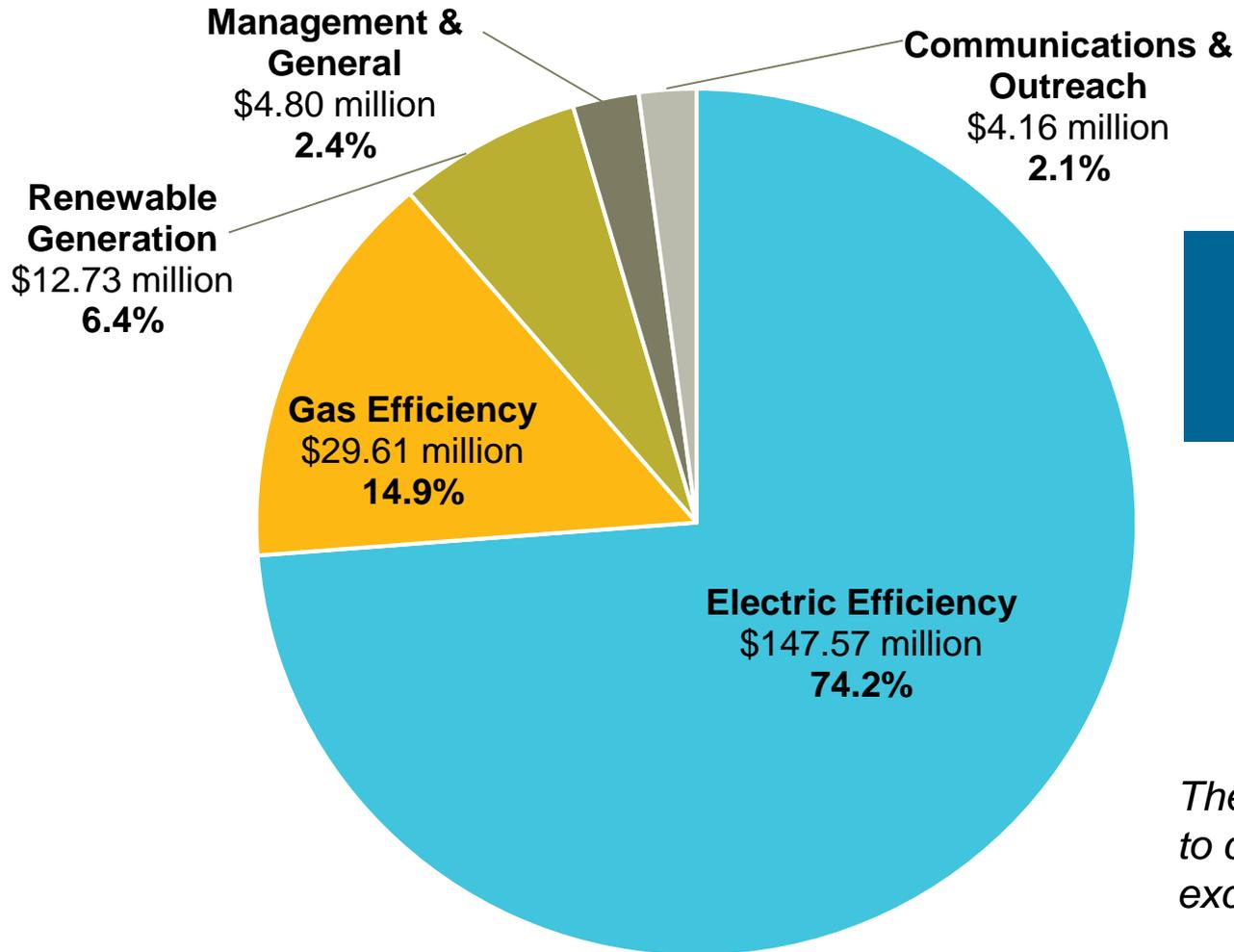


2018 Approved Budget Revenues



Total 2018 revenue \$187 million, down 3.1%

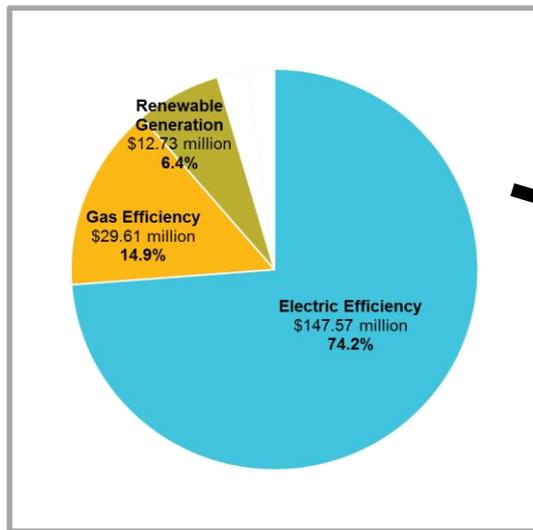
2018 Approved Budget Expenditures



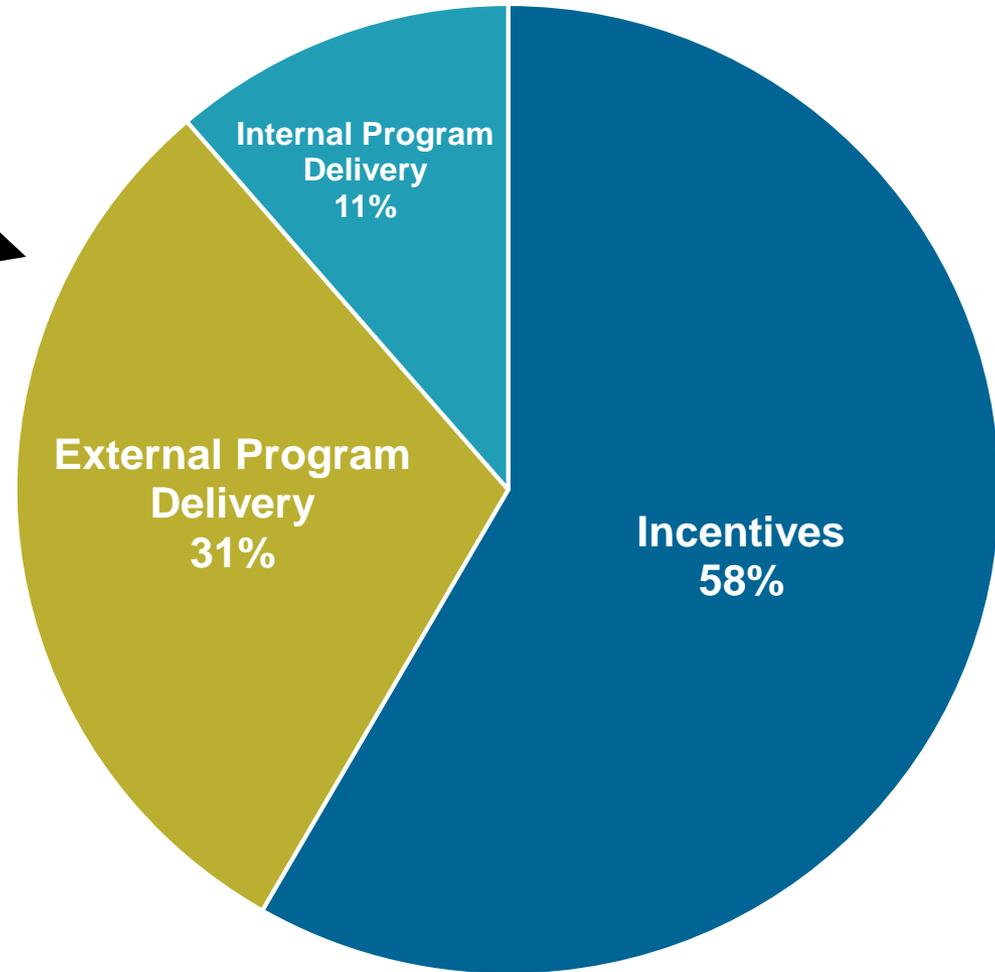
\$198.86 million
Up 0.1% from 2017

The 2018 budget utilizes reserves to cover planned expenses in excess of anticipated revenue.

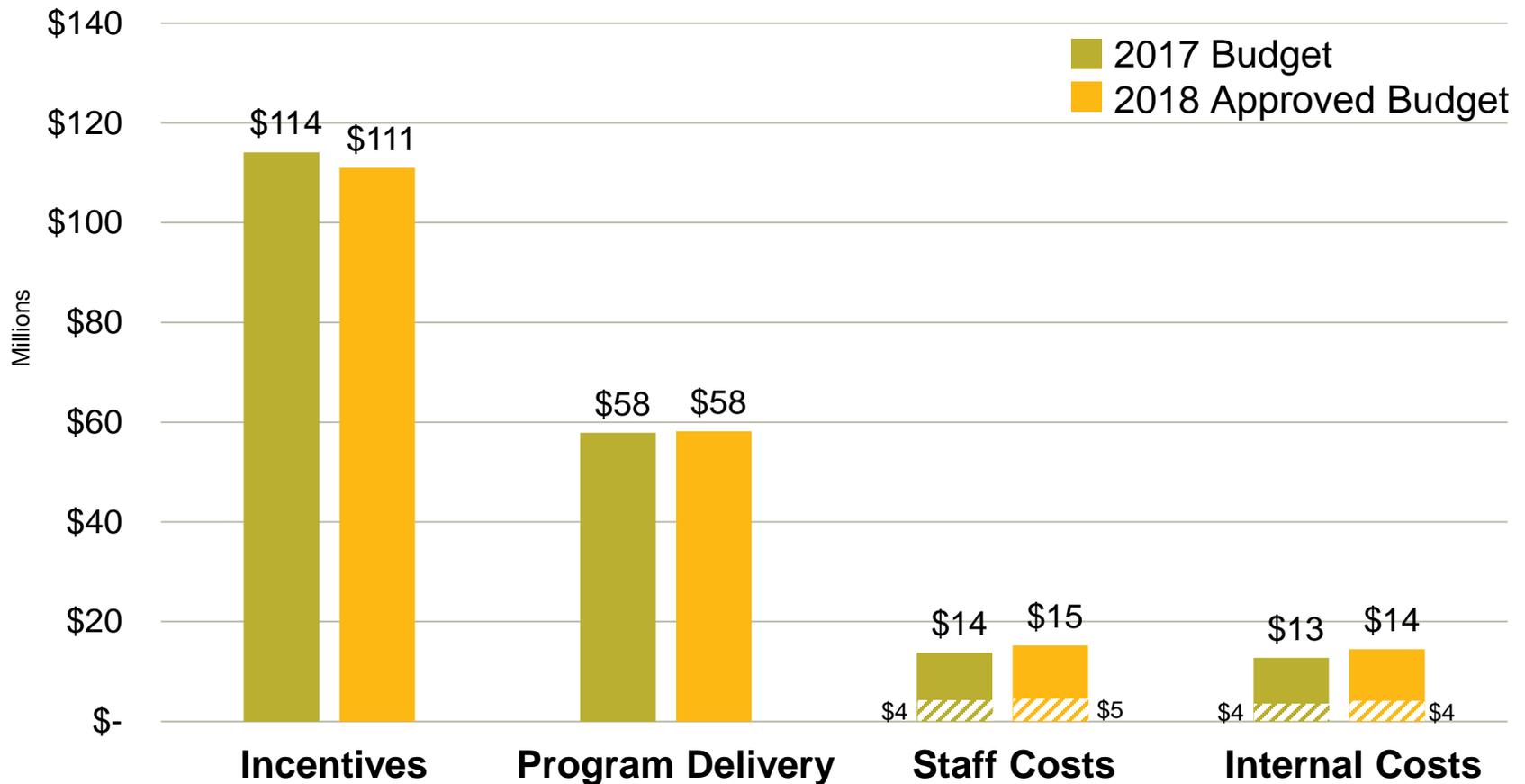
2018 Approved Budget Expenditures Detail



Pie chart excludes management/general and communications/outreach expenses

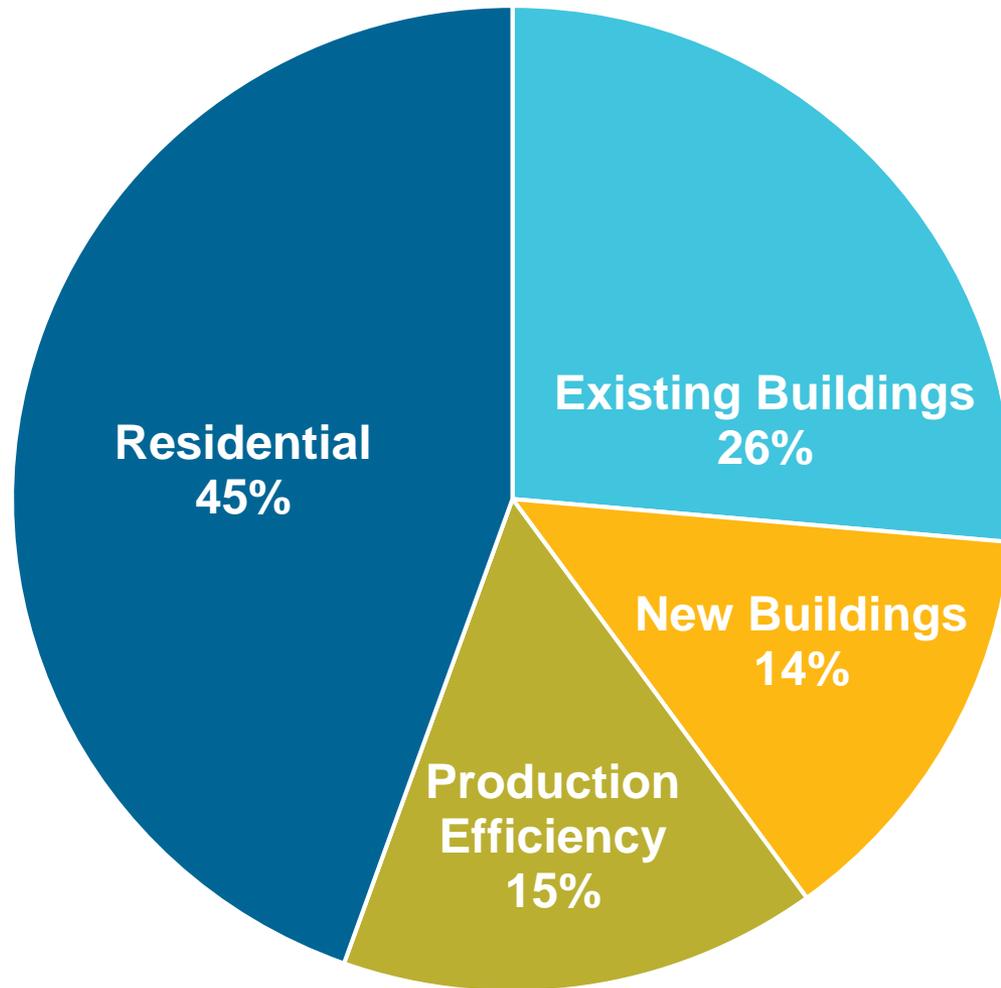


2017 Budget Compared to 2018 Budget



Cross-hatches represent Management & General and Communications & Outreach as a portion of Staff Costs and Internal Costs. The remaining portion represents Internal Program Delivery.

2018 Natural Gas Savings by Program

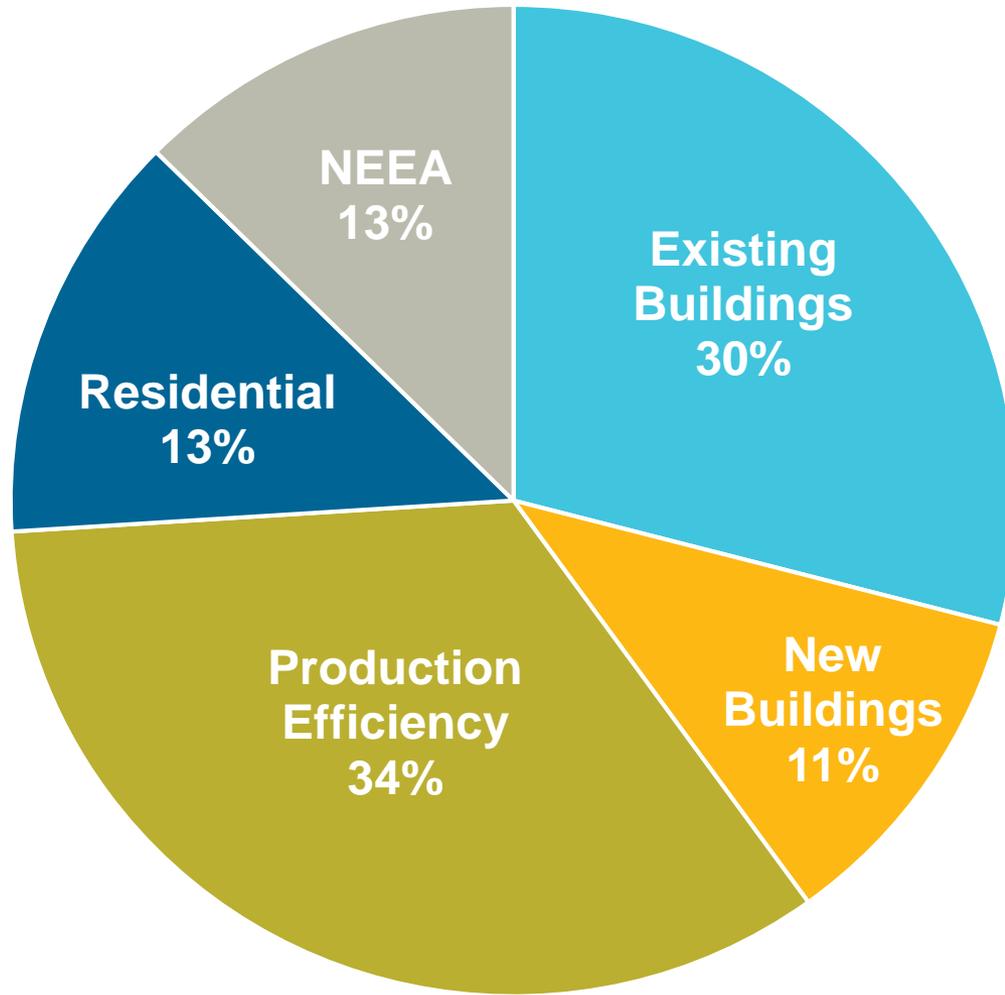


6.91 MMTh goal
33.3 cents/therm

- Savings down 6.8%
- \$31.0 million in total costs, including customer incentives, services and delivery

*MMTh: million annual therms
Cost per therm is levelized*

2018 Electric Savings by Program



56.59 aMW goal
3.0 cents/kWh

- Savings up 0.3%
- \$154.5 million in total costs, including customer incentives, services and delivery

aMW: average megawatts
Cost per kilowatt hour is levelized

2018 Renewable Energy Programs

	Budget 2017		Approved Budget 2018		% Change	
	\$ Million	aMW	\$ Million	aMW	\$	aMW
Other Renewables	\$6.42	0.001	\$3.72*	0.00	-42%	N/A
Solar	\$13.41	2.86	\$9.61	1.89	-28%	-34%
Total	\$19.83	2.86	\$13.33	1.89	-33%	-34%

Generation down 34%
\$13.3 million in total costs,
including customer incentives, services and delivery

* Other Renewables expenditures include:

- Project development assistance payments for potential generation in future years (63%)
- Staff, professional services, outreach and other allocated costs (37%)

NEEA Goals and Budget

	2017 Goal	2017 Forecast	2018 Approved Goal	2018 Approved Budget (\$Million)	2018 Approved Levelized Cost (per kWh)
PGE (aMW)	4.12	4.43	4.10	\$4.07	1.3¢
Pacific Power (aMW)	2.87	3.31	3.06	\$3.04	1.3¢
NW Natural	-	-	-	\$1.39	N/A
Cascade Natural Gas	-	-	-	\$0.14	N/A

- Energy Trust allocated budget to NEEA for gas market transformation activities; savings are expected in subsequent years
- Avista pays for its share of NEEA gas market transformation activities directly

Net and Gross Savings

	2018 Approved Budget Savings (Net) aMW or MMTh	2018 Approved Budget Savings (Gross*) aMW or MMTh
PGE (Efficiency)	36.40	40.35
Pacific Power (Efficiency)	20.18	22.57
NW Natural (OR)	5.66	6.18
NW Natural (WA)	0.36**	0.36
Cascade Natural Gas	0.55	0.60
Avista	0.35	0.37

- OPUC requested Energy Trust begin reporting net and gross savings totals (net savings are equivalent to Energy Trust's reportable savings)
- Provides holistic view of savings acquisition
- Aligns with regional and national reporting

* Gross savings represent all savings from program participants, regardless of whether they are free-riders

** Value is in gross savings per WUTC direction

Approved: 2018 Electric Savings, Budget by Program

	2017 Budget aMW Savings (Net)	2017 Electric Cost (\$ Million)	2018 Approved Budget aMW Savings (Net)	2018 Approved Electric Cost (\$ Million)	2018 Approved Levelized Cost/kWh	% 2018 Savings
Production Efficiency	13.6	\$31.80	19.2	\$35.16	2.0¢	34%
Existing Buildings	12.1	\$41.60	15.0	\$49.02	3.4¢	26%
Existing Multifamily	2.6	\$11.20	1.8	\$8.85	5.1¢	3%
Residential	14.8	\$40.00	7.2	\$34.52	4.9¢	13%
New Buildings	6.3	\$17.50	6.3	\$19.87	3.3¢	11%
NEEA	7.0	\$7.30	7.2	\$7.10	1.3¢	13%
TOTAL	56.4	\$149.40	56.6	\$154.52	3.0¢	

aMW: average megawatts

Net savings

Columns may not total due to rounding

Approved: 2018 Natural Gas Savings, Budget by Program

	2017 Budget MMTh Savings (Net)	2017 Gas Cost (\$ Million)	2018 Approved Budget MMTh Savings (Net)	2018 Approved Gas Cost (\$ Million)	2018 Approved Levelized Cost/therm	% 2018 Savings
Production Efficiency	1.1	\$2.87	1.1	\$2.86	24.4¢	15%
Existing Buildings	2.2	\$9.41	1.6	\$6.94	38.7¢	24%
Existing Multifamily	0.2	\$0.93	0.2	\$1.10	50.4¢	2%
Residential	3.0	\$12.53	3.1	\$16.34	33.7¢	45%
New Buildings	0.9	\$2.42	0.9	\$2.24	20.4¢	14%
NEEA	N/A	\$1.18	N/A	\$1.53	N/A	
TOTAL	7.4	\$29.34	6.9	\$31.01	33.3¢	

MMTh: million annual therms

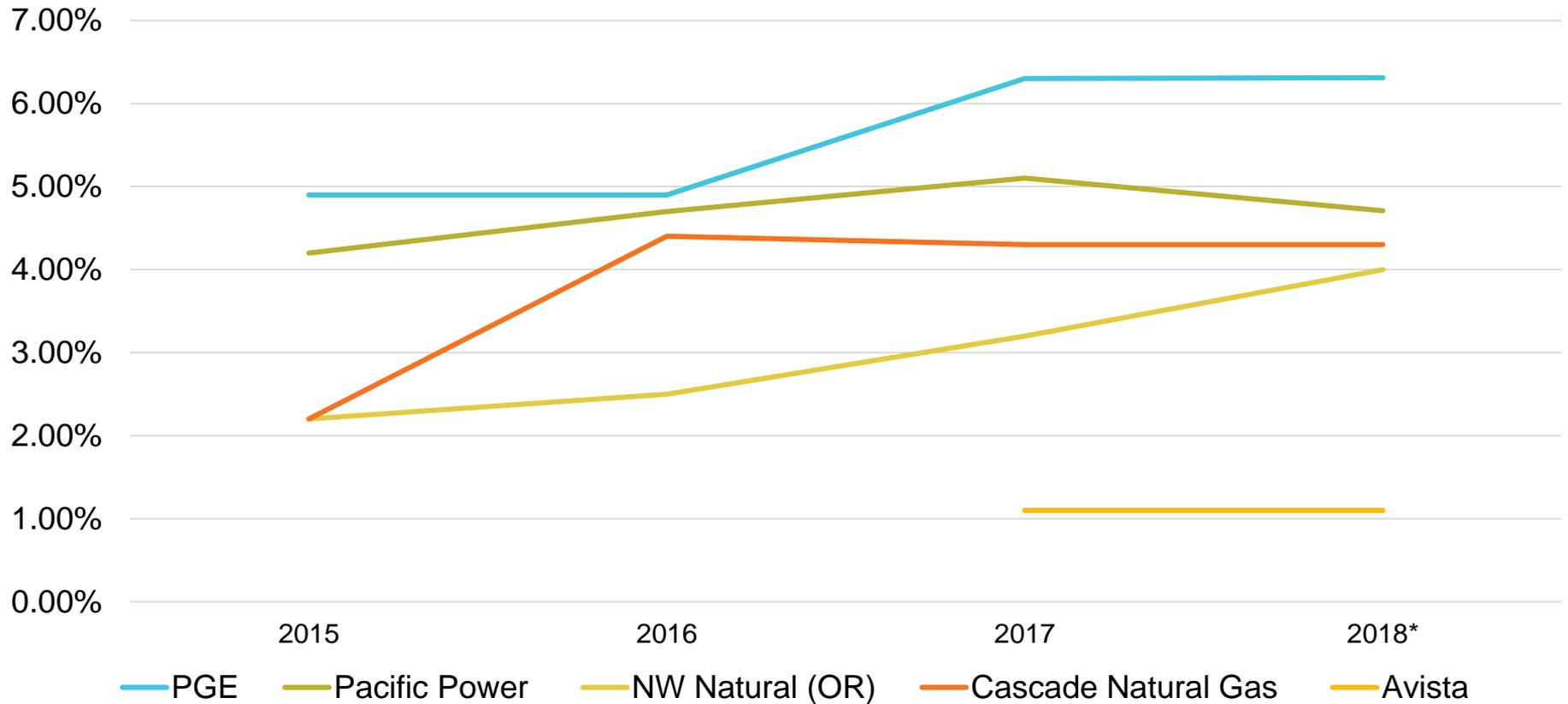
Net savings

Columns may not total due to rounding

Energy Trust allocated budget to NEEA for gas market transformation activities; savings are expected in subsequent years.

Customer Funding Changes Over Time

Energy Trust Funding as a Percent on Customer Bills



* 2018 rates are estimated and may change

Budget Outreach Schedule

October & November

December

RAC/CAC presentations, Oct. 25

Draft budget online, Nov. 1

Recorded webinar online, Nov. 7

Board of Directors, Nov. 8

OPUC public meeting, Nov. 16

RAC/CAC updates, Nov. 17

Public comments due Nov. 17

Comments reviewed, final adjustments

Final Proposed budget online,
Dec. 8

Board of Directors, **Dec. 15**,
Action on Final Proposed
2018-19 Budget and Action Plan

www.energytrust.org/about/budget

MEMO

Date: December 8, 2017
To: Board of Directors
From: Mike Colgrove, Executive Director
Subject: Staffing for the Approved 2018 Budget and 2018-2019 Action Plan

Energy Trust's staffing budget is based on a balance of organizational needs, staffing cost drivers, and compliance with OPUC cost metrics. The staffing expenditures in the Approved 2018 budget are compliant with key OPUC minimum performance metrics related to staffing costs as a percent of expenditures. Staffing as a percent of total expenditures is 7.0 percent and remains under the 7.75 percent metric, calculated on a three-year rolling average. Administrative and program support costs are at 6.6 percent of the approved budget, below the OPUC administrative and program support metric of 8 percent.

Given stakeholder interest in Energy Trust's staffing budget, this memo provides background and information to support understanding of organizational needs, the cost drivers associated with the 2018 staffing budget, and actions taken in response to stakeholder comments on staffing costs in Energy Trust's Draft 2018 budget. This supporting information is provided in the following sections:

- I. Staffing for Organizational Needs
- II. Staffing Costs and Cost Drivers for the Approved 2018 Budget
- III. Response to Comments Received on Staffing
- IV. Energy Trust Staffing Approach and Planning

I. Staffing for Organizational Needs

In last year's comments on Energy Trust's 2017 Budget, Oregon Public Utility Commission staff recommended Energy Trust "take steps to assess staffing needs and staffing allocations to ensure human resources are most appropriately aligned with organizational needs." Energy Trust's Approved 2018 Budget and Action Plan aligns staffing resources with priority organizational needs for 2018.

In 2018, Energy Trust continues to operate its core programs. Concurrently, the organization is beginning to prepare for significant change in the short and medium term based on changes in the market. Energy Trust is at an intersection of trajectories; the decline of savings related to some portions of our core energy efficiency programs even where there is higher volume of individual projects and transactions, significant changes in the renewable energy policy landscape, and the emergence of new opportunities to serve ratepayers. We developed and refined a staffing budget with these trajectories in mind.

- The 2018 staffing budget provides for resourcing organizational and program needs, which reflect a mix of continuing support for core operations and programs as well as supporting transition for change in portions of those programs. In looking ahead to opportunities, we are also proposing staffing resources that leverage our experience to design new approaches, new tactics, and new program offers. Given the need to manage staffing cost increases carefully to stay within administrative and

staffing cost metrics, as well as to limit impact on utility customers funding our work, we are carefully prioritizing work and pacing it as staffing resources allow. We've identified the following areas of increased need that will drive prioritization discussions for limited staffing resources throughout the year:

- **Planning** support needed for, among other things, six upcoming utility IRPs at time when savings changes result in more rapid changes to cost effective measures, and more analytical support is needed for regulatory dockets
- **Planning and Program** support for Targeted Demand Side Management (DSM) pilots coordinated with utilities
- **Program** support for simultaneous high solar program volume in current program and planning for program transition and next opportunities
- **Online and Digital** support for continued increase in program and organizational use of online and digital marketing channels to engage customers and stakeholders
- **Web** support for increasing volume of customer transactions and transition activities
- **In-house Program** support for increased project volume and program design changes
- **Operations** support to continue to capture system efficiencies in Finance through automations of procurement processes

II. Staffing Costs and Cost Drivers for the Approved 2018 Budget

Staff costs represent 7.0 percent of the total approved 2018 budget on a three-year rolling basis, reduced slightly from the draft 2018 budget submitted to the board in November. This is a 10.4 percent increase over the 2017 staff budget. Factors contributing to this increase in the proposed staffing budget include cost increases in healthcare insurance, budgeting for merit pay and promotions and adjustments associated with compliance with Oregon's new Pay Equity Law, and increased expenses for engaging employment agency staff on a contingent basis to fulfill short term staffing needs.

- Employee health care premiums for 2018 are increasing 11 percent compared to 2017. To keep increases as low as possible Energy Trust went to market for competitive rates, and negotiated strongly with the current medical insurance provider who reduced their original quote from 23 percent to 13 percent, resulting in an overall 11 percent increase in healthcare benefits. By contrast for 2017, Energy Trust was able to negotiate no change to rates. Energy Trust employees pay a percentage of their health care costs and participate in wellness programs and preventative care to help maintain low utilization rates. Nevertheless, given trends in the health care market, we anticipate cost increases to maintain employee health care over the next few years.
- The 2018 budget includes 4 percent for compensation adjustments. The 4 percent has two components: 3 percent for merit in line with World at Work survey of regional and national averages, and 1 percent for other pay adjustments as needed.
- Increases to the 2018 staffing budget are also driven by increased budget for employment agency staff. Employment agency staff are a flexible staffing resource to deploy for peaks in workload demands, including implementation of information system

projects and as partial backfill for extended employee leaves.

III. Response to Comments Received on Staffing

Energy Trust received specific comments on staffing costs from the Oregon Public Utility Commission on its Draft 2018 Budget and 2018-2019 Action Plan. The commission expressed concern regarding year-over-year staffing cost increases and requested changes to Energy Trust's staffing cost performance metric for application to the 2019 Budget. Specifically, OPUC requested a year-over-year limit on staffing cost increases of 10 percent. Additionally, OPUC requested an adjustment to the 3-year rolling average staffing cost metric as a percent of expenditures, reducing it from the current 7.75% to 7.25% and extracting agency contractor costs from the staffing costs used to calculate the metric.

Energy Trust acknowledges these comments and will work with the OPUC to revise the staffing metric and ensure compliance with new 2019 metrics in 2019. Additionally, Energy Trust reviewed and reduced the staffing budget for the Approved 2018 Budget by \$377,000. To accomplish this reduction, the staffing compensation budget was reduced by two percent, travel and conference budgets were reviewed and reduced, and action plans were reviewed to determine where projects requiring staffing resources could be delayed or scaled back. The following adjustments were made to 2018 plans:

- Slowing pace of planned targeted demand-side management work, web tool development, and targeted marketing support
- Delaying budget system upgrade
- Minimizing time spent as an expert resource on policy or stakeholder topics related to our work, such as residential pay-for-performance

IV. Energy Trust Staffing Approach and Planning

Energy Trust determines staffing needs by assessing resources available to meet the Energy Trust's annual and strategic goals. Staff resources are deployed through a hybrid model of mostly outsourced contractors and a comparatively small staff of regular employees and employment agency staff. This annual planning takes into account skills available in the outsource market, short-term versus long-term need, strategic value of needed functions to the organization, anticipated program transitions, new and emerging program designs, operational efficiency, total cost and overall value to utility customers. A mix of workforce provides some flexibility for Energy Trust to respond to market and program changes.

1. **Employee workforce:** Energy Trust employees are the basis of the organization's strategic and operations management and accountability. The functions appropriate for employees include strategic direction, budget authority, financial transacting, negotiating contracts, core reporting and communications functions, stakeholder engagement, and managing employees and contractors. Other practical considerations are how tightly a role is integrated with other roles internal to the organization, and the duration of the work. Additionally, internal staff manage and deliver the Industrial and Agriculture Sector programs and all aspects of Renewable Sector programs, which include the Solar program and Other Renewables program.

Employee staffing decisions are typically undertaken in two scenarios: filling vacancies and in the annual budget and action planning process. Employees can be regular full-time, temporary (including interns), or part-time. Temporary and part-time employees provide flexibility for workforce considerations, but ongoing administrative and oversight obligations must be considered to determine whether short-term employee staffing approaches have adequate return on investment. Temporary and part-time employee staffing provides greater degrees of flexibility to respond to program and market changes than do regular full-time employee staff. Interns are used extensively by Energy Trust as flexible staffing resources to fulfill short-term, more project-oriented work, but also to expose a future generation to industry workforce opportunities.

2. **Outsourced workforce:** Energy Trust contracts with outside companies to deliver most programs. Program Management Contractors and Program Delivery Contractors draw from regional and national talent pools and can quickly scale up to manage and deliver program services to customers, such as technical assistance and incentive qualification and delivery. Leveraging this ability has allowed Energy Trust to grow and retract programs at a rapid pace as new cost-effective approaches are developed or as markets mature and incentives are phased out. Other examples of outsourced workforce are call center services, trade ally insurance verifiers, web form developers, and audio-visual support for board meetings. Outsourced workforce can be contractually deployed, and contract language can provide for flexibility in scaling up or down to program and market needs. Outsourced workforce needs are typically identified through annual contract planning. Flexibility is provided through contract terms.
3. **Employment Agency workforce:** If the work is of a more limited time duration but needs to be closely supervised, or is integrated tightly with other work, a third option is hiring staff on a contingent basis through an employment agency. Employment agency staff are not Energy Trust employees; they are employees of various staffing agencies. Employment agency staff work on site in close proximity with Energy Trust employees. Agency staff are a good fit for project work and to meet work demands during busy cycles or to backfill for employee leaves. They provide a high level of flexibility for responding to change. However, an equally important factor to consider when utilizing agency staff is the learning curve associated with industry complexity and the value of retaining staff with deep institutional knowledge and critical skills over a longer term. Lost productivity due to higher rates of turnover of agency staff (who are often seeking regular, full-time work while signed on with an agency) is disruptive to Energy Trust projects and operations, and limits overall efficiency and effectiveness.

For 2019 and beyond, Energy Trust anticipates different approaches to staffing planning. As noted above, Energy Trust sees changes ahead for some portion of current core programs and operations, and Energy Trust is already working to pilot and test new approaches. Changes in technologies, success in transforming markets, new opportunities, and potential changes in Energy Trust's funding structure associated with the sunset of SB 1149 are all factors which may also lead to significant changes to both total revenue, expenditures and staffing in future years.

Through an Organization Review project commissioned by Energy Trust's executive director, a team of staff is currently reviewing the organization's systems, processes and structure. The

team is charged with making recommendations for changes in structure and processes that will optimize Energy Trust's ability to be nimble and effective as the organization responds to a dynamic future. Workforce, staffing, and career development planning have been specifically identified as focus areas and initial work is underway to analyze the organization's workforce needs more holistically for 2019 and beyond.

Through our work on pilots and tests of new approaches and with the benefit of recommendations on organization systems, processes, and structure, we expect to have a more specific understanding of future organization-wide workforce needs. Workforce planning will (i) be more holistic across the organization, examining vacancy opportunities in any one group to potentially support identified needs in other areas, and (ii) have a heavier focus on needed training, retraining and career development approaches to support and build flexibility for staffing identified current and future needs. In addition, we expect to examine the use of the current outsourced workforce and employment agency resources to ensure that they also support organization needs as they evolve and change.

MEMO



Date: December 8, 2017
To: Board of Directors
From: Mike Colgrove, Executive Director
Subject: Measure Cost-Effectiveness Exceptions

In the Oregon Public Utility Commission's comments on Energy Trust's Draft 2016 Budget and 2016-2017 Action Plan, the commission requested that Energy Trust summarize energy efficiency measures with cost-effectiveness exceptions that are incorporated into the Draft 2017 Budget and 2017-2018 Action Plan, and include this information in future draft budget and action plan materials. In response, Energy Trust has compiled the information below for the Approved 2018 Budget and 2018-2019 Action Plan, including a list of all current measure cost-effectiveness exceptions.

Background

Commission Order No. 94-590 in Docket UM 551 specifies that the Total Resource Cost Test (TRC) must be used to determine if energy efficiency measures and programs are cost-effective. The same order allows for measures that are not cost-effective to be included in utility programs if it is demonstrated that:

- A. The measure produces significant non-quantifiable non-energy benefits. In this case, the incentive payment should be set at no greater than the cost-effective limit (defined as present value of avoided costs plus 10 percent) less the perceived value of bill savings, e.g., two years of bill savings
- B. Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure
- C. The measure is included for consistency with other demand-side management programs in the region
- D. Inclusion of the measure helps increase participation in a cost-effective program
- E. The package of measures cannot be changed frequently, and the measure will be cost-effective during the period the program is offered
- F. The measure or package of measures is included in a pilot or research project intended to be offered to a limited number of customers
- G. The measure is required by law or is consistent with commission policy and/or direction

Summary of measures with exceptions that will be offered in 2018

Energy Trust requested exceptions to 71 measures in fall 2017. Of the 71 measures:

- Seventeen were granted approval by the OPUC on November 7, 2017, including two that were considered minor exceptions. The order uses a more granular definition of a measure than this report. In this report, some measures are combined for brevity.
- Forty-three will be offered by programs in 2018 under exceptions.
- Seven are cost-effective after being subjected to updated 2018 avoided costs, and will be offered in 2018.
- Twenty-three are considered minor measures. For a minor measure, the total dollars and savings associated with the measure are less than 5 percent of total annual program activity or the TRC for the measure is greater than 0.8.

The following tables represent the portion of total Energy Trust savings from measures with and without exceptions for 2016 and for 2017 (through October 23).

2016 Measures	kWh	kWh % of total	Therms	Therms % of total
Measures with Exceptions	21,017,263	3.67%	83,967	1.18%
Packages that contain measures with exceptions	1,110,559	0.19%	14,941	0.21%
Savings from measures that do not have exceptions	550,262,484	96.13%	7,011,938	98.61%
Grand Total	572,390,306	100.00%	7,110,846	100.00%
2017 Measures (year to date through 10/23/2017)	kWh	kWh % of total	Therms	Therms % of total
Measures with Exceptions	4,921,965	1.59%	62,398	1.73%
Packages that contain measures with exceptions	756,291	0.24%	596	0.02%
Savings from measures that do not have exceptions	304,513,229	98.17%	3,535,158	98.25%
Grand Total	310,191,485	100.00%	3,598,152	100.00%

Measure exceptions were approved by the OPUC according to the criteria outlined in the section above. The following table identifies how many measures qualified for each criteria listed above.

Exception Criteria	Number of Instances (Some measures meet multiple criteria)
A	15
B	19
C	33
D	27
E	7
F	5
G	0

Complete list of 2018 Energy Trust measures with exceptions (By date exception was granted)

Program	Measure	Exception Criteria	Date Exception Granted	Exception Expiration Date	Cost-Effective with 2018 Avoided Costs*	Offered in 2018	Comments
Existing Multifamily	Retrofit of Single-Pane Windows Electric with Efficient Windows	A	11/07/17	12/31/19	No	Yes	Only a subset of 2017 measures will be offered in 2018
Residential Program (Existing Homes)	Manufactured Homes (Gas)	C, D	11/08/17	12/30/2020	No	Yes	Savings revised for 2018
Production Efficiency	Irrigation - Rotating Impact Sprinkler	C	11/07/17	12/31/19	No	Yes	
Production Efficiency	Irrigation - Multi-Trajectory Low Pressure Sprinkler Replacement	C	11/07/1	12/31/19	No	Yes	
Production Efficiency	Irrigation - Goose Necks	C	11/07/17	12/31/19	Yes	Yes	Savings revised for 2018; 2017 savings are cost effective with new avoided costs
Production Efficiency	Irrigation - Flow Control Nozzle for Impact Sprinkler	C	11/07/17	12/31/19	No	Yes	Savings revised for 2018
Production Efficiency	Irrigation - Drain Replacement	C	11/07/17	12/31/19	No	Yes	Savings revised for 2018
Production Efficiency	Irrigation - Drop Tube or Hose Extension	C	11/07/17	12/31/18	No	Yes	Savings revised for 2018
Production Efficiency	Irrigation - New or Rebuilt Brass Impact Sprinkler	C	11/07/17	12/31/18	No	Yes	Savings revised for 2018
Production Efficiency	Irrigation - Rotating Sprinkler for Low-Pressure	C	11/07/17	12/31/18	No	Yes	
Existing Multifamily, Residential	Gas Storage Water Heaters: ENERGY STAR	B	11/08/17	12/31/2020	No	Yes	Measure redesigned for 2018
New Homes	Energy Performance (EPS) Path 4 (Gas)	B, D	11/07/17	12/31/19	No	Yes	Measure redesigned for 2018
New Homes	EPS Path 2 (Electric)	B, C, D	11/07/17	12/31/19	No	Yes	Measure redesigned for 2018
New Homes	EPS Path 1 (Electric)	B, C, D	11/07/17	12/31/18	No	Yes	Measure redesigned for 2018
Existing Multifamily	Ductless Heat Pumps (DHPs) in Multifamily	B, C	11/07/17	12/31/19	No	Yes	Savings updated for 2018

Program	Measure	Exception Criteria	Date Exception Granted	Exception Expiration Date	Cost-Effective with 2018 Avoided Costs*	Offered in 2018	Comments
Residential (Existing Homes)	DHPs in Manufactured Homes Replacing Electric Zonal Heat	B, C,	11/07/17	12/31/19	No	Yes	Savings Updated For 2018
Residential (Existing Homes)	DHPs in Single-Family Replacing Electric Zonal Heat	B, C	11/07/17	12/31/19	No	Yes	Savings updated for 2018
Existing Multifamily	Ceiling Insulation (Gas) UCT	C	05/25/17	N/A	No	Yes	
Multifamily, Residential	Gas Storage Water Heaters: ENERGY STAR	B	12/29/16	12/31/17	N/A	No	Measure redesigned for 2018
Multifamily	DHP in Existing Multifamily (Portland) 3/4 Ton	D	10/19/2016	12/30/2017	N/A	No	Measure redesigned for 2018
Multifamily (≤ 4 Units Or Side-By-Side)	Ceiling Insulation Incentive Cap (Gas)	A	9/8/2016	N/A	Yes	Yes	
Multifamily (≤ 4 Units Or Side-By-Side)	Floor Insulation Incentive Cap (Gas)	A	9/8/2016	N/A	No	Yes	
Multifamily (≤ 4 Units Or Side-By-Side)	Wall Insulation (Including Knee Wall) Incentive Cap (Gas)	A	9/8/2016	N/A	No	Yes	
Residential (New Homes)	Path 4 (EPS) Advanced Whole Home Subtype Weighted	B, C, D	8/18/2016	N/A	N/A	No	Measure redesigned for 2018
Multifamily (> 4 Units)	Windows (Electric)	A	4/29/2016	12/31/2017	No	No	New 2018 exception
New Buildings	Market Solutions - Retail Building Type Good-To-Better (Incremental)	D	11/2/2015	N/A	No	Yes	
New Buildings	Market Solutions - Schools Lighting Reduction	D, E	11/2/2015	N/A	No	Yes	
Existing Buildings, New Buildings	Oversized Air Cooled Condenser with VFD Compared to VFD on Standard (Cz2)	D	10/28/2015	N/A	No	Yes	

Program	Measure	Exception Criteria	Date Exception Granted	Exception Expiration Date	Cost-Effective with 2018 Avoided Costs*	Offered in 2018	Comments
Multifamily, Residential	Gas Storage Water Heaters: EF 0.67, 0.70	B	9/2/2015	12/31/2016	N/A	No	Measure redesigned for 2018
Residential (Existing Homes)	Ductless Heat Pumps	B, C	9/2/2015	N/A	N/A	No	Measure redesigned for 2018
New Homes, Products	Clothes Washers (Gas Only)	C	9/2/2015	N/A	No	Yes	
Multifamily (≤ 4 Units), Existing Single Family	Ceiling Insulation Incentive Cap (Gas)	A	4/30/2015	N/A	No	Yes	
Multifamily (≤ 4 Units), Existing Single Family	Floor Insulation Incentive Cap (Gas)	A	4/30/2015	N/A	No	Yes	
Multifamily (≤ 4 Units), Existing Single Family	Wall (Including Knee Wall) Insulation Incentive Cap (Gas)	A	4/30/2015	N/A	No	Yes	
Existing Buildings, New Buildings	LED Refrigeration Case Lighting (T12 to LED Low Power)	D	3/12/2015	N/A	N/A	No	Measure was redesigned in 2016. Equivalent measures are cost effective
Multifamily	Ceiling Insulation (Electric)	A, C	1/29/2015	N/A	Yes	Yes	
Multifamily	Floor Insulation (Electric)	A	1/29/2015	N/A	Yes	Yes	
New Buildings-Multifamily	Pilot - Gas Condo Pack	F	1/29/2015	N/A	No	No	Not currently offered, but available if there is market interest
Existing Buildings, New Buildings, Production Efficiency	Zero Loss Drains	C	1/15/2015	N/A	No	No	
Existing Buildings, New Buildings, Production Efficiency	Receiver Capacity Addition (Retrofit)	C	1/15/2015	N/A	No	Yes	
Existing Buildings	2 Lamp 4 Foot T8 To 25w LED	E	11/10/2014	N/A	N/A	No	Measure redesigned in 2017. Now cost effective

Program	Measure	Exception Criteria	Date Exception Granted	Exception Expiration Date	Cost-Effective with 2018 Avoided Costs*	Offered in 2018	Comments
Residential (Existing Homes)	Pilot - Air Sealing As Added Requirement For Ceiling Insulation	F	10/1/2014	N/A	N/A	No	
Residential (Existing Homes)	Manufactured Home Duct And Air Sealing (Gas)	C	10/1/2014	N/A	No	Yes	
Existing Buildings, Residential	Spa Covers (Gas)	C	10/1/2014	N/A	No	Yes	
Residential (New Homes)	New Homes Builder Option Package With 0.67 Water Heater	B, C	10/1/2014	N/A	N/A	No	Measure redesigned in 2016
Multifamily	Ceiling Insulation in Stacked Structures (Gas)	A	10/1/2014	N/A	No	Yes	
New Buildings	New Commercial Buildings Condensing Tank Water Heater - Schools	B	10/1/2014	N/A	No	Yes	
New Buildings	Market Solutions - Good-To-Better And Better-To-Best (Gas)	A, B, D, E	10/1/2014	N/A	N/A	No	Multifamily Market Solutions revised in 2015
New Buildings	Market Solutions - Tankless Water Heat In Offices	A, B, D, E	10/1/2014	N/A	N/A	No	Office Market solutions revised in 2016
Multifamily (≤ 4 Units), Existing Homes	Pilot - Condensing Gas Furnace (Rental)	F	8/20/2014	N/A	N/A	No	Pilot revised into a cost-effective measure in 2017
Multifamily, Existing Homes	Duct Insulation (Electric)	A, D	7/22/2014	N/A	Yes	Yes	Measure only offered by multifamily
Residential (New Homes)	Zonal Electric Advanced Electric Resistance Home	C, D	7/22/2014	N/A	N/A	No	Redesigned for 2017
Existing Buildings, New Buildings	LED A-Lamp (Omnidirectional 310 To 749 Lm)	B	7/22/2014	N/A	N/A	No	Redesigned in 2016, equivalent measure is cost effective
Existing Buildings, New Buildings	Ozone Laundry – Motel	D	7/22/2014	N/A	N/A	No	

Program	Measure	Exception Criteria	Date Exception Granted	Exception Expiration Date	Cost-Effective with 2018 Avoided Costs*	Offered in 2018	Comments
New Buildings (multifamily)	HVAC - AAHP 5 ton	D	7/22/2014	N/A	N/A	No	Measure canceled along with other RTUs due to change in federal standards
New Buildings (multifamily)	HVAC - GSHP 2 ton	D	7/22/2014	N/A	N/A	No	Measure canceled along with other RTUs due to change in federal standards
New Buildings (multifamily)	HVAC - WSHP 2 ton	D	7/22/2014	N/A	N/A	No	Measure canceled along with other RTUs due to change in federal standards
New Buildings (multifamily)	HVAC - AC Unit 12.5 ton	D	7/22/2014	N/A	N/A	No	Measure canceled along with other RTUs due to change in federal standards
New Buildings	Market Solutions - Radiant Heating and Cooling in Offices	A, B, E	7/22/2014	N/A	N/A	No	Office Market solutions revised in 2016
New Buildings	Market Solutions - Air Barriers in Offices	C, D, E	7/22/2014	N/A	N/A	No	Office Market solutions revised in 2016
New Buildings	Market Solutions - Fan Static Pressure in Offices and Retail	B, E	7/22/2014	N/A	N/A	No	Office Market solutions revised in 2016
New Buildings	Market Solutions - Phantom Plug Load in Offices	B, C	7/22/2014	N/A	Yes	Yes	Office Market solutions revised in 2016. Exception continues
Residential (Existing Homes)	Pilot - Nest Thermostat	F	7/22/2014	N/A	N/A	No	Pilot revised into a cost-effective measure
Existing Buildings, New Buildings	Commercial Vent Hoods With VFD < 2hp (Electric)	D	7/22/2014	N/A	No	Yes	
Production Efficiency	Irrigation - Drain Replacement	C, D	7/22/2014	N/A	No	Yes	Measure redesigned for 2018 exception
Production Efficiency	Irrigation - Drop Tube or Hose Extension	C, D	7/22/2014	N/A	No	Yes	Measure redesigned for 2018
Production Efficiency	Irrigation - New or Rebuilt Brass Impact Sprinkler	C, D	7/22/2014	N/A	No	Yes	Measure redesigned for 2018
Production Efficiency	Irrigation - Rotating Sprinkler for Low-Pressure	C, D	7/22/2014	N/A	No	Yes	New 2018 exception

Program	Measure	Exception Criteria	Date Exception Granted	Exception Expiration Date	Cost-Effective with 2018 Avoided Costs*	Offered in 2018	Comments
Existing Buildings, Production Efficiency	Various High Performance 4' T8 Lamps	C, D	7/22/2014	N/A	N/A	No	
Existing Buildings, New Buildings	Street Lights For Pacific Power, Schedule 51 70w HPS/48W LED	C, D	5/2/2014	N/A	No	Yes	
Existing Buildings	Pilot - Pay for Performance	F	2/18/2014	N/A	N/A	No	Pilot granted an exception; moved forward into measure that is expected to be cost-effective

* Measures that are not offered in 2018 or have been redesigned have not been tested for 2018 cost-effectiveness.

MEMO



Date: December 8, 2017
To: Board of Directors
From: Mike Colgrove, Executive Director
Subject: Planning Assumptions for Approved 2018 Budget and 2018-2019 Action Plan

In the Oregon Public Utility Commission's comments on the Energy Trust Approved 2016 Budget and 2016-2017 Action Plan, the commission requested that Energy Trust document major planning assumptions and changes, and include this information in future draft budget and action plan materials so it is readily available to Oregon Public Utility Commission staff and stakeholders.

In response to this request, Energy Trust compiled the following list of major planning assumptions that shape the direction and content of Energy Trust's Approved 2018 Budget and 2018-2019 Action Plan. Program-specific key assumptions, risks and challenges are also included in program action plans.

- **Oregon has experienced robust economic growth** for the last few years. It is assumed that the current favorable economic environment will continue, resulting in project activity in all sectors through 2018. The State of Oregon Economic Indicators report for August 2017, published by University of Oregon, tracks indicators that "suggest ongoing growth in Oregon at above average pace of activity." Strong new residential and commercial construction is expected to remain, resulting in robust participation in related program offerings.
- **Avoided costs for energy efficiency were updated** for 2018 measure and program planning. Electric avoided costs will decrease regardless of measure life. Gas avoided costs will decrease for measures with measure lives less than about 20 years, and gas avoided costs will increase for measures with measure lives greater than about 20 years, with some variation related to load profile.
 - Measures slated to be updated for 2018 have been evaluated for cost-effectiveness using updated avoided costs.
 - The update to avoided costs will result in challenges for some programs, as some measures are no longer cost-effective.
 - Energy Trust is aware that the OPUC will conduct a docket on avoided costs in late 2017 that will continue into 2018. Outcomes from this docket will influence how avoided costs are formulated and updated in the future. If the outcomes of the docket are available, Energy Trust may update avoided costs by July 1, 2018.
- **Prescriptive measure baselines for many residential and commercial measures have been updated** due to changes in federal minimum equipment efficiency standards, state energy building codes and market preferences, and new information from field tests. Measures with baseline changes include LED lighting, ductless heat pumps and New Homes new construction building option paths.

- Energy Trust will continue to track equipment standards and market trends, and these may result in additional adjustments for Energy Trust's 2019 Budget and 2019-2020 Action Plan.
- **Energy efficiency program savings realization rates remain similar or have increased for all programs except the Existing Buildings program.** This program's Savings Realization Adjustment Factor will decrease for electric and gas measures due to low realization rates revealed through recent impact evaluations.
- **Oregon Department of Energy's Residential Energy Tax Credit program will sunset** at the end of 2017. Energy Trust provides incentives for measures that are also eligible for RETC. The expiration of RETC is expected to reduce the number of installations through Energy Trust programs for ductless heat pumps, whole house heat pumps, gas furnaces in rentals and Savings Within Reach projects, heat pump water heaters, gas tank water heaters, gas water heaters, windows in multifamily buildings, and solar panels.
- **In addition to the sunset of RETC at the end of 2017, participation in Solar program will be influenced by:**
 - Continued declines in costs are assumed; however, a federal trade case may result in import tariffs that could increase solar pricing in 2018 and beyond.
 - If the state legislature adopts a new state residential solar tax credit or incentive in the 2018 session, the above-market cost for a residential project may change quickly. The program will need to be prepared to make a swift change in incentive strategy if such legislation appears to move forward.
 - OPUC's resource value of solar docket (UM 1716) will likely complete in 2018. Energy Trust's budget assumes any subsequent changes to net metering or compensation levels for solar generation would not be in place in time to impact above-market cost or incentive strategy in 2018.
- **Participation in Other Renewables program will be influenced by:**
 - Flat or declining avoided-cost rates available for renewable projects that sell power on the wholesale energy market, potentially leading to higher above-market costs.
 - The December 31, 2017, sunset of the Oregon Renewable Energy Development Grant will increase above-market costs for some renewable energy projects.
 - Continued demand from the nascent clean fuels marketplace for sources of biogas to be processed into renewable natural gas for vehicle fueling and pipeline injection. This will reduce feedstock availability for renewable electricity generation.
- **Energy Trust anticipates continued engagement in all major efficiency market sectors.** Programs will continue in their previous forms with the exception of the residential sector. Energy Trust consolidated its three residential programs (Existing Homes, New Homes and Products) into one residential program to achieve more cost-effective delivery as Energy Trust exits portions of markets that have been saturated.
- **Based on a recent regulatory agreement that increased the PGE large customer incentive spending cap, Energy Trust will not exceed the cap on for these large energy-using customers in PGE territory.** Energy Trust will continue to track SB 838 spending in relation to the cap for large energy-using customers. If a 2018 analysis indicates that 2017

spending on large energy using customers exceeded the cap, Existing Buildings, New Buildings and Production Efficiency programs will need to act to reduce spending on these customers.

- **Increased LED market share and reduced incremental costs for retail lighting** indicate that Energy Trust incentives will eventually no longer be necessary to encourage some customers to buy some LED lighting products. This will result in a reduction of the savings that Energy Trust claims for residential lighting. Energy Trust continues to monitor baselines for LED lamps and anticipates that incentives will no longer be necessary at some point in 2019 or 2020.
- **Lighting activity is expected to remain strong for commercial and industrial sectors.**
- **Existing Multifamily program will save less energy from measures directly installed in dwelling units**, including LEDs, showerheads and faucet aerators. This results from the program's success saturating the market and encouraging market acceptance of these measures.
- **Successful market penetration and evolving market conditions are leading to an increased focus on midstream approaches** in residential and commercial sectors in 2018-2019.
- **Interest in peak load management continues to grow** as utilities anticipate more load constraints. Energy Trust will continue to engage with Pacific Power, NW Natural and other stakeholders to design and deliver demand reduction activities that are linked to energy efficiency and renewable generation objectives.
- **Energy Trust will continue to fund NEEA at historical levels**, and NEEA will continue to engage in deep collaboration with other funding partners in pursuit of electric and gas market transformation programs.
- **Oregon's population will continue to expand and diversify** in 2018 and beyond.

While a memo on Energy Trust 2016 demand response activity was provided as part of the 2017 budget materials last year, a 2017 update on those activities will be provided as part of the Energy Trust 2017 Annual Report available April 15, 2018, as requested by the Oregon Public Utility Commission.

Summary of Outreach Activities and Comments Received on the Energy Trust Draft 2018 Budget and 2018-2019 Action Plan

Outreach Activities

Every year, Energy Trust initiates development of its annual budget and two-year action plan in the summer. Early program concepts are presented to each utility, and staff share proposed changes and directional information at the Conservation and Renewable Energy Advisory Councils through the fall. Feedback from these meetings is referenced by programs and support groups as the draft budget and action plan are developed. Outreach activities on draft budget and action plans occur in October and November, leading up to board consideration of the final proposed documents in December.

A summary of completed outreach activities is provided below.

July	Energy-efficiency program concepts reviewed in meetings with PGE, Pacific Power, NW Natural, Cascade Natural Gas and Avista
September	9/13 and 9/15: Draft program action plans reviewed at the Conservation and Renewable Energy Advisory Councils Received comments, suggestions and requests from utilities on 2017 energy-efficiency program concepts. Feedback incorporated and program plans adjusted; clarified information in written responses. Informal discussion continued with utilities throughout preparation of the draft annual budget and action plan. 9/27: Draft program action plans presented to Energy Trust Board of Directors
October	10/24: Draft budget and action plan presented to Oregon Public Utility Commission staff at an informal work session 10/25: Draft budget presented to Conservation and Renewable Energy Advisory Councils
November	11/7: Draft budget and action plan webinar presentation posted online to inform public review of documents 11/8: Draft budget and action plan presented to Energy Trust Board of Directors 11/16: Revised budget presented to OPUC commissioners at public workshop 11/17: In-progress budget updates reviewed at the Conservation and Renewable Energy Advisory Councils

Public Comments

The draft budget and action plan are on the website at www.energytrust.org/about/budget. Budget presentations and action plan documents are also included in the public meeting packets posted online for the Conservation Advisory Council and Renewable Energy Advisory Council meetings, and for the board of directors meetings at www.energytrust.org/about/public-meetings. Public comments on the draft budget and action plan were accepted from November 1 through November 17, 2017. Written comments were invited from all parties engaged in outreach meetings, as well as the public. Comments received are summarized in the table below, followed by copies of actual comments received.

Respondent: Oregon Public Utility Commission (OPUC) Comment topics	Energy Trust staff responses
<p>Commission adopted OPUC staff comments on Energy Trust’s draft budget and action plan, with comments and recommendations summarized below.</p>	<p>Energy Trust appreciates the time and effort of OPUC staff and commissioners to review and comment on our draft budget and action plan. We acknowledge OPUC staff member and liaison JP Batmale for his work to question, understand and thoughtfully comment on the detailed content of our draft budget and action plan.</p> <p>We note that a correction should be made to the statement on page 11 that Energy Trust’s budgeted administrative costs have risen 47 percent since 2015. This statement should accurately read that Energy Trust’s budgeted administrative costs have risen 36 percent since 2015.</p>
<p>Summarized Energy Trust follow-up actions on OPUC recommendations provided on the 2017 (current year) budget:</p> <ul style="list-style-type: none"> • Update budget procedures to improve communication, coordination and collaboration with stakeholders, and work with OPUC staff to develop alternative budget scenarios (in process) • Continue demand management work and raise the level of reporting on this issue in 2016 Annual Report and Q2 2017 presentation to the commission (complete) • Expand communications around "net to gross" at CAC and include both gross and reportable (net) savings in the 2016 annual report and the 2018 budget (complete) • Explore steps to stabilize operations and infrastructure from short-term savings uncertainty in ‘19-‘20 by smoothing acquisition of savings while continuing to focus on innovations (in process) • Undertake an organizational assessment of staffing allocations, staffing costs and the alignment of staffing with future program design and savings opportunities (in process) • Work with OPUC staff to revise the 7.75 percent staffing metric (in process) • Continue improving forecasting methods/tools by dedicating more Planning resources; report on progress (in process) • Continue engagement with OPUC in dockets related to community solar, resource value of solar and in the redesign of above-market cost incentives (complete) 	<p>We appreciate OPUC staff acknowledgement of our completed and in-progress activity in responding to budget comments received for the current budget and action plan cycle.</p>

<p>Acknowledged some recommendations require a multi-year effort and requested continuation of recommendations not fully completed in 2017, including:</p> <ul style="list-style-type: none"> • Develop a matrix of key triggering events and resulting alternative budget scenarios by July 2018 for the 2019 budget • Identify steps that could be taken to stabilize operations by smoothing the acquisition of certain savings • Continue and report back on progress related to the organizational assessment and resulting efficiencies in staffing and contractor resources • Continue work to improve forecasting methods and report on progress within a quarterly commission update 	<p>We acknowledge the OPUC's request to continue implementing these recommendations that are in progress in 2017.</p>
<p>Requested Energy Trust take steps to reduce the pace of growth in overall staffing costs in 2019.</p>	<p>Energy Trust acknowledges OPUC's concerns and has made a 2 percent reduction in staffing costs in the approved 2018 budget and 2018-2019 action plan.</p>
<p>Requested implementation of a revised OPUC staffing performance metric for the 2019 budget:</p> <ul style="list-style-type: none"> • Remove agency contractors from staffing cost category; track and report them separately • Reduce staffing performance metric from 7.75 to 7.25 percent of total Energy Trust expenditures calculated on a three-year rolling average • Introduce a 10 percent cap on year-over-year staffing cost increases 	<p>We acknowledge the OPUC's direction to modify the staffing performance metric for the 2019 budget, and will address compliance in our 2019 budget and annual report.</p>
<p>Requested updating the existing OPUC administrative cost metric to include: Year-over-year increases in administrative costs cannot exceed 10 percent of the previous year's administrative costs beginning with the 2019 budget.</p>	<p>We acknowledge the OPUC's direction to update the OPUC administrative cost metric, and will address compliance in our 2019 budget and annual report.</p>
<p>Requested the following updates be included in Energy Trust's Quarter 2 2018 Report to the OPUC:</p> <ul style="list-style-type: none"> • Near-term results from diversity, equity and inclusion activities • Status of LED lighting in all sectors and how any changes may potentially impact 2019 savings and expenditures 	<p>We will continue our efforts to enhance diversity, equity and inclusion and monitor the status of LED lighting in all sectors. We will report on this work in our Quarter 2 2018 Report to the OPUC.</p>

Recommended Energy Trust track and report in its 2018 Annual Report to the OPUC on the number of solar systems that received Energy Trust incentives and also had a battery storage system, advanced interconnection and communication devices, or were installed for customers considered moderate-income.	We will continue to track on solar systems that have battery storage systems, advanced interconnection and communication devices, or were installed for customers considered moderate-income, and will report on status in our 2018 Annual Report to the OPUC.
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Respondent: Pacific Power**Comment topics****Energy Trust staff responses**

Acknowledged Energy Trust's presentation of the draft budget and action plan to Pacific Power staff, and noted willingness to work with Energy Trust on several initiatives under development.	Energy Trust appreciates the time and effort of Pacific Power staff to carefully review, discuss and provide thoughtful feedback on our draft budget and action plan throughout the late summer and fall. We especially value the ongoing collaboration and communication with Kari Greer, Don Jones, Cory Scott and Scott Bolton.
Acknowledged Energy Trust's 2018 target for Pacific Power aligns with Pacific Power's 2017 IRP.	We appreciate this acknowledgement and Pacific Power's commitment to pursuing all cost-effective electric savings for the benefit of its utility customers.
Noted Energy Trust's 2019 target for Pacific Power does not align with Pacific Power's 2019 IRP, and supported efforts to better align them before the next budgeting cycle.	We will work with Pacific Power in 2018 as we consider Pacific Power's 2019 IRP and the corresponding Energy Trust 2019 target.
Recommended that Energy Trust get clarity from the OPUC on allowable use of contingency funds from interest earned on revenue provided by utility customers.	Energy Trust has sought guidance from the OPUC and will continue to discuss this issue with staff and receive input.
Encouraged Energy Trust to promote less mature renewable technologies, and appreciated Energy Trust's emphasis on solar projects that yield high-value benefits to the utility system and focus on reducing the soft costs of solar projects.	We appreciate this support for our current strategies. We will report on solar and storage efforts, as well as those for low-income solar. We will continue supporting the strong opportunities for irrigation modernization and biopower opportunities with waste management and wastewater treatment.

Respondent: Cascade Natural Gas**Comment topics****Energy Trust staff responses**

Requested more information about factors influencing levelized costs for Cascade Natural Gas.	<p>We appreciate Cascade Natural Gas's inquiry and provided additional information at a meeting following receipt of these comments. We especially value the ongoing collaboration and communication with Allison Spector and Jim Abrahamson.</p> <p>In brief, there are two drivers that explain differences among gas utilities in levelized costs. First, there is greater relative participation in the New Homes program in Cascade Natural Gas territory resulting in higher incentive costs. Second, allocation of market transformation savings across the state impacts Cascade Natural Gas levelized costs.</p>
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	<p>Cascade Natural Gas territory has more robust participation in the whole-home new construction program than in Avista territory (2017 was our first full year serving Avista customers).</p> <p>The second issue is related to how savings are calculated for market transformation, primarily market transformation savings derived from homes built to exceed state residential energy code. Market transformation savings are calculated by the volume of new construction permits. Energy Trust aligns with NEEA’s methodology to allocate permits by each utility’s respective share of the overall population. Because there is a greater share of overall population in Cascade Natural Gas territory, there are more market transformation savings allocated to Cascade Natural Gas territory.</p>
<p>Expressed concern about the increase in proportion of natural gas ratepayer funds spent on energy-efficient new home construction for dual-fuel homes, with no apparent increase in benefits.</p>	<p>We understand Cascade Natural Gas’s concerns and appreciated the opportunity to meet with Cascade Natural Gas staff to review the factors driving the increase in natural gas costs in dual-fuel new homes. The change in gas costs relative to electric costs is driven by three factors. First, an updated residential energy code has increased the proportion of gas savings compared to electric savings. Second, avoided costs were updated. Third, more new homes are being built with gas heat. Combined, these factors increase the value of natural gas savings relative to electric savings, and consequently costs attributed to gas increase.</p> <p>We continue to work on Cascade Natural Gas’s request to compare formula-based allocated incentive expenditures against a scenario detailing how expenditures would be allocated if they were tailored to the actual, recorded net present value (NPV) split of each independent site. We cannot disaggregate delivery hours between electric and gas, as our market engagements are by design fuel neutral.</p>
<p>Requested discussion about possible biogas coordination pilot efforts with Energy Trust and renewable natural gas.</p>	<p>We appreciate Cascade Natural Gas’s willingness to collaborate and discuss potential new efforts. A meeting has been scheduled for this discussion.</p>

Respondent: Portland General Electric (PGE)

Comment topics	Energy Trust staff responses
Reviewed and supported the draft 2018 budget and 2018-2019 action plan.	Energy Trust appreciates the time and effort of PGE staff to review and discuss our draft budget and action plan throughout the late summer and fall. We especially value the ongoing collaboration and communication with Garrett Harris, Anne Snyder-Grassmann, Joe Barra, Leslie Heilbrunn and Carol Dillin.
Expressed concern that Energy Trust’s board of directors recently approved the use of contingency reserves from accumulated interest on public purpose charge funding to cover costs of Energy Trust applying for the state’s Community Solar RFP. Commented that interest earned from utility customers should only be used for customer-related activities that fit within Energy Trust’s current mission.	Energy Trust has sought guidance from the OPUC and will continue to discuss this issue with staff and receive input.

Respondent: NW Natural	
Comment topics	Energy Trust staff responses
Expressed concern with Energy Trust’s increase in natural gas costs in the 2018 draft budget.	<p>Energy Trust appreciates the time and effort of NW Natural staff to carefully review, discuss and provide thoughtful feedback on our draft budget and action plan throughout the late summer and fall. We especially value the ongoing collaboration and communication with Holly Braun, Bill Edmonds, David Anderson and Rick Hodges.</p> <p>We understand NW Natural’s concerns and appreciated the opportunity to meet with NW Natural staff to walk through the factors driving the increase in natural gas costs. The majority of the change in gas costs relative to electric costs is driven by the new homes portion of the residential program, mainly due to three factors. First, an updated code has increased the proportion of gas savings compared to electric savings. Second, avoided costs were updated. Third, more new homes are being built with gas heat. Combined, these factors increase the value of natural gas savings relative to electric savings, and consequently costs attributed to gas increase.</p>
<p>Requested explanations for increases in NW Natural costs, including:</p> <ul style="list-style-type: none"> • What is driving the increase in costs for program evaluation and planning services? • What is the relationship between incentives and program management costs? • What are “other program expenses” and what is driving their increase? 	<p>Energy Trust staff welcome an opportunity to address these questions at an upcoming coordination meeting. In brief:</p> <ul style="list-style-type: none"> • Planning and Evaluation costs are increasing due to more impact evaluations and market research planned for 2018. • As we help customers complete smaller projects and achieve harder-to-get savings, program delivery costs increase proportional to incentives because it takes more effort to

<ul style="list-style-type: none"> • What is the connection between incentives, programmatic expenses and administrative cost allocations? 	<p>achieve savings. Incentives and program management costs are driven by the most effective and cost-effective strategies, with the overall objective of achieving low-cost savings.</p> <ul style="list-style-type: none"> • Other program expenses include occupancy costs, business meetings, subscriptions, travel and conferences. The increase in other program expenses is relatively small, contributing 0.6 percent to the total draft budget. One item for \$150,000 was misclassified in the draft budget, creating the appearance of a large increase. This error has been corrected in the final approved budget. • Incentives and program expenses are the basis on which administrative costs are allocated. Administrative costs are allocated to a program proportional to the program's total cost.
<p>Suggested budget outreach process improvements to help meet diverse stakeholder information needs and improve stakeholder engagement.</p>	<p>We acknowledge NW Natural's comments regarding communication with stakeholders, and will review the process to identify and propose improvements in future years.</p>

<p>Respondent: Avista Comment topics</p>	<p>Energy Trust staff responses</p>
<p>Appreciated Energy Trust exceeding natural gas savings in 2017 while staying within budget. Noted that the budget meets expectations to offer the least-cost energy-efficiency resource while balancing rate impact.</p>	<p>Energy Trust appreciates the time and effort of Avista staff to review and discuss our draft budget and action plan throughout the late summer and fall. We especially value the ongoing collaboration and communication with Kerry Shroy, Lisa McGarity, Shawn Bonfield and Dan Johnson.</p>
<p>Expressed concern with Energy Trust's strategy to increase participation of low-income customers, including how Energy Trust plans to implement additional low-income programs that may conflict with existing programs for low-income customers. Requested additional discussion with utilities about how Energy Trust will support or compete with existing utility-funded low-income programs.</p>	<p>We will engage with Avista and utilities on this topic. Our intent is not to compete with existing low-income programs, but to work with existing low-income programs to identify gas and savings opportunities that Energy Trust can support. We appreciate any guidance Avista can provide regarding how to ensure coordination and avoid conflict with existing low-income programs.</p>
<p>Expressed concern that natural gas goals are increasing while costs of program marketing, outreach, and trade ally and customer service management are decreasing.</p>	<p>The decreasing costs of program marketing, outreach, and trade ally and customer service management are related to cost allocations by utilities and the change in value for gas relative to electricity. Decreasing costs are also related to Energy Trust's portfolio of programs with savings acquired from a range of programs, with some programs requiring more and some requiring less support. Even with cost decreases, Energy Trust will continue to provide a high level of customer service, effective marketing and ongoing outreach to all customers.</p>

Respondent: City of Portland Bureau of Planning and Sustainability**Comment topics****Energy Trust staff responses**

Suggested budget outreach process improvements to help meet diverse stakeholder information needs and improve stakeholder engagement.

Energy Trust appreciates the time and effort of City of Portland Bureau of Planning and Sustainability employee and Energy Trust Conservation Advisory Council member Andria Jacob in reviewing our draft budget and action plan. We acknowledge the City of Portland's comments regarding communication with stakeholders, and will review the process to identify and propose improvements in future years.

Respondent: Attic Access**Comment topics****Energy Trust staff responses**

Suggested that all public purpose charge funds from residential utility ratepayers should be spent to motivate and reward weatherization of existing homes. Funds from residential utility ratepayers that are not spent on weatherization should be held in reserve until proper usage is established.

Energy Trust is mandated by state policy to invest in all cost-effective energy efficiency. Investments in cost-effective energy efficiency outside of residential weatherization are appropriate and expected. Energy Trust's investments are outlined in a transparent and open budget process, which includes presentations to the OPUC and an on-demand webinar available to the public on our website from November 1 through November 17, 2017.

Expressed concern about the utility of Home Performance with ENERGY STAR® blower door tests.

Energy Trust no longer provides incentives for blower door tests and has moved to a prescriptive approach to weatherization for existing homes, per agreement with the OPUC and stakeholders in 2015.



Oregon

Kate Brown, Governor

Public Utility Commission

201 High St SE Suite 100

Salem, OR 97301-3398

Mailing Address: PO Box 1088

Salem, OR 97308-1088

503-373-7394



December 5, 2017

Michael Colgrove, Executive Director
Energy Trust of Oregon
421 SW Oak, Suite 300
Portland, OR 97204

Dear Michael,

We appreciate the opportunity to comment on your 2018 Budget and 2018-2019 Action Plan. We adopt the recommendations of the OPUC Staff, summarized in more detail in the memo and discussed at the November 16th special public meeting.

We applaud the Energy Trust for its continued results in 2017 and look forward to those results continuing into 2018. We look forward to working with Energy Trust and stakeholders to achieve targets in this upcoming year's budget and to face together the many exciting challenges ahead.

OREGON PUBLIC UTILITY COMMISSION

Lisa D. Hardie
Chair

Stephen M. Bloom
Commissioner

Megan W. Decker
Commissioner

**PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
SPECIAL PUBLIC MEETING DATE: November 16, 2017**

REGULAR **CONSENT** **EFFECTIVE DATE** N/A

DATE: November 15, 2017

TO: Public Utility Commission

FROM: JP Batmale

THROUGH: Jason Eisdorfer

SUBJECT: ENERGY TRUST OF OREGON: Presentation of 2018 Draft Budget and 2018-19 Action Plan.

STAFF RECOMMENDATION:

The Commission adopt Staff's comments and recommendations on Energy Trust of Oregon's (Energy Trust) Draft 2018 Budget and 2018-2019 Action Plan.

DISCUSSION:

Issue

Whether the Commission should adopt Staff's comments and recommendations on Energy Trust's Draft 2018 Budget and 2018-2019 Action Plan.

Applicable Law

In 1999 Oregon Revised Statute (ORS) 757.612 was adopted and established the public-purpose charge (PPC). The PPC provided funding for new cost-effective local energy conservation, new market transformation, energy efficiency for the state's K-12 public schools, the above-market costs of new renewable energy resources, and new low-income weatherization. Along with authorizing the PUC to direct the manner in which PPC funds are collected and spent, the statute also gave the Commission the authority to direct PPC funds to a nongovernmental entity. This non-profit would implement cost effective energy conservation, market transformation initiatives, and programs that addressed the above-market costs of new renewable energy resources. The Energy Trust was formed to act as the nonprofit, nongovernmental entity described in ORS 757.612(3)(d).

In December 2005 Energy Trust and the Commission executed the current grant agreement that guides Energy Trust operations. The contract details parties' obligations and describes methods for accountability and oversight, such as submitting an annual budget report for review by the Commission. Specifically, section 3.a.ii of the grant agreement stipulates that Energy Trust will:

...develop an annual calendar budget on or before November 15 of each year and a final budget, approved by Energy Trust's board of directors, on or before December 31 of each year. The budget will include projected revenues to be received under this Agreement, other revenues to be received, and describe proposed expenditures in such a manner as may be requested by the PUC. The budget will also contain information that may permit the reader to evaluate the Energy Trust's total administrative costs and whether such costs may be considered reasonable, and provide a comparison of actual revenues and expenditures received through the first three full quarters and an estimation of projected expenditure for the remaining fourth quarter of the current year, as compared to the current year's budget.

Annually, the Commission reviews and comments on Energy Trust's budget and action plan to ensure that it presents a sound plan to acquire all technically, achievable cost effective savings, continues to accelerate the adoption of small scale renewable resources and keeps certain overhead costs below agreed upon thresholds.

Analysis

Summary

Energy Trust's budget is made available to stakeholders and the public in a series of meetings and through its web site starting in late October. Energy Trust presented the first overview of the 2018 Budget and Draft 2018-2019 Action Plan to the Conservation (CAC) and the Renewable Energy Advisory Council (RAC) on October 25. This presentation featured program-level details and materials were available in advance to council members and the public via its web site. The complete draft Budget and Action Plan was posted online at www.energytrust.org on November 1 and then presented to the Energy Trust Board on November 8, 2017.

Energy Trust discussed the Budget and Action Plan with OPUC Staff at an informal workshop on October 24. The special Commission public meeting scheduled for November 16, 2017, is the opportunity for the public and the Commission to consider and comment on Staff's assessment of the Budget and Action Plan.

Energy Trust will present a review of its changes to the Budget and Action Plan to the CAC and RAC on November 17, 2017. The Energy Trust Board will receive the final Action Plan and Budget in early December and will consider it for adoption at its meeting on December 15, 2017.

Major Takeaways

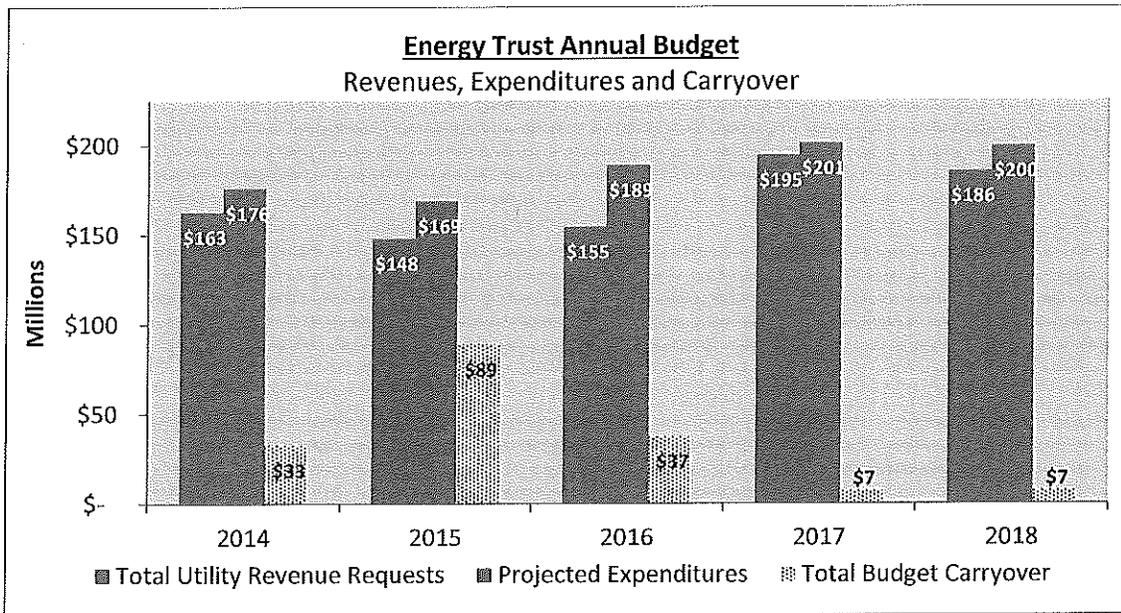
- Staff finds that Energy Trust's proposed, 2018 budget on the surface represents a continuation of 2017 levels of expenditures, revenue, and incentives. As Energy Trust notes in their 2018 budget they will be sustaining a high level of savings with slightly lower revenues. The lower revenues for 2018 would appear to be due to larger than anticipated carry-overs from 2017.
- Portfolio wide electric savings activities are projected to hold relatively flat in 2018 compared to 2017, despite a large decrease in Residential Sector savings. Residential electric savings are expected to fall nearly 50 percent in 2018 while savings in other sectors increases,

- Budgeted gas savings are projected to decline in 2018. While less than budgeted for 2017, achievement of the 2018 goals would still represent an all-time high in savings.
- Costs associated with gas savings, especially in the residential sector, are increasing. This concern will be discussed in greater detail later in the memo.
- The Other Renewable Program continues to forecast no installed generation for 2018 yet shows progress in efforts associated with program development assistance. Staff has worked with Energy Trust this year to develop a new performance metric for the Other Renewable Program that better captures the scope of activities than annual generation.
- The reduced generation goal for Energy Trust's Solar Program in 2018 represents a potentially permanent trend due to the recent retirement of the Residential Energy Tax Credit (RETC). Subsequent sections of this memo will discuss the plans for the Solar Program in greater detail.
- Staffing costs increased by over \$2M to represent 7.8 percent of expenditures. Energy Trust responded to Staff's concerns and plan to reduce these costs in the final budget, as discussed in greater detail in the memo.
- The absolute and relative rise in staffing costs in 2018 represents a three-year trend of double-digit increases. While a majority of the staffing cost increases for 2018 are somewhat unavoidable (e.g., medical costs), the trend needs to be better contained. Staff proposes making the Staffing Cost reporting more transparent and reducing the performance metric limit from a rolling average of 7.75 to 7.25 percent after adjusting for contractor costs.
- Administrative costs increase 12 percent over last year. Much of this can be attributable to Energy Trust's several strategic projects and initiatives. However, Staff is concerned about the sustainability of this growth in spending and proposes some reasonable limit should be introduced to constrain growth in administrative costs.

Budget and Savings Summary

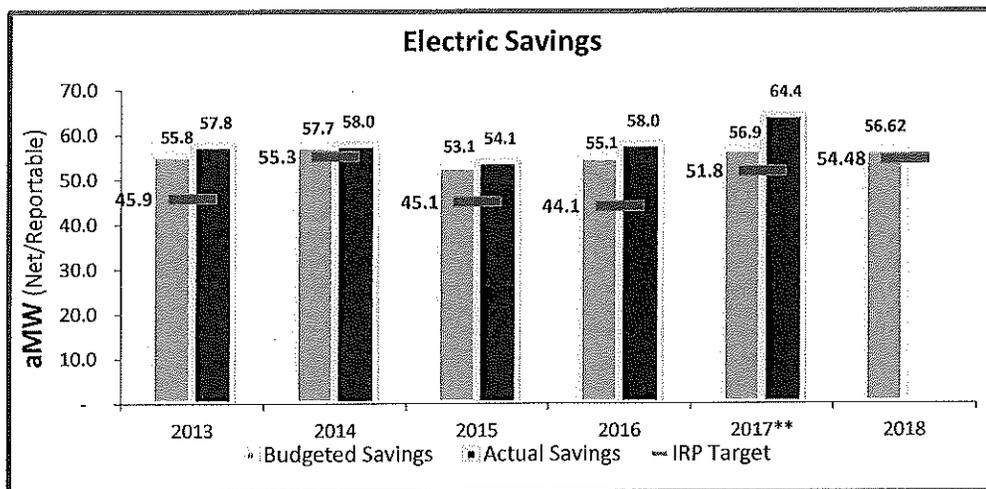
Total expenditures are nearly flat from the 2017 budget with a slight decline in total incentive dollars expected. Revenues needed to support the 2018 expenditures are less than 2017, mostly due to continued use of carry over funds from prior years.

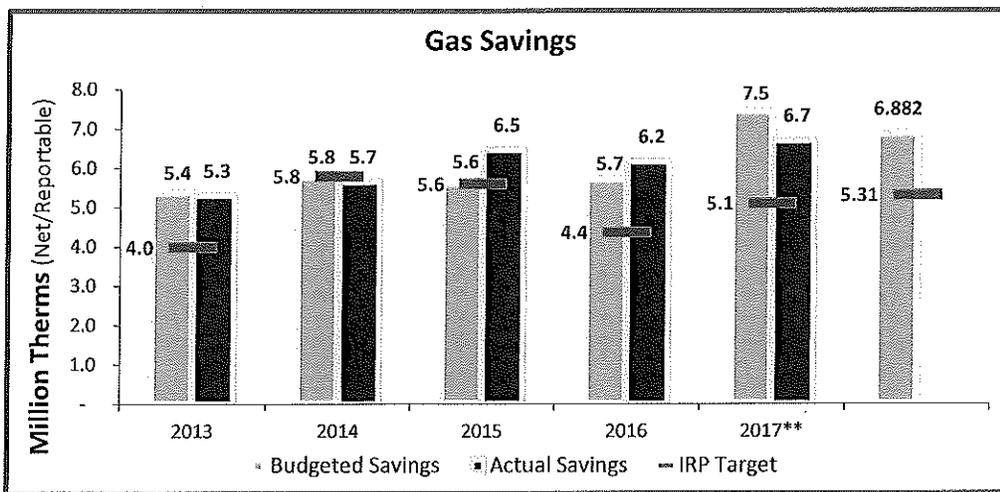
	2017 Budget	2018 Budget	Year-Over-Year Change
Expenditures	\$ 198,572,681	\$ 199,603,648	0.52%
Revenues	\$ 192,927,000	\$ 185,740,403	-3.73%
Incentives	\$ 114,122,042	\$ 111,127,375	-2.62%



Overall electric savings are anticipated to be flat relative to the 2017 budget while gas savings appear to decline from 2017 although actual 2017 gas savings are forecasted to be 5.1MMTh. Therefore 2018 is anticipated to be an all-time high in savings for gas efficiency.

	2017 Budget	2018 Budget	Year-Over-Year Change
Savings, Electric (aMW)	56.4	56.5	0.2%
Savings, Gas (MMTh)	7.4	6.9	-7.2%





Although not anticipated to manifest in a non-solar project installation for 2018, the Other Renewables program is actively working with several projects through the stages of Project Development towards future year project incentive commitments and installations. The solar program anticipates using all available funds to target modified incentive levels most effectively as the market transitions to expiration of the RETC, reflected in an estimated 24 percent reduction in generation from the 2017 budget.

	2017 Budget	2018 Budget	Year-Over-Year Change
Generation, Other Program (aMW)	0.0	0.0	0%
Generation, Solar Program (aMW)	2.75	2.18	-24%

Status of the 2017 Recommendations

As part of the review of each Energy Trust annual budget, the Commission makes suggested recommendations for Energy Trust to adopt over the course of the next year. The table below captures the Commission approved recommendations from last year's budget and Energy Trust's progress toward completing them.

2017 OPUC Staff Recommendation	Implemented
1. Update budget procedures to improve communication, coordination and collaboration with stakeholders. Work with OPUC staff in 2017 to develop alternative budget scenarios that are triggered by key events, such as rapid, year-over-year increases in revenue requests.	In process
2. Continue demand management work and raise the level of reporting on this issue by presenting progress on this work in the 2016 annual report and in the Q2 presentation to the Commission.	Yes

3. Expand communications around the issue of "net to gross" including drivers for key assumptions such as declining realization rates at CAC and include both gross and reportable (net) in the 2016 Annual Savings report and the 2018 budget.	Yes
4. Explore in 2017 steps that could be taken to stabilize operations and infrastructure from short-term savings uncertainty in 2019-2020 by smoothing acquisition of savings from select measures where possible while continuing to focus on program and measure innovations.	In process
5. Undertake in 2017 an organizational assessment of staffing allocations, staffing costs and the alignment of staffing with future program design and savings opportunities	In process
6. Work with OPUC Staff to revise the 7.75 percent staffing metric.	In process
7. Continue efforts to improve forecasting methods and tools by dedicating more Planning resources to this work in 2017 and report on progress to this effort no later than the Q2 presentation to the Commission.	In process
8. Continue engagement with OPUC in dockets related to community solar, resource value of solar and in the redesign of Above-Market Cost incentives.	Yes

Energy Trust has either implemented or is in the process of implementing all of Staff's recommendations from 2017. While Staff understands that accomplishing some recommendations will require a multi-year effort, Staff has the following general comments:

- Update Budget Procedures: Staff notes that while Energy Trust did improve budget communications for this budget cycle, no alternative budget scenarios triggered by key events was developed. We will recommend that this be accomplished in 2018 for the 2019 budget.
- Stabilize Operations & Infrastructure from Short-Term Savings Uncertainty and Conduct Organizational Assessment: Energy Trust began to work on both of these internally focused recommendations as part of several comprehensive initiatives in 2017. Staff is pleased with the work completed thus far on Energy Trust's Organizational Review, Lean Start-Up and Budget Review projects. Staff also understands that the process and steps necessary to fully accomplish both recommendations may ultimately take several years. We will recommend that Energy Trust continue this work through 2018.
- Revise the Staffing Metric: Staff have been working with Energy Trust management to update this metric and this memo will have final recommendation for the staffing metric to be used as part of Energy Trust's 2018 performance metrics.
- Improve Forecasting Methods: Energy Trust staff have held multiple meetings with OPUC Staff, utility representatives, and other stakeholders to improve forecasting methods. Energy Trust will be continuing this work into 2018.

2018 Draft Budget Overview

One of the most notable aspects of the proposed budget is that several highly anticipated, large market trends – such as the impact of LED lighting on Residential Sector savings – have begun to manifest themselves in 2018. The result is that Budgeted Residential Sector electric savings, without savings from NEEA, are expected to decline by over 50 percent in 2018. To Energy Trust's credit, they have been forecasting a decline in certain savings for some time now. The future reduction in savings from certain measures – like lighting – was discussed in last year's budget.¹

So while Energy Trust's aggregate savings, expenditures and costs across all of its portfolio of programs do appear to stable this year, the 2018 budget does contain indicators of more profound shifts in future sources of savings for Energy Trust's programs. Another such indicator of the profound change underway is the continued increase in the volume of efficiency projects that are of decreasing size for the Commercial and Industrial Sectors.

Energy Trust's operations remain organized around the four following sectors:

- Residential
- Commercial
- Production Efficiency (Industrial & Agriculture)
- Renewable

In anticipation of major market changes, the residential sector went through a comprehensive Sector redesign in 2017. The goal was to better align sector resources with forecasted source of savings. In the end, the redesign resulted in all existing programs combining into a single Residential Sector program and shrinking the Sector's three Program Management Contractors (PMC) down to one PMC. This created Sector delivery cost savings for 2018. The costs for delivering the Residential Sector programs dropped from \$13.4 million in 2017 to \$11.9 million in 2018.

As discussed previously, one major market changes for the Residential Sector that are visible in the 2018 budget is the reduction in electric savings from the rapid and widespread adoption of LED bulbs by consumers in 2017 supported by Energy Trust's work with retailers to apply incentives that reduce the customer's cost at point of purchase. Based on August 2017 market survey data, the 2018 baseline of energy use by which residential lighting savings can be claimed per LED bulb will drop 66 percent from 2017. While providing incentives to LED bulbs will still be cost-effective for Energy Trust in 2018, the amount of savings that can be claimed is dramatically reduced. When this development is combined with other changes that reduce savings – such as the market saturation of showerheads and increasing baselines due to code updates – the Residential Sector is forecasting significant, year-over-year decreases in electric savings.

¹ Although it should be noted that the reduction in lighting savings for 2018 is far steeper than anticipated.

Residential Sector Budgeted Electric Savings (aMW)	2017	2018	2019
Without NEEA Savings	14.9	7.2	5.2
With NEEA Savings	20.3	12.5	8.7

From the perspective of the organization as a whole, the 2018 shortfall in Residential savings is more than covered by the additional savings from Production Efficiency Sector's mega-project and from very strong results in lighting in all business programs. This is why Energy Trust's 2018 electric savings remain at a level similar to 2017. However, the mega-project will end in 2019 and the Residential Sector's savings will continue to decline into the future until new sources of savings or untapped markets are discovered.

The budgeted expenditures for the Residential Sector do not change nearly as much as the savings. Energy Trust will support the same volume of LED bulbs in 2018 and continue to support LED's in smaller retail locations and in rural areas. This will increase the Sector's levelized costs. For 2018, the levelized cost to acquire electric savings will increase 31 percent, from \$0.026/kWh to \$0.034/kWh.

Budgeted Residential Sector, Electric	2017	2018	2019
Expenditures, without NEEA (Million)	\$40.3	\$35.5	\$28.4
Expenditures, with NEEA (Million)	\$44.9	\$38.9	\$32.7
Estimated Levelized Costs/kWh, without NEEA	\$0.030	\$0.049	\$0.053
Estimated Levelized Costs/kWh, with NEEA	\$0.026	\$0.034	\$0.040

Gas savings for the Residential Sector will drop about 3 percent in 2018 from 2.95 Million Therms to 2.87 Million Therms. However, gas expenditures in the Residential Sector will increase 31 percent, from \$12.3 Million to \$16.1 Million.² This is due to both higher levels of incentives being offered and the shifting value of savings on dual-fuel measures. Staff understands that Energy Trust staff and the staff from the three gas company are discussing this.

The savings and expenditure story is different for the Commercial and Production Efficiency Sectors. Both Sectors can continue to count on lighting savings for the time being and have strong custom project pipelines going into 2018. However, both Sectors continue to deal with a growing volume of projects that have lower levels of project savings.³

² In aggregate, across all Energy Trust Sectors, gas costs will rise less than 0.5 percent.

³ See pages 23 and 24 of Energy Trust's Board 2018 Budget presentation for graphics representing this dichotomy.

For the Renewable Sector, the sunset of the State of Oregon's RETC will significantly raise the Above-Market Cost (AMC) of nearly all residential standard solar projects. At the current project volume – nearly 2,000 projects applying for incentive funding – there will simply be more demand for funds than what the Solar Program has available funds.

Since August the Solar Program has been actively engaged with the RAC on how to best prioritize incentive applications in 2018. Based on the feedback the Solar Program has received, the program plans to implement a multifaceted approach to prioritizing projects. They will target smaller projects for commercial customers and some, smaller residential activity and directed toward projects that either provide higher utility value or increase participation of moderate-income customers.

2018-2019 Draft Action Plan Overview

Themes

The themes driving the 2018-2019 Action Plan are:

- Diversify Participation
- Enhance Program Methods & Strategies
- Manage Change, Prepare for Future

For the 2018-2019 Action Plan, Energy Trust has made diversifying participation a key element of its overall plan for meeting its savings and generation goals. The strategies and activities are designed to drive greater organizational diversity, equity, and inclusion are holistic; they not only impact customer outreach but also seek to shape and improve Energy Trust operations and program delivery. The budget impacts would appear to be negligible, while raising the potential to tap underserved markets.

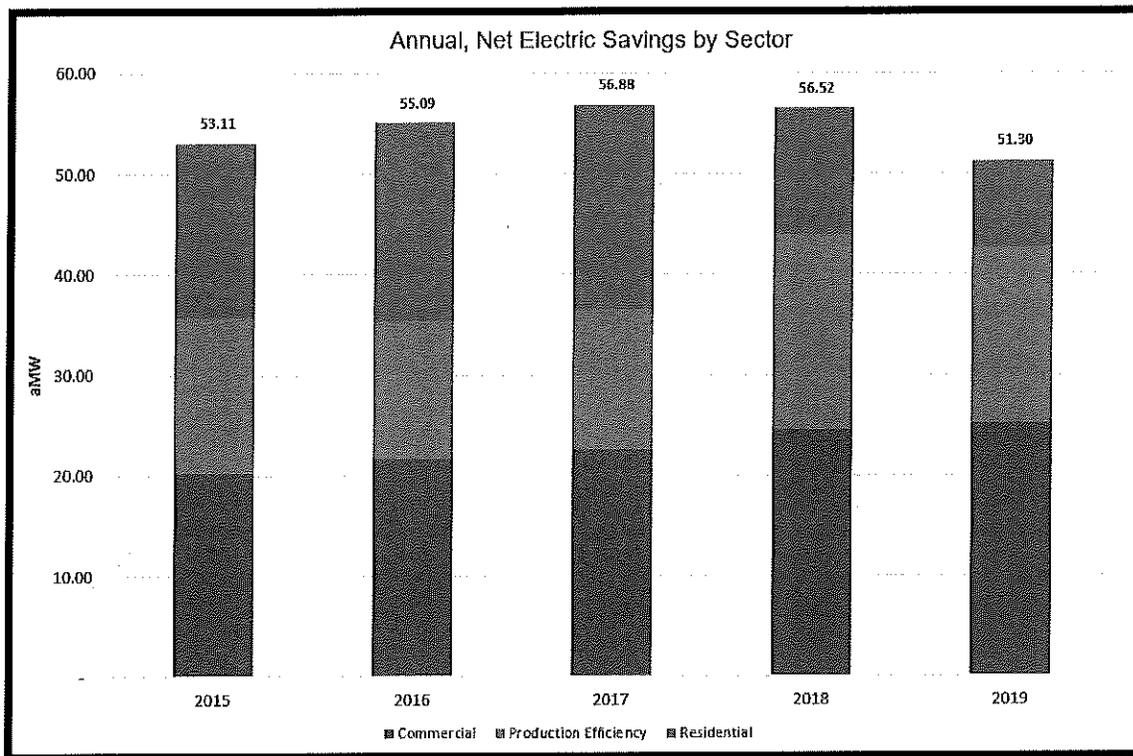
It is also worth noting that Energy Trust's 2005 grant agreement foreshadowed the work Energy Trust is undertaking in 2018 to improve diversity, equity and inclusion. With regards to the composition of the Energy Trust Board, the grant agreement states:

The Energy Trust will create board development guidelines designed to ensure that the board of directors of the Energy Trust has the skills and demographics to be effective and that it has the diversity necessary to support its mission. The board of directors will be as broadly representative of electrical users in the Service Areas as possible...

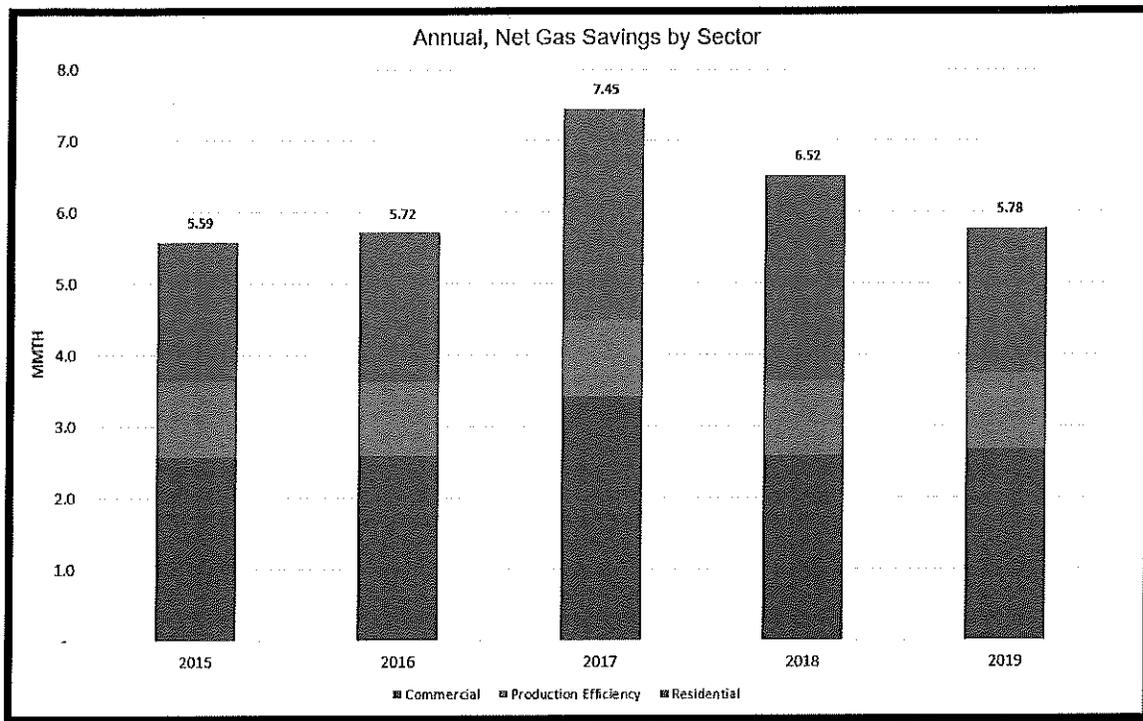
Future Savings

As noted earlier, the overall trend in electric savings for 2018 is solid. Energy Trust is projected to have another strong year. But, this does not fully capture the large changes taking shape across each of the Sectors. The August 2017 market data that caused the significant drop in the 2018 residential lighting savings took all stakeholders by surprise. This reduction in savings came earlier than Energy Trust planners and all the regional models had forecasted. While this is ultimately a success story for Energy Trust and the region, the transformation of lighting, as a large and relatively inexpensive source of savings in Energy Trust's portfolio, is compounded by the trend in the higher volume of projects but with lower levels of savings and by the finish of the mega-project in 2019.

As the graphics below show, the combined savings trends and 2018-2019 forecasts show an organization whose net savings are peaking and plateauing in 2017-2018 and then entering into a transition phase in 2019.⁴ The residential sector with relatively deeper penetration, significant increases in baseline practices and challenging cost-effectiveness drives most of the change. Unlike past years, this forecast of future savings decline is being borne out in the upcoming year's budget. The new landscape for Energy Trust will require innovation to find new sources of electric and gas savings and the discipline to keep costs low without sacrificing the infrastructure the organization has built up over the past 15 years.



⁴ Mega-Project Savings removed.



As electric and gas savings become more difficult to secure in 2019 and beyond, if expenditures remain constant, programmatic and Sector level cost-effectiveness may become an issue. More scenarios will need to be explored so as to better understand potential tradeoffs and for stakeholders to support potentially difficult decisions. The recent facilitation process conducted by the Solar Program in the RAC where Energy Trust staff discussed the 2018 budget tradeoffs they faced stands as good example of how to approach both the analysis and outreach for programs in savings transition.

Solar Program Changes

As noted previously the Solar Program has been forced to quickly evolve due to rapidly unfolding events in the market and political landscape. Standard solar incentive offerings have been adapted to market changes, with commercial offerings being refocused on smaller projects and the residential incentives slightly increased to compensate for the higher above-market costs associated with expiration of the RETC. Activities to support the ongoing reduction in soft costs will continue, but innovations to enhance program delivery and the program’s impact will be launched in 2018. The program will be testing ways to influence the adoption of solar systems with more advanced controls for storage or smart inverters. We see these efforts, dovetailing nicely with the future work the Commission will undertake in 2018 around Distribution System Planning and the Resource Value of Solar (RVOS) investigation.

Administrative Costs

Since 2015, Energy Trust’s budgeted administrative costs have risen 47 percent; double the rate for revenues.

	2015	2016	2017	2018
Budgeted Revenues	\$147,922,631	\$152,453,853	\$194,334,162	\$ 185,510,403
Budgeted Administrative and Program Costs	\$9,185,824	\$9,684,888	\$11,245,295	\$ 12,481,525

Much of the 2018 increase in administrative costs can be attributable to Energy Trust's several strategic projects and initiatives. And while Staff appreciates and supports Energy Trust's need to better understand and plan for near-term uncertainty and market changes, Staff also believes the growth in administrative spending is not sustainable. Absolute growth in administrative costs should be somewhat constrained in the future. Staff suggests adding one new element to Energy Trust's current OPUC metric for administrative costs:

- Year-over-year increases in administrative costs cannot exceed 10 percent of the previous year's administrative costs beginning with the 2019 budget.

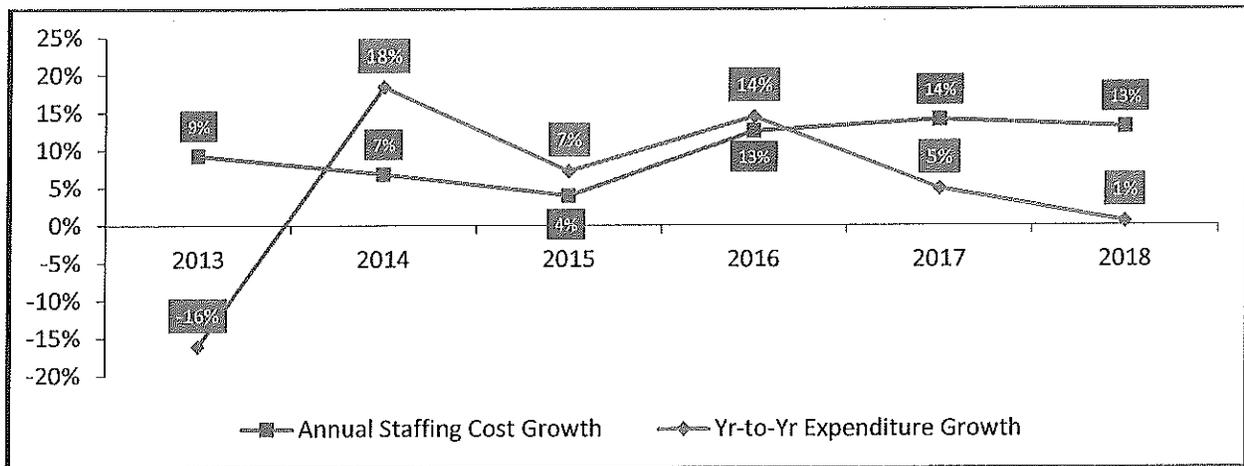
Staffing Costs

Last year OPUC Staff raised concerns about the absolute growth in Energy Trust's annual staffing costs. OPUC Staff recommended that the current performance metric be updated in 2017 to include some type of limit in absolute growth. Energy Trust and OPUC Staff were still in the process of updating this metric when the 2018 Budget was released. This year's budget contains the highest total for staffing costs and the greatest year-over-year increase.

For 2018, staffing costs represent 7.8 percent of the total budget. It raises Energy Trust's three year rolling average for staffing costs above the 7 percent mark, the highest level since this performance metric was established.

	Total Staffing Cost	3 year Rolling Average used in OPUC Metric
2014 actual	\$ 10,323,052	6.55%
2015 actual	\$ 10,728,978	6.83%
2016 actual	\$ 12,076,244	6.56%
2017 R2 budget	\$ 13,774,959	6.66%
2018 R1 budget	\$ 15,578,685	7.10%

This will be the second year that increases in annual staffing costs outpace overall expenditure growth and the third year in a row that staffing cost experience increases in excess of 10 percent.



Staff feels Energy Trust must take steps to reduce the pace of growth in overall staffing costs in 2019, especially given the forecasted savings reductions. Energy Trust is aware of Staff's concerns and will be looking to make a percentage reduction in Staffing costs before this year's budget is finalized.

It is also worthy of note that additional Energy Trust employees are *not* the cause of the 2018 staffing cost increase. Energy Trust's 2018 budget proposal includes no new staff. Instead, a mixture of factors led to the staffing costs increases in 2018. Those factors were:

- 11 percent increase in healthcare premiums.
- 6 percent increase in staff compensation due to merit adjustments and coming into compliance Oregon's new pay equity law.
- 157 percent increase in the cost of agency contractors.

The large, year-over-year rise in agency contractors is due to the launching of several IT initiatives and partial backfill for extended employee leave in 2018. The table below shows the historic use of agency contractors to augment Energy Trust staff.

	Total Staffing Cost	Agency Contractors	Agency Contractors as % of Staffing Costs
2014 actual	\$ 10,323,052	\$720,378	6.98%
2015 actual	\$ 10,728,978	\$493,337	4.60%
2016 actual	\$ 12,076,244	\$613,067	5.08%
2017 R2 budget	\$ 13,774,959	\$466,000	3.38%
2018 R1 budget	\$ 15,578,685	\$1,256,006	8.06%

OPUC Staff would note that rolling up Energy Trust employee costs with agency contractor costs as part of a single, cost category makes it difficult to accurately monitor, track and report Energy Trust's actual overhead related to direct employees.

To increase transparency and accountability, OPUC Staff would recommend several things. First, Energy Trust begin reporting employee (staffing) costs and agency contractor costs

separately in the 2019 budget. Agency contractors should become a new line item in the budget and their total, budgeted cost and percent of 2019 expenditures should be clearly reported in the 2019 budget for monitoring and tracking purposes.

Second, the current OPUC staffing metric should be revised. Specifically, the OPUC metric should focus on the actual staffing costs of Energy Trust's direct employees. Further, with the removal of agency contractor costs, the OPUC performance metric for staffing costs should be tightened from 7.75 to 7.25 percent.

Lastly, the OPUC staffing metric should include a 10 percent cap on year-over-year cost increases.

Recommendations

Overall, PUC Staff supports Energy Trust's draft 2018 Budget and 2018-19 Action Plan. Staff recommends the Commission support the budget and action plan subject to the following conditions:

1. Continuation of recommendations not fully completed in 2017. Specifically,
 - a. Develop a matrix of key triggering events and resulting, alternative budget scenarios by July 2018 for the 2019 budget.
 - b. Identify steps that could be taken to stabilize operations by smoothing the acquisition of certain savings.
 - c. Continue and report back on progress related to the organizational assessment and resulting efficiencies in staffing and contractor resources
 - d. Continue work to improve forecasting methods and report on progress within a quarterly Commission update.
2. Implement new staffing performance metric for the 2019 budget
 - a. Remove agency contractors from Staffing Cost category; track and report separately.
 - b. Reduce Staffing Performance Metric to 7.25 percent.
 - c. Introduce a 10 percent cost increase cap.
3. Update the existing administrative cost metric to include:
 - a. Year-over-year increases in administrative costs cannot exceed 10 percent of the current year's administrative costs
4. As part of Energy Trust's Q2 report to the Commission
 - a. Report back on near-term results from Diversity, Equity, Inclusion (DEI) activities
 - b. Report back on status of LED lighting in all Sectors and how any changes may potentially impact 2019 savings and expenditures.
 - c. Track and report in the 2018 annual report the number of solar systems that received Energy Trust incentives and also had a battery storage system, advanced interconnection and communication devices, or would be considered moderate-income.
 - d.

PROPOSED COMMISSION MOTION:

Adopt Staff's comments as Commission comments on the Draft 2018 Budget and Draft 2018-19 Action Plan for Energy Trust of Oregon.

2018 Energy Trust Budget and 2018-19 Action Plan



Let's turn the answers on.

825 NE Multnomah
Suite 1500
Portland, OR 97232

November 17, 2017

Michael Colgrove
Executive Director
Energy Trust of Oregon
421 SW Oak Street, Suite 300
Portland, OR 97204

RE: Comments on Energy Trust 2018 Annual Budget and 2018-2019 Action Plan

Dear Mike,

We appreciate the work Energy Trust of Oregon (ETO) has invested in developing and presenting your 2018 draft budget and action plan to Pacific Power and other stakeholders around the state. We are very much looking forward to working closely with your team on several initiatives under development.

We would like to offer the following comments and have identified the following opportunities for the upcoming year:

- Pacific Power appreciates the close alignment between the 2018 target and the amount of cost-effective energy efficiency identified in our 2017 Integrated Resource Plan (IRP). We do note that alignment for 2019 appears to present a bit of a challenge and look forward to working with you over the next year to understand and potentially narrow this gap before the next budgeting cycle.
- During the Energy Trust Board Meeting on November 8, 2017, ETO acknowledged that nearly all contingency funds, except \$56,200, are interest earned on revenue provided by utility customers. Money generated from customer collections, regardless if direct or interest earned, should be spent to benefit customers, and consistently with the provisions of the public purpose charge and utility funding agreements. To the extent there are questions about scope and related spending, which there may be with regard to the community solar request for proposals, we recommend that in addition to input from the board, ETO gets clarity from the Oregon Commission on the matter.



Let's turn the answers on.

825 NE Multnomah
Suite 1500
Portland, OR 97232

- We appreciate and continue to encourage ETO to look for opportunities to promote less mature renewable technologies. We also appreciate ETO's plans to target solar efforts for applications that yield high-value benefits to the utility system and the continued focus on lowering the "soft costs" of solar projects.

Pacific Power continues to value the resource acquisitions and customer benefits delivered by Energy Trust of Oregon on behalf of our customers. We are looking forward to continued good work in 2018.

Sincerely,

A handwritten signature in black ink that reads "Cory Scott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Cory Scott
Director, Customer Solutions

From: Spector, Allison [<mailto:Allison.Spector@cngc.com>]
Sent: Thursday, November 16, 2017 11:07 AM
To: Michael Colgrove <Michael.Colgrove@energytrust.org>
Subject: Touching Base
Importance: High

Michael,

I hope all's well since we last touched base!

I wanted to let you know that Mary and I have finally had a chance to talk a bit about RNG and are ready to set up a brainstorming meeting with Energy Trust on potential opportunities. I look forward to puzzling through what that might look like.

I also wanted to set a separate time to talk with you about a few issues weighing on my mind. As you know budget/action plan comments are due from the utilities and other stakeholders on Friday. I began to pull something together and then realized that I much rather just sit down and work through my thoughts/concerns/questions with you directly.

Here's a summary of the budget comments I was considering. Instead, let's meet one-on-one. I think we're due for another meeting soon anyway.

The main points I'd like to talk about:

- Cascade has the highest levelized cost per therm for the acquisition of natural gas savings. While Energy Trust has provided some insights into the factors that led to these increased costs, the Company seeks to more fully understand the root causes, and maximize ratepayer value.
- As reported by the Energy Trust on November 14, 2017, ETO has significantly raised the proportion of natural gas ratepayer funds spent on the EPS New Construction program. It was explained that this increase was due to code changes effecting the viability of electric measures, including electric lighting savings. In order to compensate for the decreased (quantifiable) electric value of this program, the Energy Trust has raised the proportion of funds the gas utilities must pay for these projects, though it appears no new gas benefits are being introduced. The Cascade budget for the program is being increased from \$275,742 in 2017, to \$434,864 in 2018 with no new ratepayer benefits being assigned. We have concerns.
- ETO and RNG-- possible biogas coordination pilot efforts with Cascade (and perhaps the other LDCs.)

I look forward to another great dialogue. Let me know what your availability looks like this/next month and I'd be glad to make it happen.

Thanks!

Allison Spector

Manager, Energy Efficiency Policy

Cascade Natural Gas Corporation (CNGC)

206-310-1120 / 503-896-3260



Portland General Electric Company
121 SW Salmon Street • Portland, Oregon 97204
PortlandGeneral.com

November 17, 2017

Michael Colgrove
Executive Director
Energy Trust of Oregon
421 SW Oak St., Suite 300
Portland, OR 97204

Dear Michael,

Thank you for sharing Energy Trust's 2018 budget and operational plans. PGE supports your plans to contribute to our Integrated Resource Plan, helping us meet our customers' energy needs with cost-effective energy efficiency.

I want to also note that PGE has concerns about the Board's recent approval to use accumulated interest dollars on the Energy Trust's contingency reserve to cover any incremental Community Solar RFP costs, if needed. We believe that the appropriate standard for use of interest dollars should be the same as the standard associated with the use of the underlying principle, which is funded by our retail customers. Since this is interest earned from our customers' contributions, we believe these interest dollars should only be used for customer-related activities that fit within the Energy Trust's current mission.

Sincerely,

A handwritten signature in cursive script that reads "Carol".

Carol Dillin
Vice President
Customer Strategies & Business Development

cc: Steve Lacey

Holly Braun
Energy Policy and Sustainability Manager
503-226-4211 x5717
holly.braun@nwnatural.com



November 17, 2017

Mr. Steve Lacey and Peter West
421 SW Oak
Portland, Oregon 97204

NW NATURAL FEEDBACK ON ENERGY TRUST'S 2018 BUDGET AND REVIEW PROCESS

Budget comments

In light of dramatic increases to the natural gas New Homes program budget, Energy Trust convened a meeting with all natural gas funders on November 14th to explain the components and math behind the increase. NWN's portion of the New Homes program increased \$2M – the majority of this (\$1.4M) is independent of any gas-related changes but represents the costs no longer borne by the electric funders due to updates the new residential building code. Now that LED lighting is required, the program cannot claim these electric savings. Energy Trust explained that gas savings are now *relatively* more valuable so in 2018 gas will cover a relatively higher portion of the program support costs. We appreciate the level setting of that meeting and openness to reconsider this allocation protocol in 2018.

While that explanation clarified the New Homes increase, Energy Trust's budget is shown in aggregate of all programs, by utility, and therefore our year-over-year budget review occurred at that level as well. Some of the answers to our questions may be contained in the New Homes program explanations but the causation and scope of that impact is not clear to the budget as a whole so a few questions remain:

- *Program Evaluation and Planning services* looks to be up 22-31% for all utilities- what is driving this change?
- Gas incentives are going up significantly across the board (25% for NWN) but program management is going up at a rate at least twice as high as the incentive growth (64% for NWN). Is there a budgetary relationship between *incentives* and *program management*, if so, what is that relationship?
- *Other Program Expenses-all* is going up 42-88% depending on utility- what are the other program expenses? What is driving them so high; in particular, NWN's 49% jump?
- The solar program costs are increasing (6%) while the solar incentives are decreasing (-39%). The result seems to be a net decrease of Administrative costs (-20%) borne by the solar program because of reduced project volume, not a reduction in effort, staffing, outreach activities, or initiatives. It appears that those fixed Energy Trust Administrative costs are therefore being reallocated across the other efficiency programs which in turn bear a larger burden than prior years. Overall Administrative costs are up 13%, NWN's portion is up 32% in OR (PPC) and 28% in WA. Gas Efficiency Programs in two states are picking up overhead formerly supported by Renewable program in Oregon. We would like a thorough explanation of the connection between incentives, programmatic expenses and administrative cost causation.

Process comments

NW Natural aims to be a constructive partner in the budget process. To achieve a more meaningful, streamlined and effective sequence, we recommend starting with a year-over-year budget and walking utilities and CAC members through the significant changes. Supplementary information should be presented in light of, and subsequent to, a traditional budget. Our CAC meeting on this topic was 3.5 hours and contained 99 slides but an actual line-item budget wasn't distributed for another week. As it pertains to my role as a CAC member, it would be helpful for Energy Trust to identify the nature of feedback you are seeking from the CAC. This will help focus our discussion and attention and should better provide the information/insight you need.

Thank you for considering this feedback and for your work in creating a budget that adequately and fairly funds next year's programs.

Sincerely,

A handwritten signature in black ink that reads "Holly Braun". The signature is written in a cursive, flowing style with a long horizontal tail stroke extending to the right.

Holly Braun

cc: Michael Colgrove, David Anderson, Bill Edmonds and Rick Hodges



580 Business Park Drive
Medford, OR 97501

November 15, 2017

Michael Colgrove
Executive Director
Energy Trust of Oregon
421 SW Oak St Ste 300
Portland, OR 97204

Dear Michael,

Avista appreciates Energy Trust exceeding natural gas therm saving goals in 2017 while staying within budget expectations. It is important to Avista that the Integrated Resource Plan goals are achieved while keeping in mind rate impact to our customers.

Avista is concerned with one area of the 2018 Strategic Goals and Strategies, which relates to discussions about how to better serve low-income customers. In our service territory an average of 18% of our residential customers meet federal poverty guidelines. Through our partnership with the Oregon Community Action Agencies, they will receive approximately 34% of Avista's total 2018 public purpose charges collected for efficiency programs. This money is used for whole-home weatherization at no cost to the customer. In addition, our low-income customers can benefit from Energy Trust programs by receiving Energy Saver Kits, Existing Manufactured Homes no-cost upgrades, or landlords can participate in programs too. Avista is concerned with how the Energy Trust plans to implement additional low-income programs that may conflict with the programs currently in place. Also, it is unclear what the impact will be on the Community Action Agencies. Avista would appreciate that before any additional programs are rolled out for low-income customers that there is a greater discussion with the utilities regarding how the Energy Trust program will either support or compete with the utility programs.

We have also noticed that the budget, excluding incentives, is increasing 17%. Our concern is two-fold. If costs continue to increase the programs could become non cost effective. Secondly, the program marketing, outreach, and trade ally customer service management is decreasing while therm goals are increasing, which seems counterintuitive.

Notwithstanding, the 2018 budget meets Avista expectations to offer the least cost resource while balancing rate impact. We look forward to working with Energy Trust next year to serve our customers' efficiency needs.

Sincerely,

Lisa McGarity
DSM Manager Oregon

From: Jacob, Andria [<mailto:Andria.Jacob@portlandoregon.gov>]

Sent: Friday, November 17, 2017 2:45 PM

To: Peter West <Peter.West@energytrust.org>; Hannah Cruz <Hannah.Cruz@energytrust.org>; Michael Colgrove <Michael.Colgrove@energytrust.org>

Subject: comments on budget process

Hi Peter, Hannah and Mike,

Sorry I'm not able to be at CAC today. We launched the [City of Portland Home Energy Score](#) website yesterday and I've been busy with media all day.

I wanted to offer a few brief thoughts on the recent budget presentation at CAC. I don't have substantive comments on the budget itself, but I was a little confused by the presentation at the last CAC meeting. It felt like it had very little relevance for me as a non-utility CAC member. The utilities clearly have a different need and relationship with the ETO budget. It's not clear to me what kind of feedback you all want or need from CAC, but all I really want to see is a clear presentation of trends. How does this year's budget compare to the last five years (or 3, or pick another time range), in each of the major program areas? What are the year-over-year changes and why? What's the big picture? When the budget is presented in such excruciating detail, but without any larger context, it's very difficult for me to find a way into the conversation.

It seems like you have differing needs from different members of CAC. My recommendation for going forward would be to offer a deep-dive into the budget for self-selected CAC members to be held at a different time from the regular CAC meeting. For the regular CAC meeting, I suggest showing the trends, offering big picture context, keeping it high-level and to no more than 30 minutes.

Thanks for considering this feedback!

Andria

+++

Andria Jacob | Senior Manager, Energy Programs and Policy
City of Portland | Bureau of Planning and Sustainability
1900 SW 4th Avenue | Suite 7100 | Portland, OR 97201
p: 503-823-7616 | e: andria.jacob@portlandoregon.gov

The Bureau of Planning and Sustainability is committed to providing meaningful access. For accommodations, modifications, translation, interpretation or other services, please contact at 503-823-7700 or use City TTY 503-823-6868, or Oregon Relay Service 711.

Traducción o interpretación | Chuyển Ngữ hoặc Phiên Dịch | 翻译或传译 | Письменный или устный перевод | Traducere sau Interpretare |

Письмовий або усний переклад | 翻訳または通訳 | Turjumida ama Fasiraadda | ການແປພາສາ ຫຼື ການອະທິບາຍ | الترجمة التحريرية أو الشفوية | 503-823-7700 | www.portlandoregon.gov/bps/71701

From: Phillip Norman
Sent: Friday, November 17, 2017 7:00 AM
To: Energy Trust of Oregon Info <info@energytrust.org>
Subject: Draft 2018 Annual Budget and 2018-2019 Action Plan

I attended the Portland-Area Trade Ally Fall 2017 quarterly meeting on 11/14 and expressed in effect the following, to Energy Trust staff:

Whereas the Public Purpose Fund finds voter acceptance only in a wish to help neighbors, for all of us to join in residential energy conservation, all funds collected from residential ratepayers should be spent only for their direct benefit, in accomplishing existing-home weatherization. Where perhaps 1000 homes per year, certainly fewer than 2000, are now claimed in this, funds that can't be properly spent must be withheld from spending, for other means of correct usage. In my 11/14 conversations, I believe there was admission less than \$500,000 will have been correctly spent in motivating and rewarding weatherization, in 2017. The annual remaining \$99,500,000 should then be held in a reserve fund until proper usage is established.

I have never believed in the spending down of funds. All cash to the public should be as loans to be repaid, the Fund then growing as investment and capitalization in an Oregon State Bank. Energy Trust should be an advocate in this for proper self interest in the growth of weatherization activity by more than an order of magnitude, to justify and employ its staff, then being an honest broker with OPUC.

A change from present practices is especially demanded where most ratepayers now have no prospect of benefit from their paid Public Purpose Fund taxes. I think this present practice is criminal.

As a weatherization contractor, outstanding in Angie's List reviews and Energy Trust job inspections, I work alone for good reason, to always and without restraint, practice and share ever-better policies and methods, with ever-better materials. I deal with anything beneficial in an existing home, including improved interface with HVAC specialists, roofers, electronics/ data specialists, and licensed electricians and plumbers.

My practice is focused upon existing-home attic opportunities, but is strong also in crawl spaces. Please judge my contributions so far and weigh my credibility, from my freely-offered blog posts and other web submissions visible to the world as a credit to Oregonians.

Please acknowledge that work in existing homes has negligible benefit from absurd HPwES blower door shows. All repairable problems/ savings opportunities are found progressively in a contract of weatherization, by rote and by visual discovery. Rote is in humble reach always to **fully** place insulation.

Phillip Norman
Attic Access
1234 NE 118th Avenue
Portland, OR 97220-2129
Phone [503-255-4350](tel:503-255-4350)
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<http://sites.google.com/a/r5portals.com/www/home>
<http://energyconservationhowto.blogspot.com/>
<http://plasterrepairhowto.blogspot.com/>
<https://www.pinterest.com/phillipnorman52/residential-led-downlighting/>
<https://plus.google.com/communities/116610711167978915311>
<https://plus.google.com/108533770292578040917/posts>

**Energy Trust of Oregon
Income Statement
2017 to 2019**

	Budget 2017	Forecast 2017	Budget 2018	Projection 2019
<u>REVENUES</u>				
Public Purpose Funds-PGE	37,255,027	38,241,267	37,484,629	37,484,629
Public Purpose Funds-PacifiCorp	27,524,599	29,583,394	28,525,981	28,525,981
Public Purpose Funds-NW Natural	17,392,246	18,714,900	18,279,834	22,979,834
Public Purpose Funds-Cascade	2,900,000	3,129,325	2,167,052	2,917,052
Public Purpose Funds-Avista	1,036,869	1,036,869	1,156,870	1,156,870
Total Public Purpose Funds	86,108,742	90,705,755	87,614,365	93,064,365
Incremental Funds - PGE	65,291,750	65,333,595	64,656,625	59,656,625
Incremental Funds - PacifiCorp	33,375,078	35,518,465	31,515,755	31,515,755
NW Natural - Industrial DSM	5,920,596	5,920,596	520,024	3,682,304
NW Natural - Washington	2,020,834	2,020,834	2,466,148	2,431,310
Revenue from Investments	210,000	400,000	230,000	230,000
TOTAL REVENUE	192,927,000	199,899,245	187,002,918	190,580,360
<u>EXPENSES</u>				
Program Subcontracts	57,903,505	56,847,142	58,297,400	58,953,234
Incentives	114,122,042	109,152,354	111,030,753	112,593,066
Salaries and Related Expenses	13,774,959	13,258,866	15,201,530	15,548,036
Professional Services	9,421,807	7,588,532	11,219,998	9,358,471
Supplies	48,600	45,100	47,500	47,500
Telephone	69,900	56,800	51,600	51,600
Postage and Shipping Expenses	18,000	18,000	24,500	24,000
Occupancy Expenses	950,433	950,433	944,433	948,133
Noncapitalized Equip. & Depr.	1,341,183	1,156,770	1,037,843	934,297
Call Center	200,000	162,000	180,000	180,000
Printing and Publications	16,550	15,050	15,050	15,050
Travel	228,700	218,450	232,850	238,450
Conference, Training & Mtng Exp	209,450	165,950	243,700	241,700
Interest Expense and Bank Fees	4,000	1,800	1,500	1,500
Insurance	110,000	110,000	110,000	110,000
Miscellaneous Expenses	3,000	3,000	3,000	3,000
Dues, Licenses and Fees	150,552	151,750	220,091	215,228
TOTAL EXPENSES	198,572,681	189,901,997	198,861,748	199,463,264
TOTAL REVENUE LESS EXPENSES	(5,645,681)	9,997,248	(11,858,831)	(8,882,904)

Energy Trust of Oregon
2018 Approved Budget versus Draft

SAVINGS & GENERATION	Draft 2018	Approved 2018	Change	% Change
Savings				
PGE	37.0	36.4	(0.6)	(1.7%)
PAC	19.5	20.2	0.7	3.5%
Total Electric Savings (aMW)	56.5	56.6	0.1	0.1%
Total Gas Savings (MM Therms)				
NW Natural	6.0	6.0	0.0	0.6%
Cascade Natural Gas	0.6	0.5	(0.0)	(1.3%)
Avista	0.3	0.3	0.0	0.4%
Total Gas Savings (MM Therms)	6.9	6.9	0.0	0.4%
Total Generation (aMW)				
PGE Generation	1.1	1.1	0.0	0.0%
PacifiCorp Generation	1.1	0.8	(0.3)	(26.0%)
Total Generation (aMW)	2.2	1.9	(0.3)	(13.2%)
FINANCIALS				
	Draft 2018	Approved 2018	Change	% Change
REVENUE	185,740,402	187,002,918	1,262,516	0.7%
Expenses by Function				
Electric Efficiency	143,548,695	143,839,258	290,562	0.2%
Gas Efficiency	29,011,118	28,862,228	(148,890)	(0.5%)
Renewable Energy	13,164,135	12,410,076	(754,059)	(5.7%)
Management & General	4,839,603	4,796,323	(43,280)	(0.9%)
Communication and Outreach	9,040,096	8,953,868	(86,228)	(1.0%)
TOTAL	199,603,648	198,861,753	(741,895)	(0.4%)
Expenses by Nature				
Efficiency Incentives	101,264,267	101,866,533	602,266	0.6%
Renewable Incentives	9,863,108	9,164,220	(698,888)	(7.1%)
Program Subcontracts	58,029,538	58,297,400	267,862	0.5%
Staffing Costs	15,578,685	15,201,530	(377,155)	(2.4%)
All Other Expenses	14,868,049	14,332,070	(535,979)	(3.6%)
TOTAL EXPENSES	199,603,648	198,861,753	(741,895)	(0.4%)
Expenses by Utility. Fully Loaded				
Electric	154,276,513	154,523,718	247,200	0.2%
Gas	31,179,205	31,006,131	(173,074)	(0.6%)
Renewables	14,147,930	13,331,904	(816,026)	(5.8%)
Total	199,603,648	198,861,753	(741,895)	(0.4%)
Expenses by Sector				
Commercial	87,919,144	88,021,139	101,995	0.1%
Industrial	37,969,364	38,016,761	47,397	0.1%
Residential	50,925,559	50,859,635	(65,924)	(0.1%)
NEEA combined	8,641,650	8,632,314	(9,336)	(0.1%)
Efficiency Total	185,455,717	185,529,849	74,131	0.0%
Renewables Total	14,147,930	13,331,904	(816,026)	(5.8%)
Grand total	199,603,648	198,861,753	(741,895)	(0.4%)

2018 Budget Recap Spending and Savings - R2: Approved

ENERGY EFFICIENCY

	BUDGET (\$M)			ELECTRIC		GAS	
	ELECTRIC	GAS	TOTAL	ELECTRIC SAVINGS GOAL (aMW)	Levelized Cost per kWh (in cents)	Annual Therms	Levelized Cost per Therm (in cents)
Commercial							
Business Energy Solutions – Existing Buildings	49.0	6.0	55.1	14.96	3.4	1,481,693	37.13
Business Energy Solutions – Multifamily	8.9	1.1	9.9	1.79	5.1	165,791	50.36
Business Energy Solutions – New Buildings	19.9	2.2	22.1	6.26	3.3	936,040	20.45
Mkt Transformation (Alliance)	2.3	0.4	2.7	1.81	2.5		
Total Commercial	80.0	9.7	89.8	24.83	3.5	2,583,524	33.61
Industrial							
Production Efficiency	35.2	2.9	38.0	19.23	2.0	1,064,753	24.44
Mkt Transformation (Alliance)	0.4	0.0	0.4	0.08	8.1		
Total Industrial	35.5	2.9	38.4	19.31	2.1	1,064,753	24.78
Residential							
Home Energy Solutions – Residential	34.5	15.0	49.5	7.17	4.9	2,903,694	32.76
Mkt Transformation (Alliance)	4.4	1.0	5.4	5.27	1.0		
Total Residential	38.9	16.0	55.0	12.45	3.4	2,903,694	35.74
Washington							
Business Energy Solutions – Existing Buildings		0.9	0.9			160,000	53.41
Home Energy Solutions – Residential		1.3	1.3			199,880	47.13
Mkt Transformation (Alliance)		0.1	0.1				
Total Washington		2.4	2.4			359,880	51.64
Total Energy Efficiency	\$154.5	\$31.0	\$185.5	56.59	3.0	6,911,850	33.29

RENEWABLE RESOURCES

	ACTIVITY BASIS		ACCOUNTING BASIS	ACTIVITY BASIS		ACCOUNTING BASIS	
	BUDGET (\$M)		BUDGET (\$M)	ELECTRIC GENERATION GOAL (aMW)	(\$/mils/ aMW)	ELECTRIC GENERATION GOAL (aMW)	(\$/mils/ aMW)
Other Renewables	9.7		3.7	1.35	7.21	0.00	
Solar Electric	9.5		9.6	1.32	7.19	1.89	5.08
Total Renewable Resources	\$19.2		\$13.3	2.67	7.20	1.89	7.05

TOTAL BUDGET - ALL

\$198.9

¹ some columns may not add due to rounding

ENERGY TRUST OF OREGON Income
Statement by Service Territory
2018 Approved Budget

	ENERGY EFFICIENCY									
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
REVENUES										
Public Purpose Funding	29,100,000	22,175,370	51,275,370	-	18,279,834	2,167,052	1,156,870	72,879,126	-	72,879,126
Incremental Funding	64,656,625	31,515,755	96,172,380	520,024				96,692,404	2,466,148	99,158,552
Contributions										
Revenue from Investments										
TOTAL PROGRAM REVENUE	93,756,625	53,691,125	147,447,750	520,024	18,279,834	2,167,052	1,156,870	169,571,530	2,466,148	172,037,678
EXPENSES										
Program Management (Note 3)	3,883,575	2,290,785	6,174,362	194,899	1,078,636	114,766	54,469	7,617,130	145,982	7,763,112
Program Delivery	26,970,903	16,677,838	43,648,740	834,629	5,321,389	745,243	270,767	50,820,766	537,131	51,357,897
Incentives	53,187,814	31,424,609	84,612,423	2,495,321	11,483,744	1,512,546	654,545	100,758,577	1,107,956	101,866,533
Program Eval & Planning Svcs.	3,232,107	1,951,517	5,183,625	105,084	533,235	66,084	29,182	5,917,210	190,518	6,107,728
Program Marketing/Outreach	2,314,867	1,344,412	3,659,279	26,632	738,316	77,088	37,328	4,538,643	109,189	4,647,832
Program Legal Services	-	-	-	-	-	-	-	-	-	-
Program Quality Assurance	36,360	22,605	58,965	-	23,372	1,785	878	85,000	-	85,000
Outsourced Services	1,015,488	557,307	1,572,795	31,809	245,919	26,931	12,797	1,890,250	36,550	1,926,800
Trade Allies & Cust. Svc. Mgmt.	326,016	194,238	520,254	5,729	138,409	12,402	6,115	682,910	41,472	724,382
IT Services	1,027,828	586,221	1,614,050	30,126	299,594	30,350	14,960	1,989,080	42,763	2,031,843
Other Program Expenses - all	326,742	194,959	521,703	16,842	65,387	7,874	3,435	615,240	49,884	665,124
TOTAL PROGRAM EXPENSES	92,321,700	55,244,491	147,566,196	3,741,071	19,928,001	2,595,069	1,084,476	174,914,806	2,261,445	177,176,251
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	2,331,681	1,395,259	3,726,938	94,485	503,302	65,541	27,390	4,417,656	57,115	4,474,771
Communications & Customer Svc (Notes 1 & 2)	2,021,146	1,209,435	3,230,583	81,901	436,271	56,813	23,742	3,829,309	49,508	3,878,817
Total Administrative Costs	4,352,827	2,604,694	6,957,521	176,386	939,573	122,354	51,132	8,246,965	106,623	8,353,588
TOTAL PROG & ADMIN EXPENSES	96,674,527	57,849,185	154,523,717	3,917,457	20,867,574	2,717,423	1,135,608	183,161,771	2,368,068	185,529,839
TOTAL REVENUE LESS EXPENSES	(2,917,902)	(4,158,060)	(7,075,967)	(3,397,433)	(2,587,740)	(550,371)	21,262	(13,590,241)	98,080	(13,492,161)
NET ASSETS - RESERVES										
Cumulative Carryover at 12/31/17 Forecast	7,228,212	6,186,565	13,414,784	3,597,429	3,698,591	1,002,297	108,096	21,821,201	101,922	21,923,123
Change in net assets this year	(2,917,902)	(4,158,060)	(7,075,967)	(3,397,433)	(2,587,740)	(550,371)	21,262	(13,590,241)	98,080	(13,492,161)
Interest Attributed										
Ending Net Assets - Reserves	4,310,310	2,028,505	6,338,815	200,000	1,110,851	451,926	129,358	8,230,950	200,000	8,430,950
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	4,310,310	2,028,505	6,338,815	200,000	1,110,851	451,926	129,358	8,230,950	200,000	8,430,950
Assets Released for General Purpose										
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	4,310,310	2,028,505	6,338,815	200,000	1,110,851	451,926	129,358	8,230,950	200,000	8,430,950

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.

Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits does not allow allocation of admin costs to program expenses.

Note 3) Program Management costs include both outsourced and internal staff.

	RENEWABLE ENERGY			Other	TOTAL
	PGE	PacifiCorp	Total		All Programs
REVENUES					
Public Purpose Funding	8,384,629	6,350,611	14,735,239	-	87,614,365
Incremental Funding					99,158,552
Contributions					
Revenue from Investments				230,000	230,000
TOTAL PROGRAM REVENUE	8,384,629	6,350,611	14,735,239	230,000	187,002,917
EXPENSES					
Program Management (Note 3)	640,016	673,334	1,313,350		9,076,462
Program Delivery	215,240	161,260	376,500		51,734,397
Incentives	4,663,680	4,500,540	9,164,220		111,030,753
Program Eval & Planning Svcs.	113,228	110,243	223,470		6,331,198
Program Marketing/Outreach	138,680	112,820	251,500		4,899,332
Program Legal Services	2,836	3,164	6,000		6,000.00
Program Quality Assurance	-	-	-		85,000
Outsourced Services	361,834	322,165	683,999		2,610,799
Trade Allies & Cust. Svc. Mgmt.	34,581	27,369	61,950		786,332
IT Services	142,126	151,876	294,002		2,325,845
Other Program Expenses - all	188,220	168,416	356,636		1,021,760
TOTAL PROGRAM EXPENSES	6,500,441	6,231,187	12,731,627	-	189,907,878
ADMINISTRATIVE COSTS					
Management & General (Notes 1 & 2)	164,176	157,375	321,550		4,796,321
Communications & Customer Svc (Notes 1 & 2)	142,310	136,416	278,726		4,157,543
Total Administrative Costs	306,486	293,791	600,276		8,953,864
TOTAL PROG & ADMIN EXPENSES	6,806,927	6,524,978	13,331,903		198,861,742
TOTAL REVENUE LESS EXPENSES	1,577,702	(174,367)	1,403,336	230,000	(11,858,825)
NET ASSETS - RESERVES					
Cumulative Carryover at 12/31/17 Forecast	6,893,730	5,382,521	12,276,251	9,671,809	43,871,183
Change in net assets this year	1,577,702	(174,367)	1,403,336	230,000	(11,858,825)
Interest Attributed					
Ending Net Assets - Reserves	8,471,432	5,208,154	13,679,587	9,901,809	32,012,346
Ending Reserve by Category					
Program Reserves (Efficiency and Renewables)	8,471,432	5,208,154	13,679,587		22,110,537
Assets Released for General Purpose				4,901,809	4,901,809
Emergency Contingency Pool				5,000,000	5,000,000
TOTAL NET ASSETS CUMULATIVE	8,471,432	5,208,154	13,679,587	9,901,809	32,012,346

Energy Trust of Oregon
Statement of Functional Expenses
2018 Approved Budget

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total
Program Expenses							
Incentives	101,866,533	9,164,220	111,030,753				111,030,753
Program Management & Delivery	57,910,900	386,500	58,297,400				58,297,400
Payroll and Related Expenses	4,349,467	1,303,350	5,652,818	2,759,663	1,923,311	4,682,974	10,335,792
Outsourced Services	6,780,349	1,014,499	7,794,848	1,152,650	1,366,000	2,518,650	10,313,498
Planning and Evaluation	2,847,653	150,470	2,998,123	11,285	188,088	199,373	3,197,497
Customer Service Management	358,215	51,719	409,935				409,935
Trade Allies Network	366,167	20,230	386,398				386,398
Total Program Expenses	174,479,285	12,090,989	186,570,274	3,923,599	3,477,399	7,400,998	193,971,272
Program Support Costs							
Supplies	13,240	4,220	17,461	10,052	6,877	16,929	34,390
Postage and Shipping Expenses	10,320	1,490	11,810	5,524	2,074	7,598	19,408
Telephone	3,456	1,592	5,048	2,019	1,660	3,679	8,726
Printing and Publications	2,016	995	3,011	5,678	3,468	9,146	12,157
Occupancy Expenses	272,006	93,783	365,789	158,921	130,608	289,529	655,318
Insurance	31,681	10,923	42,604	18,510	15,212	33,722	76,326
Equipment	4,464	170,639	175,103	2,608	2,144	4,752	179,855
Travel	64,250	19,000	83,250	55,400	50,000	105,400	188,650
Meetings, Trainings & Conferences	56,000	24,400	80,400	53,000	22,000	75,000	155,400
Interest Expense and Bank Fees				1,500		1,500	1,500
Depreciation & Amortization	125,484	13,096	138,580	22,192	18,238	40,431	179,010
Dues, Licenses and Fees	81,343	6,200	87,543	38,610	18,000	56,610	144,153
Miscellaneous Expenses	864	298	1,162	505	415	920	2,082
IT Services	2,031,843	294,002	2,325,845	498,206	409,449	907,655	3,233,500
Total Program Support Costs	2,696,968	640,637	3,337,606	872,724	680,146	1,552,871	4,890,476
TOTAL EXPENSES	177,176,253	12,731,627	189,907,880	4,796,323	4,157,545	8,953,868	198,861,748

OPUC Measure vs. 8%

6.58%

Energy Trust of Oregon
Summary by Service Territory and Program
2018 Approved Budget

	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	ETO Total
Energy Efficiency											
Commercial											
Existing Buildings	\$29,233,436	\$19,782,324	\$49,015,760	\$1,672,755	\$2,904,101	\$1,070,591	\$387,534	\$6,034,981	\$55,050,741	\$909,612	\$55,960,353
Multifamily Bldgs	6,374,096	2,477,830	8,851,927		967,352	35,273	93,703	1,096,327	9,948,254		9,948,254
New Buildings	13,815,119	6,056,565	19,871,683	291,503	1,591,315	246,258	111,769	2,240,845	22,112,528		22,112,528
NEEA	1,322,167	986,477	2,308,643		336,900	37,433		374,334	2,682,977	38,073	2,721,050
Total Commercial	50,744,817	29,303,196	80,048,013	1,964,258	5,799,667	1,389,555	593,006	9,746,486	89,794,500	947,685	90,742,185
Industrial											
Production Efficiency	21,896,231	13,262,830	35,159,061	1,953,198	671,897	196,718	35,886	2,857,699	38,016,760		38,016,760
NEEA	220,176	164,274	384,450						384,450		384,450
Total Industrial	22,116,407	13,427,104	35,543,511	1,953,198	671,897	196,718	35,886	2,857,699	38,401,210	-	38,401,210
Residential											
Residential Combined	21,286,659	13,233,742	34,520,401	-	13,485,130	1,029,943	506,717	15,021,790	49,542,191	1,317,445	50,859,636
NEEA	2,526,646	1,885,145	4,411,791		910,877	101,209		1,012,086	5,423,877	102,938	5,526,815
Total Residential	23,813,305	15,118,887	38,932,192	-	14,396,007	1,131,152	506,717	16,033,876	54,966,068	1,420,383	56,386,451
Energy Efficiency Program Costs	96,674,530	57,849,187	154,523,717	3,917,456	20,867,571	2,717,425	1,135,609	28,638,061	183,161,778	2,368,068	185,529,846
Renewables											
Solar Electric (Photovoltaic)	5,369,965	4,244,882	9,614,847						9,614,847		9,614,847
Other Renewable	1,436,961	2,280,096	3,717,057						3,717,057		3,717,057
Renewables Program Costs	6,806,926	6,524,978	13,331,904	-	-	-	-	-	13,331,904	-	13,331,904
Cost Grand Total	103,481,456	64,374,165	167,855,621	3,917,456	20,867,571	2,717,425	1,135,609	28,638,061	196,493,682	2,368,068	198,861,750

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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COMBINED SERVICE TERRITORIES: Energy Efficiency & Renewables

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Washington (with NEEA)	Solar Renewables	Custom Renewables	ETO Total
Program Management	1,400,474	733,274	676,587	-	1,787,111	-	3,019,684	-	145,982	719,939	593,411	9,076,462
Program Delivery:	14,429,834	3,859,727	5,432,950	2,518,914	10,294,262	344,569	8,805,990	5,134,523	537,131	376,500	-	51,734,400
Incentives:	33,200,891	3,791,148	12,573,969	-	21,815,592	-	29,376,979	-	1,107,956	6,815,500	2,348,720	111,030,755
Program Eval & Planning Svcs.:	1,542,348	308,230	1,002,296	43,260	1,206,322	22,570	1,747,042	45,141	190,518	182,091	41,380	6,331,198
Program Marketing/Outreach:	1,122,207	395,181	564,859	-	302,999	-	2,153,397	-	109,189	241,500	10,000	4,899,332
Program Legal	-	-	-	-	-	-	-	-	-	3,000	3,000	6,000
Program Quality Assurance:	-	-	-	-	-	-	85,001	-	-	-	-	85,001
Outsourced Services:	289,249	130,001	526,000	-	311,000	-	634,001	-	36,550	338,999	345,000	2,610,800
Trade Allies & Cust. Svc. Mgmt.:	107,020	47,053	36,666	-	38,329	-	453,841	-	41,472	61,844	106	786,331
IT Services:	358,919	199,543	268,215	-	303,201	-	859,201	-	42,763	165,595	128,407	2,325,844
Other Program Expenses	121,108	36,173	35,354	-	246,216	-	176,388	-	49,884	276,965	79,671	1,021,759
TOTAL PROGRAM EXPENSES	52,572,050	9,500,330	21,116,896	2,562,174	36,305,032	367,139	47,311,524	5,179,664	2,261,445	9,181,933	3,549,695	189,907,882
ADMINISTRATIVE COSTS												
Management & General	1,327,763	239,940	533,330	64,711	916,923	9,272	1,194,901	130,818	57,115	231,900	89,651	4,796,324
Communications & Customer Svc	1,150,930	207,984	462,300	56,092	794,805	8,037	1,035,765	113,395	49,508	201,015	77,711	4,157,542
Total Administrative Costs	2,478,693	447,924	995,630	120,803	1,711,728	17,309	2,230,666	244,213	106,623	432,915	167,362	8,953,866
Total Program & Admin Expenses	55,050,743	9,948,254	22,112,526	2,682,977	38,016,760	384,448	49,542,190	5,423,877	2,368,068	9,614,848	3,717,057	198,861,748
Energy Savings (kwh)	131,085,255	15,714,693	54,849,649	15,865,109	168,450,143	711,345	62,847,057	46,174,508				495,697,758
Energy Savings (therms)	1,481,692	165,791	936,040	-	1,064,753	-	2,903,694	-	359,880			6,911,851
Energy Generation (kwh)										16,569,300	-	16,569,300

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ENERGY EFFICIENCY

PGE

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	743,795	469,395	424,929		953,172		1,292,284		3,883,575
Program Delivery:	7,823,216	2,470,750	3,434,024	1,237,860	5,651,013	197,336	3,769,674	2,387,030	26,970,903
Incentives:	17,451,855	2,426,850	7,805,506		12,927,886		12,575,717		53,187,814
Program Eval & Planning Svcs.:	823,662	202,905	631,543	24,775	686,202	12,926	824,242	25,852	3,232,107
Program Marketing/Outreach:	609,676	252,969	356,119		174,493		921,610		2,314,867
Program Legal									-
Program Quality Assurance:							36,110		36,110
Outsourced Services:	153,481	83,218	328,486		179,100		271,203		1,015,488
Trade Allies & Cust. Svc. Mgmt.:	56,787	30,121	22,898		22,073		194,137		326,016
IT Services:	190,449	127,735	167,500		174,609		367,535		1,027,828
Other Program Expenses	64,262	23,156	22,079		141,792		75,453		326,742
TOTAL PROGRAM EXPENSES	27,917,183		13,193,084	1,262,635	20,910,340	210,262	20,327,965	2,412,882	92,321,450
ADMINISTRATIVE COSTS									
Management & General	705,078	153,736	333,205	31,889	528,113	5,310	513,410	60,940	2,331,681
Communications & Customer Svc	611,175	133,261	288,829	27,642	457,778	4,603	445,034	52,824	2,021,146
Total Administrative Costs	1,316,253		622,034	59,531	985,891	9,913	958,444	113,764	4,352,827
Total Program & Admin Expenses	29,233,436		13,815,118	1,322,166	21,896,231	220,175	21,286,409	2,526,646	96,674,283
Energy Savings (kwh)	79,103,180	11,793,197	35,485,139	9,085,991	119,191,651	407,389	37,379,452	26,444,267	318,890,267

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

Pacific Power

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	503,074	182,470	186,290		616,593		802,358		2,290,785
Program Delivery:	5,286,766	960,465	1,505,480	923,575	3,734,865	147,233	2,338,477	1,780,977	16,677,838
Incentives:	11,793,599	943,400	3,421,943		7,464,455		7,801,212		31,424,609
Program Eval & Planning Svcs.:	581,374	78,876	276,869	18,485	430,556	9,644	536,424	19,289	1,951,517
Program Marketing/Outreach:	412,149	98,338	156,123		105,693		572,109		1,344,412
Program Legal									-
Program Quality Assurance:							22,712		22,712
Outsourced Services:	103,861	32,350	144,009		108,483		168,604		557,307
Trade Allies & Cust. Svc. Mgmt.:	38,428	11,709	10,038		13,370		120,693		194,238
IT Services:	128,877	49,655	73,432		105,763		228,494		586,221
Other Program Expenses	43,486	9,001	9,679		85,885		46,908		194,959
TOTAL PROGRAM EXPENSES	18,891,614	2,366,264	5,783,863	942,060	12,665,663	156,877	12,637,991	1,800,266	55,244,598
ADMINISTRATIVE COSTS									
Management & General	477,128	59,762	146,078	23,793	319,885	3,962	319,183	45,468	1,395,259
Communications & Customer Svc	413,583	51,803	126,623	20,624	277,282	3,434	276,674	39,412	1,209,435
Total Administrative Costs	890,711	111,565	272,701	44,417	597,167	7,396	595,857	84,880	2,604,694
Total Program & Admin Expenses	19,782,325	2,477,829	6,056,564	986,477	13,262,830	164,273	13,233,848	1,885,146	57,849,291
Energy Savings (kwh)	51,982,075	3,921,496	19,364,509	6,779,117	49,258,492	303,956	25,467,605	19,730,240	176,807,491

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ENERGY EFFICIENCY

NW Natural Industrial

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	41,904		5,158		147,837				194,899
Program Delivery:	146,252		6,864		681,513				834,629
Incentives:	1,337,397		240,523		917,401				2,495,321
Program Eval & Planning Svcs.:	36,212		12,213		56,659				105,084
Program Marketing/Outreach:	8,882		2,157		15,593				26,632
Program Legal									
Program Quality Assurance:									-
Outsourced Services:	8,844		6,960		16,005				31,809
Trade Allies & Cust. Svc. Mgmt.:	3,272		485		1,972				5,729
IT Services:	10,974		3,549		15,603				30,126
Other Program Expenses	3,703		468		12,671				16,842
TOTAL PROGRAM EXPENSES	1,597,440	-	278,377	-	1,865,254	-	-	-	3,741,071
ADMINISTRATIVE COSTS									
Management & General	40,345		7,031		47,109				94,485
Communications & Customer Svc	34,972		6,094		40,835				81,901
Total Administrative Costs	75,317	-	13,125	-	87,944	-	-	-	176,386
Total Program & Admin Expenses	1,672,757	-	291,502	-	1,953,198	-	-	-	3,917,458
Energy Savings (therms)	497,146		267,298		751,105	-	-	-	1,515,549

Energy Trust of Oregon, Inc
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ENERGY EFFICIENCY

NW Natural Gas

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	74,340	71,832	49,152		52,927		830,385		1,078,636
Program Delivery:	780,640	378,100	397,214	321,731	152,123		2,421,717	869,864	5,321,389
Incentives:	1,741,434	371,382	902,863		389,162		8,078,903		11,483,744
Program Eval & Planning Svcs.:	69,535	23,337	66,671		26,158		347,534		533,235
Program Marketing/Outreach:	60,876	38,712	41,192		5,364		592,172		738,316
Program Legal									
Program Quality Assurance:							23,321		23,321
Outsourced Services:	15,354	12,735	37,996		5,506		174,328		245,919
Trade Allies & Cust. Svc. Mgmt.:	5,681	4,609	2,649		679		124,791		138,409
IT Services:	19,053	19,547	19,375		5,368		236,251		299,594
Other Program Expenses	6,429	3,544	2,554		4,359		48,501		65,387
TOTAL PROGRAM EXPENSES	2,773,342	923,798	1,519,666	321,731	641,646	-	12,877,903	869,864	19,927,950
ADMINISTRATIVE COSTS									
Management & General	70,044	23,331	38,381	8,126	16,205		325,246	21,969	503,302
Communications & Customer Svc	60,715	20,224	33,269	7,043	14,047		281,930	19,043	436,271
Total Administrative Costs	130,759	43,555	71,650	15,169	30,252	-	607,176	41,012	939,573
Total Program & Admin Expenses	2,904,101	967,353	1,591,316	336,900	671,898	-	13,485,079	910,876	20,867,525
Energy Savings (therms)	720,841	142,323	541,482	-	255,710	-	2,479,440	-	4,139,795

**Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

Cascade Natural Gas

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	27,431	2,619	7,606		13,666		63,444		114,766
Program Delivery:	288,521	13,787	61,469	35,748	63,996		185,070	96,652	745,243
Incentives:	643,625	13,542	139,719		98,263		617,397		1,512,546
Program Eval & Planning Svcs.:	23,176	851	10,317		5,706		26,034		66,084
Program Marketing/Outreach:	22,485	1,412	6,375		1,570		45,246		77,088
Program Legal									
Program Quality Assurance:							1,999		1,999
Outsourced Services:	5,660	464	5,880		1,612		13,315		26,931
Trade Allies & Cust. Svc. Mgmt.:	2,094	168	410		199		9,531		12,402
IT Services:	7,024	713	2,998		1,571		18,044		30,350
Other Program Expenses	2,370	129	395		1,276		3,704		7,874
TOTAL PROGRAM EXPENSES	1,022,386	33,685	235,169	35,748	187,859	-	983,784	96,652	2,595,283
ADMINISTRATIVE COSTS									
Management & General	25,821	851	5,939	903	4,745		24,841	2,441	65,541
Communications & Customer Svc	22,383	737	5,148	783	4,113		21,533	2,116	56,813
Total Administrative Costs	48,204	1,588	11,087	1,686	8,858	-	46,374	4,557	122,354
Total Program & Admin Expenses	1,070,590	35,273	246,256	37,434	196,717	-	1,030,158	101,209	2,717,637
Energy Savings (therms)	211,339	6,053	79,795	-	48,176	-	201,744	-	547,106

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ENERGY EFFICIENCY

Avista

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	9,930	6,958	3,452		2,916		31,213		54,469
Program Delivery:	104,439	36,625	27,899		10,752		91,052		270,767
Incentives:	232,981	35,974	63,415		18,425		303,750		654,545
Program Eval & Planning Svcs.:	8,389	2,261	4,683		1,041		12,808		29,182
Program Marketing/Outreach:	8,139	3,750	2,893		286		22,260		37,328
Program Legal									
Program Quality Assurance:							859		859
Outsourced Services:	2,049	1,234	2,669		294		6,551		12,797
Trade Allies & Cust. Svc. Mgmt.:	758	446	186		36		4,689		6,115
IT Services:	2,542	1,893	1,361		287		8,877		14,960
Other Program Expenses	858	343	179		233		1,822		3,435
TOTAL PROGRAM EXPENSES	370,085	89,484	106,737	-	34,270	-	483,881	-	1,084,457
ADMINISTRATIVE COSTS									
Management & General	9,347	2,260	2,696		866		12,221		27,390
Communications & Customer Svc	8,102	1,959	2,337		750		10,594		23,742
Total Administrative Costs	17,449	4,219	5,033	-	1,616	-	22,815	-	51,132
Total Program & Admin Expenses	387,534	93,703	111,770	-	35,886	-	506,696	-	1,135,591
Energy Savings (therms)	52,367	17,416	47,465	-	9,762	-	222,510	-	349,520

**Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

NW Natural Washington

EXPENSES	Existing Buildings	NEEA Commercial	Residential	NEEA Residential	Efficiency Total
Program Management	47,181		98,801		145,982
Program Delivery:	173,286	36,359	229,183	98,303	537,131
Incentives:	455,400		652,556		1,107,956
Program Eval & Planning Svcs.:	60,784		129,734		190,518
Program Marketing/Outreach:	74,000		35,189		109,189
Program Legal					
Program Quality Assurance					
Outsourced Services:	1,000		35,550		36,550
Trade Allies & Cust. Svc. Mgmt.:	19,893		21,579		41,472
IT Services:	17,882		24,881		42,763
Other Program Expenses	19,230		30,654		49,884
TOTAL PROGRAM EXPENSES	868,656	36,359	1,258,127	98,303	2,261,445
ADMINISTRATIVE COSTS					
Management & General	21,939	918	31,775	2,483	57,115
Communications & Customer Svc	19,017	796	27,543	2,152	49,508
Total Administrative Costs	40,956	1,714	59,318	4,635	106,623
Total Program & Admin Expenses	909,612	38,073	1,317,445	102,938	2,368,066
Energy Savings (therms)	160,000	-	199,880		359,880

**Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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RENEWABLE PROGRAMS

PGE Renewables

EXPENSES	Standard Solar	Custom Projects	Renewable Total
Program Management	402,106	237,910	640,016
Program Delivery:	215,240		215,240
Incentives:	3,806,000	857,680	4,663,680
Program Eval & Planning Svcs.:	97,231	15,997	113,228
Program Marketing/Outreach:	134,880	3,800	138,680
Program Legal	1,676	1,160	2,836
Program Quality Assurance:	-	-	-
Outsourced Services:	189,334	172,500	361,834
Trade Allies & Cust. Svc. Mgmt.:	34,540	41	34,581
IT Services:	92,486	49,640	142,126
Other Program Expenses	154,687	33,533	188,220
TOTAL PROGRAM EXPENSES	5,128,180	1,372,261	6,500,441
ADMINISTRATIVE COSTS			
Management & General	129,518	34,658	164,176
Communications & Customer Svc	112,268	30,042	142,310
Total Administrative Costs	241,786	64,700	306,486
Total Program & Admin Expenses	5,369,966	1,436,961	6,806,928
Energy Generation (kwh)	9,427,000	-	9,427,000

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RENEWABLE PROGRAMS

Pacific Power Renewables

EXPENSES	Standard Solar	Custom Projects	Renewable Total
Program Management	317,833	355,501	673,334
Program Delivery:	161,260		161,260
Incentives:	3,009,500	1,491,040	4,500,540
Program Eval & Planning Svcs.:	84,860	25,383	110,243
Program Marketing/Outreach:	106,620	6,200	112,820
Program Legal	1,324	1,840	3,164
Program Quality Assurance:	-	-	-
Outsourced Services:	149,665	172,500	322,165
Trade Allies & Cust. Svc. Mgmt.:	27,304	65	27,369
IT Services:	73,109	78,767	151,876
Other Program Expenses	122,278	46,138	168,416
TOTAL PROGRAM EXPENSES	4,053,753	2,177,434	6,231,187
ADMINISTRATIVE COSTS			
Management & General	102,382	54,993	157,375
Communications & Customer Svc	88,747	47,669	136,416
Total Administrative Costs	191,129	102,662	293,791
Total Program & Admin Expenses	4,244,882	2,280,096	6,524,979
Energy Generation (kwh)	7,142,300	-	7,142,300

Energy Trust of Oregon
 Capital Expenditure Budget

Description	Useful lives / depreciation policy	2018	2019
Information Systems			
Commercial and Industrial Lighting Tool	3 years	200,000	280,000
Industrial Project Scoping Tool	3 years	350,000	
Procurement Automation Software	3 years	175,000	
Helpdesk Software	3 years	10,000	
AV System Upgrades	3 years	58,000	
Servers and Storage	3 years	66,000	30,000
		859,000	310,000
Office Operations			
Kitchen Remodel	7 years	35,000	
Bathroom Stalls Remodel	7 years	13,100	
Chair rails for Kilowatt/Megawatt	7 years	6,252	
Replace Three Copiers	5 years	60,000	
Conference Room Chairs	5 years	10,000	
		124,352	
		983,352	310,000

Plans Commercial Sector—Existing Buildings

Existing Buildings Program Description

Energy Trust's Existing Buildings program provides electric and gas energy-efficiency solutions for existing commercial buildings. The program has three components: program management and delivery through Program Management Contractor ICF International, commercial Strategic Energy Management and Pay for Performance offerings through ICF International, and management and delivery of the Existing Multifamily program through PMC Lockheed Martin. The Multifamily Action Plan is a separate document. The Existing Buildings program consists of four tracks.

1. The **custom track** saves electricity and natural gas through energy-efficient capital projects and operations and maintenance upgrades. PMC account managers, trade allies and engineering firms identify and promote customer opportunities.
2. The **standard track** provides incentives for standard measures with predetermined savings for buildings of all sizes and across all commercial market sectors. The program promotes measures through customer outreach and cultivation of trade ally contractors.
3. The **lighting track** uses a combination of customer outreach and outreach through a network of trade allies. In addition to the traditional lighting track, the program offers incentives provided midstream to distributors and retailers with savings passed onto small commercial customers and state agencies.
4. The **energy performance management track** uses training, tools, technical assistance and incentives to help customers save energy by improving energy management practices.
 - **Commercial Strategic Energy Management** has a year-long enrollment cycle using a cohort approach. Through commercial Strategic Energy Management, Energy Trust offers technical assistance to deepen commitment to energy management. The offering helps customers drive persistent energy-efficiency improvements in large buildings or campuses. Customers are paid incentives for incremental savings achieved at the end of each enrollment year, as well as for milestones achieved throughout the year.
 - Customers participating in **Pay for Performance** enter into agreements with contractors to implement a suite of measures at a single site. The offering includes annual financial incentives for demonstrated energy savings each year for three years. Pay for Performance projects can include operations and maintenance, behavioral changes and capital upgrades.
 - **Retrocommissioning** projects feature incentives for specific operations and maintenance measures such as controls or HVAC adjustments, paid at project installation completion.
 - **Building Operator Certification and Energy Management Certification** offer incentives for coursework completion offered by the Northwest Water and Energy Education Institute.

2018 Strategic Focus

- Promote and add gas measures and/or measures with both gas and electric savings to increase gas opportunities and achieve goals.
- Adapt lighting program offerings to respond to changes in the market, standards and codes.
- Increase regional outreach and continue an emphasis on reaching a diverse set of customers, including size, type and location.

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Plans Commercial Sector—Existing Buildings

- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.
- Expand midstream offerings to streamline program delivery, improve cost-effectiveness of measures and target customers who purchase and install their own lighting rather than hiring a trade ally.
- Design and refine delivery strategies to expand participation, support a growing pipeline of long-term customers and influence a culture of energy management across businesses and institutions in Oregon.
- Find ways to reduce costs and drive better cost-effectiveness while maintaining a high level of customer service and support.

2018 Activities—Ongoing

Expand participation

- The program has consistently grown over the years and has exceeded 5,000 enrollments per year through a variety of delivery channels, targeted outreach and marketing efforts, and tailored program offerings to meet a wide range of customers. Staff expects enrollments to continue to grow and will focus efforts on achieving Energy Trust's savings and equity objectives.
- Expand outreach level of effort in northeast Oregon to better serve Cascade Natural Gas and Avista customers.
- Work with organizations that focus on diverse customer groups.
- Continue direct installation of efficient lighting to serve small business customers throughout the state and support equitable access to program opportunities.
- Deliver SEM Continuation cohorts in Southern Oregon, Central Oregon, Willamette Valley and Portland and launch two year-one cohorts.
- Support targeted demand-side management efforts with utilities.

Explore new savings opportunities

- Collaborate with NEEA to identify new measures, strategies and delivery channels.

Streamline program operations

- Reduce operational costs by improving processes and eliminating activities that are not effectively supporting the program for long-term savings.
- Work with the PMC to find opportunities to streamline SEM customer communication and support.
- Build a portfolio of SEM learning modules for workshop delivery that meets the needs of customers with evolving energy management practices.

Increase focus on quality technical assistance and design support through training for trade allies and technical consultants.

Increase market penetration

- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.

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Plans Commercial Sector—Existing Buildings

- Employment of regionally located trade ally coordinators will continue to build awareness among regional customers.

2018 Activities—New

Expand participation

- Re-engage underperforming trade allies and technical consultants with training and support to help them be more effective in closing projects.
- Launch the first combined commercial and industrial SEM cohort, which will take place in Northeast Oregon.
- Explore potential for a North Coast SEM cohort for commercial and industrial customers.

Grow program offerings

- Update program procedures to vet third-party energy studies and provide incentives for these projects.
- Investigate a midstream offering for HVAC for a 2019 launch.
- Enroll six buildings in the 2017 Pay for Performance pilot.

Explore new savings opportunities

- Identify pilot opportunities for new measures, such as working on a collaborative pilot with NEEA and Bonneville Power Administration for pumps and circulators.
- Explore ideas and conduct field tests of prescriptive, behavioral and technical strategies that will drive cost-effective energy savings in 2019.

Streamline program operations

- Refine and Implement improvements to multisite applications.
- Explore opportunities for additional calculators and tools to reduce processing time for custom energy audits and studies.

Deepen relationships with customers

- Utilize key account management strategy to support SEM opportunities.
- Create a standardized tracking system for long-term planning for larger customers.
- Continue emphasis on diversity based on customer size and location. Focus on inclusion of all customer types and business ownership.

Refine delivery strategies

- Engage stakeholders to support community energy efforts involving commercial buildings, including Multnomah County's PropertyFit Commercial Property Assessed Clean Energy and City of Portland Energy Performance Reporting.
- Leverage improved internal data systems for market analysis to engage new participants and explore new offers.
- Release request for proposals for revised commercial and industrial lighting tool.
- Promote integration of lighting controls and other best practices in comprehensive lighting projects through promotion of advanced lighting strategies.

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Commercial Sector—Existing Buildings

- Refine SEM incentives to better support activity milestones.

2018 Key Assumptions, Risks and/or Challenges

- Market trends and analysis indicate that the lighting replacement market will continue to be very strong in 2018, which will continue to place demand on incentive budgets.
- Revisions to incentive levels made in 2017 and approved for 2018 should help bring down per-unit costs that will allow the program to meet goals within budget.
- Historically low savings realization adjustment factors of 71 percent for electric and 58 percent for gas that resulted from the last evaluation will result in a significantly lower cost-to-savings ratio.
- Gas savings continue to be a challenge based on low gas costs and current avoided costs. As measure approval documents expire, it will be harder for gas measures to pass cost-effectiveness tests and offerings could be eliminated.
- Cost-effectiveness of the overall program is a potential concern given lower avoided costs and relatively higher delivery cost due to a growing number of smaller sites enrolled.
- If analysis indicates the SB 838 spending cap is exceeded for large energy users, the program will need to act to reduce spending on these customers.

2019 Expected Changes

- Revisions to incentive levels made in 2017 and approved for 2018 should further help bring down per-unit costs in 2019.
- Lower evaluation factors will result in lower achieved savings at a higher cost per unit. This is especially challenging for gas measures in Existing Buildings.
- A decline in eligible lighting measures is anticipated due to market adoption and significantly lower LED pricing.

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Commercial Sector—Existing Buildings

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings aMW	levelized cost (cents / KWh)	Savings therms	levelized cost (cents / therm)
2017 Reforecast	\$41.0	\$4.0	\$45.0	14.7	3.0	1,125,349	34.7
2018 Budget	\$49.0	\$6.0	\$55.1	15.0	3.4	1,481,693	37.1
2019 Projection	\$48.7	\$6.2	\$54.9	15.1	3.4	1,496,301	37.8

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	30,265,172	26,619,419	33,200,890	33,154,722
Delivery Costs				
Program Management	408,076	408,076	416,237	424,562
Program Delivery	13,168,148	12,909,460	14,429,833	14,676,546
Marketing-PMC	781,110	781,110	831,732	849,067
Performance Comp	150,000	9,750	100,000	100,000
Total Delivery Costs	14,507,334	14,108,396	15,777,802	16,050,175
ETO expenses				
Staffing	734,572	673,521	884,237	864,741
Marketing	325,500	289,000	282,475	286,500
Other Services	1,163,484	620,962	1,260,286	1,077,591
General	42,000	39,159	55,500	77,800
Allocations	1,052,722	954,946	1,110,858	1,078,674
Sub-Total before Admin Costs	48,090,784	43,305,403	52,572,048	52,590,203
Administrative Costs	2,026,236	1,727,827	2,478,692	2,312,251
TOTAL EXPENSE	50,117,020	45,033,230	55,050,740	54,902,454

Plans Commercial Sector—Existing Multifamily

Existing Multifamily Program Description

Delivered through Program Management Contractor Lockheed Martin, the Existing Multifamily program serves existing multifamily structures with two or more dwelling units across diverse market segments, including market rate housing, affordable housing, assisted living facilities, campus housing facilities, homeowners associations and individual unit owners. Offerings include free installation of LEDs, showerheads and faucet aerators, and distribution of energy-saving advanced power strips in tenant units. Other offerings are incentives for common-area lighting upgrades; incentives for standard measures including HVAC equipment, water heaters, weatherization, appliances and foodservice equipment; midstream incentives provided to distributors for qualifying equipment and lighting measures; incentives for custom projects; and technical services including technical analysis studies and free walkthrough surveys.

2018 Strategic Focus

- Expand participation in market segments and regions where participation has historically been lower, using market and program participation data analysis and customized marketing and outreach strategies
- Foster long-term relationships with customers to drive repeat participation and deeper energy savings.
- Develop a strategic plan for utilizing data to drive program design improvements and targeted outreach.
- Enhance relationships with market actors, including trade allies, distributors, manufacturers and partners such as Oregon Housing and Community Services, the City of Portland and the Portland Water Bureau.
- Seek new savings opportunities by monitoring new technologies and conducting field tests and pilots.
- Maintain strong cross-program collaboration to identify ways to align on offerings and messaging, streamline program participation and reduce customer confusion.
- Enhance engagement strategies and services for affordable housing customers.
- Explore tenant engagement strategies.
- Develop customized strategies to engage with customers of various sizes, types and locations throughout the state.
- Develop potential strategies to redesign the direct installation offering to maintain cost-effective offerings for instant-savings measures, including LEDs, showerheads, faucet aerators and advanced power strips.

2018 Activities—Ongoing

Deepen relationships with customers and expand participation

- Maintain account management approach with PMC representatives who conduct direct outreach to property owners and managers, including dedicated representatives located in Central Oregon and Southern Oregon.

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Plans Commercial Sector—Existing Multifamily

- Expand the delivery of energy-efficiency workshops for multifamily customers, presenting relevant information based on their market segment and region.
- Analyze market and program participation data to identify key areas of opportunity and refine messaging based on market segment and region.
- Develop outreach tactics for customer groups with lower participation rates, such as smaller multifamily properties and customers outside of the Portland Metro area.
- Increase trade ally driven program activity through enhanced trade ally support, one-on-one engagement and educational resources, and encouraging use of business development funds.
- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.

Offer a wide range of incentives and services

- Provide free direct installation of LEDs, showerheads and faucet aerators, and distribution of energy-saving advanced power strips in individual dwelling units.
- Promote common-area lighting solutions, with outreach emphasis on smaller multifamily properties.
- Promote standard measures, which saw strong uptake in 2017.
- Continue and expand midstream incentives paid to distributors for appliances, water heating and HVAC equipment, with savings passed onto customers.
- Support multifamily customers enrolled in commercial Strategic Energy Management.

Grow program offerings and seek new savings opportunities

- Partner with the Portland Water Bureau on a water sub-metering pilot to study the savings associated with shifting participants from master-metered to individually metered water billing.
- Optimize the benchmarking offering to provide customers with actionable reports that help them prioritize property improvements and track impacts.
- Drive participation in the efficient wall heater pilot to determine if energy-efficient wall heaters provide savings for multifamily customers who are not able to make other upgrades.
- Continue limited rollout of an online tool enabling customers to solicit multiple bids for custom projects through a competitive online request for proposals process. Determine if this service increases project close rates and decreases timeframes for custom projects.
- Leverage Multnomah County and Prosper Portland's (formerly the Portland Development Commission) PropertyFit Commercial Property Assessed Clean Energy initiative as a financing option to enable deeper savings for interested customers. PropertyFit leverages Energy Trust incentives and loans to provide 100 percent of funding to commercial property owners in Multnomah County who complete comprehensive energy-efficiency and renewable energy projects, with long-term loans from Prosper Portland repaid through energy savings or electricity production. This tool may lead to comprehensive projects for customers previously limited by access to capital.
- Incorporate Tier 2 advanced power strips with activity sensors into the direct installation offering, based on outcome of 2017 analysis.

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Plans Commercial Sector—Existing Multifamily

2018 Activities—New

Refine outreach strategies to expand participation

- Use data analytics to identify areas with high savings opportunities and lower participation rates.
- Refine program design and outreach strategies by incorporating lessons learned from market analysis and data-driven program outreach.
- Simplify requirements and increase distributor motivation to participate, and explore ways to leverage midstream incentive strategies across programs.
- Conduct secondary research to identify opportunities for increasing participation in specific market sectors.

Explore new program services and savings opportunities

- Assess opportunities for enhancing services to help affordable housing participants install comprehensive upgrades.
- Identify opportunities to engage renters to help reduce in-unit energy consumption.
- Assess opportunities for testing behavioral energy savings initiatives in multifamily properties.
- Investigate alternative delivery options for direct installation of energy-efficient products in tenant units.
- Launch new incentives for rooftop unit controls and heat pump advanced controls.
- Support targeted demand-side management efforts with utilities.

Streamline program design to improve customer experience

- Simplify program forms and processes to meet customer needs, especially for direct installation enrollment and portfolio managers installing measures at multiple sites.
- Pursue additional online incentive applications and enrollment forms.

2018 Key Assumptions, Risks and/or Challenges

- Existing Multifamily has several key measures that may be discontinued due to cost-effectiveness; these current unknowns will have significant impacts on 2018-19 budgets. Exception requests are currently under review by the OPUC for ductless heat pumps and single-pane window replacements in electrically heated stacked structures. Additionally, the program expects to discontinue incentives for replacing double-pane windows in electrically heated stacked structures, as well as electric tank water heaters, in 2018.
- The expiration of the Residential Energy Tax Credit will impact window and ductless heat pump measures.
- The direct installation track faces eroding savings per measure and per site and increased market saturation.

2019 Expected Changes

- With the increasing challenges to the direct installation track, the model for instant-savings devices for multifamily properties will need to change in 2019 to maintain viability.
- In a dynamic lighting market, program offerings may also need to change in 2019.

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Commercial Sector—Existing Multifamily

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings aMW	levelized cost (cents / kWh)	Savings therms	levelized cost (cents / therm)
2017 Reforecast	\$8.4	\$1.2	\$9.6	1.9	4.6	171,585	70.2
2018 Budget	\$8.9	\$1.1	\$9.9	1.8	5.1	165,791	50.4
2019 Projection	\$8.2	\$1.2	\$9.5	1.6	5.4	161,758	57.6

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	6,138,506	3,909,372	3,791,148	3,344,092
Delivery Costs				
Program Management	306,012	357,811	350,094	355,243
Program Delivery	3,800,766	3,803,377	3,859,726	3,879,766
Marketing-PMC	389,290	334,879	355,180	358,600
Performance Comp	90,000	40,000	90,000	90,000
Total Delivery Costs	4,586,068	4,536,067	4,655,000	4,683,609
ETO expenses				
Staffing	268,166	235,667	293,180	293,172
Marketing	45,900	40,000	38,000	37,000
Other Services	119,250	44,000	207,000	213,000
General	9,000	4,000	11,500	15,900
Allocations	490,786	445,750	504,499	486,839
Sub-Total before Admin Costs	11,657,676	9,214,856	9,500,327	9,073,612
Administrative Costs	491,179	367,660	447,926	398,943
TOTAL EXPENSE	12,148,855	9,582,516	9,948,253	9,472,555

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Plans Commercial Sector—New Buildings

New Buildings Program Description

New Buildings influences commercial design and construction practices to deliver buildings with low energy use. Program staff work closely with building owners and design teams to make energy considerations part of building design criteria and an asset for the building owner in both major renovations and new construction projects. Outreach managers influence a broad range of market actors, leveraging energy-efficiency and renewable energy strategies and incentives to achieve energy savings targets. New Buildings delivers highly technical solutions, simplified where possible, to create cost-effective, above-code options that leverage architectural design solutions and systems. New Buildings provides incentives to support high-performance design, including early design assistance, energy modeling incentives and a solar ready offering; incentives for whole building approaches including modeled savings, standard incentive packages for small commercial buildings; and prescriptive and calculated incentives such as standard offerings and lighting calculators.

2018 Strategic Focus

- Build market momentum for net zero and Architecture 2030 goals through Path to Net Zero and whole-building offerings.
- Drive savings and prepare customers and building industry professionals for advancing codes and standards through customizable incentive packages.
- Accelerate adoption of emerging technologies and approaches through partnerships, pilots and other promotions.
- Influence decisions from early design to occupancy by deploying additional tools and repositioning offerings to drive further market adoption and improve building energy performance.
- Launch a competitive selection process for program design, delivery and management contracts.
- Support evaluations, including of program impact, program process and large or complex project evaluations.

2018 Activities—Ongoing

Targeted offerings

- Encourage innovation the Path to Net Zero offering designed to push savings to at least 40 percent better than code and incorporate solar to reach net-zero energy goals.
- Support the connection between energy efficiency and resilience through education, technical assistance and implementation of renewable and efficiency measures. Implement solar ready, an offering that supports early feasibility of installing solar.
- Provide custom solutions using whole-building energy modeling, technical assistance, early design assistance, and standard and custom measures to capture savings in larger projects. Target and support small commercial construction through streamlined approaches.

Comprehensive market delivery

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Plans Commercial Sector—New Buildings

- Continue regional outreach and delivery model with personnel based in Eastern Oregon, Southern Oregon and the Portland Metro area. Emphasize diversity and inclusion of all customer types in program offers, outreach, training and education.
- Engage the small commercial market through standard incentive packages for small commercial buildings, targeted by building types.
- Engage the data center market, targeting small- and mid-sized facilities.
- Engage with the public sector and market actors involved in projects supported by bond measures, and provide design assistance and support for these projects from inception.

Continue strategic market transformation activities

- Provide training and education opportunities for design professionals and building owners around the state on high-performance building design strategies and technologies, including solar.
- Promote and release results from the 2017 Net Zero Fellowship. Release and promote opportunities similar to the 2017 Fellowship and small project grants.
- Coordinate with NEEA to leverage regional activity, enhanced codes pathway and commercial lighting, and prepare for code updates estimated to improve electric baseline by 5-10 percent.
- Explore supporting a pilot program with NEEA for an advanced HVAC technology with heat recovery.

2018 Activities—New

Expand participation and deepen relationships with customers

- Increase delivery of Best and Very Best Market Solutions incentive packages that deliver more savings to customers.
- Expand the training and education offering—Allies for Efficiency—with best practices, case studies and local success stories. Expand market delivery through co-sponsorships and regional building tours.
- Add a net zero leadership series with the objective of supporting emerging building industry professionals and their ability to apply net-zero design strategies to the growing number of net-zero projects.
- Collaborate with cities to advance energy-efficiency opportunities at the master planning stage, supporting large-scale developments.
- Help design teams maintain energy strategies identified in early design through late-stage cost-cutting exercises.
- Help owners make a more compelling business case for solar and high-performance buildings through targeted customer stories, training and education.

Refine measures and offerings

- Revise Market Solutions for several targeted building types—including multifamily, grocery and schools—and create new Market Solutions offerings for public sector facilities and low-income multifamily buildings, including features that help overcome barriers to energy efficiency faced by nonprofit developers building affordable housing.
- Develop variable refrigerant flow offering for specific markets as identified in a 2017 pilot.
- Streamline modeling and technical review processes to address perceived barriers to participation.

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Plans Commercial Sector—New Buildings

Refine strategic program development and innovation

- Explore and test tools, technologies and strategies to improve design assumptions and building performance, creating a feedback loop from building operators to building designers.
- Develop offerings for measures that may be next in line for code through code scans and work of other groups, such as Pacific Northwest National Laboratory and NEEA.
- Support targeted demand-side management efforts with partner utilities.

2018 Key Assumptions, Risks and/or Challenges

- Construction will continue at a fast pace through 2018-2019, with strong activity in office, retail, mixed-use, multifamily and school buildings.
- Few large savings projects are expected to enter and complete the program in 2018, such as data centers and health care projects. Additional technical support may be needed for new leads.
- If analysis indicates the SB 838 spending cap is exceeded for large energy users, the program will need to act to reduce spending on these customers.

2019 Expected Changes

- The new version of the Oregon energy code is expected in 2018, which will necessitate measure and offering redevelopment and will likely impact savings starting in 2019.
- The pace of construction is expected to continue into 2019, particularly for education and other bond-funded projects.
- Refine program offerings using learnings from Path to Net Zero to drive deeper savings in all projects. Incorporate energy target setting by providing an energy use intensity target for all projects entering the program, starting with a phased rollout in 2018.
- The program will identify opportunities for deeper impact by providing support to new construction development areas that closely align with energy efficiency, such as renewable energy, resilience and master planning.
- Savings from data centers are likely to increase after low savings in 2017 and 2018.

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Plans Commercial Sector—New Buildings

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings	levelized cost	Savings	levelized cost
				aMW	(cents / KWh)	therms	(cents / therm)
2017 Reforecast	\$17.2	\$2.2	\$19.5	6.1	2.8	897,658	20.0
2018 Budget	\$19.9	\$2.2	\$22.1	6.3	3.3	936,040	20.4
2019 Projection	\$18.2	\$2.6	\$20.8	6.6	2.9	987,271	22.5

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	11,174,545	11,261,627	12,573,969	12,003,809
Delivery Costs				
Program Management	229,771	229,771	226,766	226,766
Program Delivery	5,433,137	5,433,137	5,432,950	5,432,950
Marketing-PMC	401,170	401,170	401,859	401,859
Performance Comp	60,000	60,000	60,000	60,000
Total Delivery Costs	6,124,078	6,124,078	6,121,575	6,121,575
ETO expenses				
Staffing	328,025	318,766	389,821	298,507
Marketing	132,000	127,000	157,000	119,000
Other Services	720,067	280,551	1,186,333	701,822
General	0	7,900	9,000	7,000
Allocations	660,233	593,111	679,200	650,551
Sub-Total before Admin Costs	19,138,948	18,713,033	21,116,898	19,902,264
Administrative Costs	806,392	746,625	995,630	875,050
TOTAL EXPENSE	19,945,340	19,459,658	22,112,528	20,777,314

Washington

Southwest Washington Commercial Program Description

Energy Trust's Washington Existing Buildings program provides gas energy-efficiency solutions for existing commercial buildings. Business customers of NW Natural in Washington can receive incentives for qualifying energy-efficient upgrades and retrofits. The program provides incentives for select measures in existing and new commercial buildings, including office buildings, restaurants and other foodservice buildings, dormitory and assisted living facilities, greenhouses and multifamily structures. The Washington Existing Buildings program consists of two tracks:

- The **custom track** saves natural gas through energy-efficient capital projects and operations and maintenance upgrades. Program Management Contractor account managers and engineering firms identify and promote customer opportunities. The custom track also includes opportunities in retrocommissioning, which features targeted incentives for operations and maintenance improvements such as controls or HVAC adjustments.
- The **standard track** provides incentives for standard measures with predetermined savings for buildings of all sizes and across all commercial market sectors. The program promotes measures through customer outreach and cultivation of trade ally contractors.

2018 Strategic Focus

- Identify and work with customers, architects and trade allies on new construction projects.
- Continue to work with school districts based on recent bond approvals.
- Strengthen the trade ally network to work with small- and medium-sized businesses.
- Introduce new gas measures including HVAC, restaurant equipment and measures for multifamily structures.
- Continue emphasis on diversity based on customer size, location, customer types and business ownership.

2018 Activities—Ongoing

Expand participation

- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.

Grow program offerings

- Promote non-funded studies to accommodate medium-usage customers through the custom track. Trade allies are encouraged to submit single-measure custom projects to the program for review without a proposal for funding or a request for study incentive. This cuts out several steps and time delays in the process (proposal for study, negotiation on study cost, issuing a work order for a study, etc.) This also helps medium-usage customers with smaller projects because the program cannot pay for studies where potential savings do not justify the study costs. Non-funded studies are for custom

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Commercial Sector—Southwest Washington

projects where only a limited number of variables determine the savings. Projects may include custom boilers or roof insulation over 50,000 square feet.

- Continue to review measures nearing expiration while developing new gas measures.

Streamline program operations and deepen relationships with customers

- Refine customer acquisition and account management to identify market opportunities and serve NW Natural commercial ratepayers efficiently.

Refine delivery strategies

- Increase focus on trade ally delivery through trade ally coordinator outreach and training.

Deliver technical assistance and design support

- Focus on working with active allied technical assistance contractors.

Increase market penetration

- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.
- Explore opportunities for Spanish or other language collateral.

2018 Activities—New

Expand participation

- Use building permit information to expand new construction participation.

Grow program offerings

- Investigate a midstream offering for HVAC for a 2019 launch.

Streamline program operations

- Refine and implement improvements to multisite applications.
- Explore offering instant incentives paid directly to trade allies.

Deepen relationships with customers

- Create a standardized spreadsheet for long-term planning for larger customers.

Deliver technical assistance and design support

- Introduce every-other-month trainings for allied technical assistance contractors.

2018 Key Assumptions, Risks and/or Challenges

- Gas savings continue to be a challenge based on low gas costs and current avoided costs. It will be harder for gas measures to pass cost-effectiveness tests and offerings may be eliminated, such as warm air furnaces.

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Plans Commercial Sector—Southwest Washington

- Forecasting custom pipeline development and realization of custom project savings in a relatively small commercial program can be challenging. One large project can make up a large percentage of program budget. Ensuring an accurate forecast for 2018 is a high priority

2019 Expected Changes

- Boilers bring in the largest savings per standard applications. Over the past few years, as participation in boiler projects decreased, incentives were raised. This measure has one of the highest per unit costs. If participation in 2018 continues at the same level, in 2019 it may be necessary to reduce the boiler incentives to level the overall per unit cost.

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Plans Commercial Sector—Southwest

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings	levelized cost	Savings	levelized cost
				aMW	(\$ / KWh)	therms	(cents / therm)
2017 Reforecast		\$0.8	\$0.8			146,876	53.4
2018 Budget		\$0.9	\$0.9			160,000	53.4
2019 Projection		\$0.9	\$0.9			160,000	52.6

Incentives	414,087	430,680	455,400	455,400
Delivery Costs	246,200	246,200	258,286	258,286
ETO expenses				
Staffing	25,751	22,272	22,181	23,622
Marketing	3,500	3,500	14,000	14,000
Other Services	11,000	11,000	11,000	1,000
General	17,860	17,860	17,099	16,516
Allocations	94,804	83,816	90,690	88,902
Sub-Total before Admin Costs	813,202	815,328	868,656	857,726
Administrative Costs	34,263	32,531	40,956	37,712
TOTAL EXPENSE	847,465	847,859	909,612	895,438

Plans Industrial Sector: Production Efficiency

Production Efficiency Program Description

Energy Trust's Production Efficiency program provides electric and gas energy-efficiency solutions for all sizes and types of eligible industrial, agricultural, and municipal water and wastewater customers. The program provides services and incentives through three primary delivery tracks. Production Efficiency is designed and managed in-house by staff, and is delivered to market through the support of Program Delivery Contractors and other market actors.

1. The **standard tracks** focus on simpler, common equipment measures, typically installed through Energy Trust trade allies and other vendors. They are delivered by standard track PDCs that focus on trade ally outreach and training, new measure and calculator tool development, project verification and delivery of savings from lighting, irrigation, small compressed air, variable frequency drives and other standard and calculated measures.
2. The **custom track** allows for a comprehensive approach to gas and electric process efficiency projects, retrofits, and operations and maintenance improvements. Custom PDCs are industrial efficiency experts who act as long-term energy efficiency account managers for industrial customers of all sizes and types in assigned geographic territories, delivering approximately half of all Production Efficiency savings. Allied Technical Assistance Contractors provide analyses in support of the program for custom projects.
3. The **energy performance management track** includes training, tools and technical support of industrial Strategic Energy Management coaches to help customers save energy by establishing or improving energy management practices in the workplace. SEM offerings aim to secure and deepen customer commitment to energy management and improve capability to drive persistent, measureable improvements in the energy intensity of their operations. The energy performance management track includes both first-year SEM for new participants and Continuous SEM for graduates who would like to further improve their energy management practices.

2018 Strategic Focus

- Implement and improve standard, custom and industrial SEM offerings.
- Increase outreach, technical services and other support to the agriculture sector and to small- to medium-sized industrial customers to boost savings in these areas.
- Increase the number of gas projects completed in all tracks to help reduce fluctuations in annual savings from larger projects.
- Work with other organizations such as NEEA and Pacific Northwest National Laboratory to help deploy emerging technologies, including tests of new applications of existing technology such as smart controls, energy information systems and advanced lighting design.
- Improve internal processes and systems, including use of data and information to support program activities and technical management of all tracks.
- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.
- Adapt design, implementation and operations to accommodate the increasing volume of small projects. Since 2015, staff have seen an increase of almost 30 percent in project volume, and expect this growth to continue.

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Industrial Sector: Production Efficiency

2018 Activities—Ongoing

Continuously improve program design and services

- Work with standard track PDCs to recruit, train and support trade ally vendors to sell efficient products, equipment and systems.
- Develop marketing and outreach strategies and streamline delivery to small- to medium-sized industrial customers.
- Deploy custom PDCs as long-term account managers and technical consultants for all types and sizes of industrial customers.
- Refine and expand Continuous SEM offering.

Broaden participation

- Recruit new participants into first-year and Continuous SEM, adding 15-20 new SEM participants.
- Provide rural outreach and services to farmers, irrigators and their vendors, including leveraging and collaborating with other agencies and nonprofits who are active in agriculture.
- Drive geographic diversity of gas and electric savings through outreach to trade allies, associations and other market actors across the state.
- Update and implement marketing, communication and event strategies to meet the needs of smaller customers and to support program outreach. Many marketing activities will continue, including direct marketing, materials to support PDC outreach, a quarterly customer newsletter, sponsorship of the NW Industrial Energy Efficiency Summit and the Oregon Manufacturing Awards. These activities and the My Business advertising campaign will be retooled, as needed, to address market opportunities.
- Work with utilities and other industry partners to improve awareness of the benefits of efficiency and services available for small- to medium-sized industrial customers.

Develop new measures and approaches to save energy

- Promote integration of lighting controls and other best practices in comprehensive lighting projects through ongoing promotion of advanced lighting strategies.
- Promote the regional diagnostic tool lending library to build capacity of industrial and agricultural customers to diagnose energy waste and savings opportunities.
- Continue to provide outreach, technical services and incentives to reduce energy use of new or expanding cannabis production facilities. Engage with local market actors and peers in other states to accelerate efficiency solutions and inform planning and strategies.

2018 Activities—New

Continuously improve program design and services

- Release request for proposals for revised commercial and industrial lighting tool.
- Review custom track design, release Request for Qualifications and contract with Custom Track program delivery contractors.

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Industrial Sector: Production Efficiency

- Explore opportunities to streamline technical analysis studies for small and medium customers.
- Support targeted demand-side management efforts with partner utilities.

Broaden participation

- Focus on strategies to build community of energy champions (SEM and possibly other participants) to encourage cross pollination of ideas and identify deeper savings opportunities for customers
- Launch the first combined Commercial and Industrial SEM cohort, which will take place in Northeast Oregon.
- Explore a North Coast SEM cohort for commercial and industrial customers.
- Implement a tablet-based scoping tool to quickly identify opportunities and improve outreach to small and medium customers.
- Look for opportunities to reach historically under-participating customers and communities.

Develop new measures and approaches to save energy

- Launch training and a pilot for advanced integrated controls for lighting in 2018.
- Research non-lighting indoor agriculture measures and the interactive effects of efficiency upgrades with process lighting.
- Continue to develop new measures and calculator tools for small compressed air, irrigation, refrigeration and other common measures.

2018 Key Assumptions, Risks and/or Challenges

- The energy savings goal and budget assumes that the current economic and policy environment will not change in significant ways compared to 2017.
- If analysis indicates the SB 838 spending cap is exceeded for large energy users, the program will need to act to reduce spending on these customers.
- Production Efficiency costs and savings are historically difficult to forecast due to unpredictable project completion timelines and variable savings for large projects. To continue to acquire all cost-effective savings, it may be necessary to tap reserves if savings and costs are higher than budgeted.
- As the program serves more small- to medium-sized customers, it will need to manage program costs and tactics to scale delivery. Smaller projects are generally less cost-effective. Program cost-effectiveness may decrease as the number of large projects are limited and the number of small projects grows.
- Market trends and analysis indicate that the lighting replacement market will continue to be very strong in 2018.

2019 Expected Changes

- No changes expected for 2019 at this point.

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Industrial Sector: Production Efficiency

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings	levelized cost	Savings	levelized cost
				aMW	(cents / kWh)	therms	(cents / therm)
2017 Reforecast	\$34.2	\$2.7	\$36.9	16.5	2.3	1,112,759	21.4
2018 Budget	\$35.2	\$2.9	\$38.0	19.2	2.0	1,064,753	24.4
2019 Projection	\$35.6	\$2.9	\$38.5	17.3	2.3	1,064,753	24.6

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	20,094,731	22,285,937	21,815,591	22,190,236
Delivery Costs				
Program Management				
Program Delivery	9,967,462	9,967,462	10,294,262	10,768,389
Marketing-PMC				
Performance Comp	275,000	102,500	295,000	295,000
Total Delivery Costs	10,242,462	10,069,962	10,589,262	11,063,389
ETO expenses				
Staffing	1,194,516	1,331,522	1,492,111	1,562,626
Marketing	317,000	278,000	298,000	299,000
Other Services	665,533	758,678	1,206,334	832,444
General	35,500	35,500	115,000	195,967
Allocations	755,969	720,595	788,734	758,292
Sub-Total before Admin Costs	33,305,711	35,480,194	36,305,032	36,901,954
Administrative Costs	1,403,288	1,415,612	1,711,727	1,622,481
TOTAL EXPENSE	34,708,999	36,895,806	38,016,759	38,524,435

Plans Residential Sector—Residential

Residential Program Description

Energy Trust's residential sector provides electric and gas energy-efficiency solutions for residential customers of single-family homes, manufactured homes and newly constructed homes. The program is delivered through Program Management Contractor CLEAResult, with retail promotions delivered through Program Delivery Contractor Ecova and EPS new construction offerings delivered through PDC TRC. Incentives are available for energy-efficient HVAC and water heating equipment, lighting, appliances and weatherization upgrades. The program delivers these efficiency services through a number of key market channels:

Retail and distribution

- **Retail incentives** are paid to retailers and passed through consumers as instant discounts on lighting, showerheads and water heaters at point of purchase.
- **Distributor incentives** are paid to distributors to encourage the stocking and sales of energy-saving equipment, such as fireplaces with electronic ignitions and efficient gas and electric water heaters.

EPS new construction

- Energy Trust works with **builders and verifiers** to increase the energy-efficiency of newly constructed homes. Energy Trust provides incentives, educational opportunities, trade and program ally support, and quality assurance.

Manufactured homes

- Energy Trust offers **incentives and no-cost upgrades to existing manufactured homes, including** HVAC and weatherization upgrades. Owners receive an incentive check for the energy upgrades after completing an application. No-cost air sealing and free contractor-installed LEDs and showerheads are also available for owners of manufactured homes.
- Energy Trust offers support, incentives, education and collateral for **new manufactured home retailers and manufacturers** for the sale and sighting of ENERGY STAR® homes, as well as Heat Pump space and water heating equipment in all electric ENERGY STAR homes.

Home retrofit

- Residential customers can receive **standard incentives** for heating systems, fireplaces, insulation, windows and washing machines after completing an incentive application.
- Increased Savings Within Reach incentives for income qualified (moderate-income) homeowners reduce the up-front cost of energy upgrade projects. Incentives are paid to the trade ally and passed onto customers through lower up-front project costs. An on-bill loan repayment option is also available for customers of PGE, Pacific Power and NW Natural.

2018 Strategic Focus

- Transition program management to new PMC and program delivery to two new PDCs.
- Bolster participation among diverse customer and trade ally groups through targeted offerings and data driven outreach.
- Prepare to respond to reduced savings from lighting and water conservation devices by focusing on measures and program designs that drive new types of participation.
- Engage the supply chain to increase cost-effective savings acquisition.

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Plans Residential Sector—Residential

- Identify opportunities for operational efficiencies in incentive processing, trade ally management, quality assurance, consolidated measure analysis and submission processes across multiple sectors.
- Increase capabilities to support targeted demand-side management efforts with utilities.

2018 Activities—Ongoing

Product and service development

- Transition whole-home EPS offering to the updated Oregon Residential Energy Code, which represents an average improved baseline of 6 to 8 percent above the 2014 Oregon Specialty code.
- Support the City of Hillsboro's sustainability objectives for the development of South Hillsboro. Work with additional municipalities to share best practices for community-based strategies to drive efficient new construction practices
- Continue a pilot to assess energy savings potential and program design for replacement of older vintage manufactured homes with newly constructed, efficient manufactured homes.
- Complete delivery and evaluation of automated thermostat optimization pilot, with a goal of developing additional savings opportunities from smart thermostats. This is accomplished through the deployment of additional software algorithms to communicate with and control smart thermostats.
- Pilot delivery and develop a best practices guide for the design and installation of ductless heat pumps as primary heating systems in residential new construction.

Customer acquisition

- Continue marketing campaigns to maintain awareness and drive participation.
- Simplify customer experience through instant incentive offerings.
- Coordinate with Oregon Housing and Community Services, Community Action Partnership of Oregon and agencies serving low-income populations to develop energy-saving strategies.
- Use Energy Saver Kits as a customer engagement tool.
- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.

Operations management and fulfillment

- Offer full portfolio of residential incentives to electric and gas customers.
- Expand midstream offerings for water heaters and gas hearths with electronic ignition.
- Offer incentives for self-installed web-enabled smart thermostats to homeowners and builders, and promote thermostat optimization to Nest Thermostat customers.
- Support and expand energy-efficiency advancements in moderate-income and rental homes, with focus on heating system upgrades.
- Provide broad field services to support trade ally and builder participation with consistent engagement throughout the state.
- Continue collaboration with utilities and Craft3 on process improvements for financing with repayment through utility bills.

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Plans Residential Sector—Residential

2018 Activities—New

New product and service development

- Develop a methodology to produce a five-year measure savings assessment, incorporating market intelligence, emerging technology roadmaps, resource planning, customer acquisition strategies and existing Integrated Resource Plan assessments.
- Deploy an automated meter data analytics platform to engage trade allies, program delivery staff and Energy Trust evaluation staff to improve work quality, energy savings outcomes and standard baseline assumptions for measure analysis.
- Update new construction quality control and workflow processes to facilitate an increasingly consultative approach to increase the program's influence on the new construction market.
- Transition from heat pump offering from Heating Seasonal Performance Factor requirements to requirements that optimize heat pump sizing and controls for the broader market.
- Engage stakeholders to develop a consensus-based net-zero home specification for gas and electric heated homes. Use best practices and technical roadmap for future residential energy code updates.

Customer acquisition

- Support a five-year measure savings assessment by developing an accompanying plan identifying future customer acquisition strategies.
- Develop a competitive solicitation and enrollment for trade allies to offer specialized services in under-participating market segments.
- Contract with community-based organizations to ensure residential offers and promotions engage underserved communities, in coordination with Communications and Customer Service. Contracted activities may include advising PMC on best practices and/or delivery of services to engage customers.
- Engage with Home Energy Score stakeholders to support adoption of Home Energy Scores and promote energy-efficiency improvements.
- Diversify distribution of incentives across the supply chain to increase savings acquisition and participation.
 - Explore strategies to maintain gas fireplace savings by moving fireplace efficiency upgrade and electronic ignition upgrade incentives to distributors.
 - Transition clothes washer incentives from a customer incentive check to instant discount for lower-cost, efficient models.
 - Increase measure uptake of ductless heat pumps in new manufactured homes by working closely with Northwest Energy Works. Develop and coordinate relationships between retailers and ductless heat pump installers.
- Support targeted demand-side management efforts with utilities.

Operations management and fulfillment

- Monitor the impact of the discontinuation of Residential Energy Tax Credit to determine impacts on retail prices and demand for measure technologies

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Plans Residential Sector—Residential

- Develop efficiencies and enhance customer service through incentive processing changes, including implementation of direct deposit payments and automated communications to high-volume participants
- Explore more efficient quality assurance protocols, including adding new technologies, working with new program partners and adding new data resources.

2018 Key Assumptions, Risks and/or Challenges

- The program will transition to a new consolidated program and implementation structure.
- The program will be under several cost-effectiveness constraints, including the sunset of RETC.
- A strong home improvement market will continue to bolster window and equipment purchases.
- Energy Saver Kit strategy consolidation and order form enhancements will reduce overall savings from water- and energy-saving devices in kits while improving installation rates. As the kit strategy evolves, some combinations of products may not be cost-effective but could be supported through new strategies to use LEDs to engaged new, underserved customers.
- As the new construction residential building code goes into effect, a consistent market penetration of EPS built homes is expected.
- Increased LED market share and reduced incremental costs will significantly reduce lighting savings and increase per unit costs. This may reverse current efforts to expand participation of smaller retailers in rural areas.

2019 Expected Changes

- The residential delivery structure is expected to continue to evolve.
- The program will expand specialized ally participation opportunities to align with identified critical low participation areas.
- The program will continue to expand income-qualified program offers and no-cost offerings.
- The program will diversify distribution of incentives across the supply chain to increase savings acquisition and participation across the service territory.
- Staff will continue to manage reductions to lighting and showerhead savings potential.
- Staff will evaluate pilots to determine opportunities for program integration.

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Plans Residential Sector—Residential

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings	levelized cost	Savings	levelized cost
				aMW	(cents / KWh)	therms	(cents / therm)
2017 Reforecast	\$39.0	\$11.5	\$50.4	17.4	2.3	2,965,574	29.0
2018 Budget	\$34.5	\$15.0	\$49.5	7.2	4.9	2,903,694	32.8
2019 Projection	\$28.3	\$15.9	\$44.2	5.3	5.1	2,287,003	44.3

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	29,972,113	29,978,827	29,376,979	24,611,187
Delivery Costs				
Program Management	1,138,528	1,087,849	1,553,335	1,365,693
Program Delivery	9,830,969	9,393,883	8,805,990	8,686,838
Marketing-PMC	2,186,791	2,217,132	1,465,397	1,359,037
Performance Comp	230,000	217,500	250,000	195,000
Total Delivery Costs	13,386,288	12,916,364	12,074,722	11,606,568
ETO expenses				
Staffing	1,057,045	1,101,045	1,216,349	1,238,618
Marketing	664,000	617,000	673,000	756,750
Other Services	1,624,466	1,567,634	1,386,370	1,424,814
General	65,250	65,250	62,500	72,500
Allocations	2,511,120	2,254,917	2,521,602	2,455,835
Sub-Total before Admin Costs	49,280,282	48,501,037	47,311,522	42,166,272
Administrative Costs	2,076,354	1,935,126	2,230,667	2,050,288
TOTAL EXPENSE	51,356,636	50,436,163	49,542,189	44,216,560

Washington

Southwest Washington Residential Program Description

Residential programs in Southwest Washington acquire cost-effective gas savings by engaging with builders and homeowners. Energy Trust engages with builders to increase energy efficiency of newly constructed homes through incentives, education, trade and program ally support, and quality assurance. For single-family and small multifamily homeowners, Energy Trust provides energy savings through incentives for efficient space heating and controls, water heating, insulation, windows, water conservation and behavioral actions, education, trade ally support, financing with repayment through utility bills, and market interventions.

2018 Strategic Focus

- Transition to consolidated delivery of Washington residential program through New Homes Program Delivery Contractor TRC.
- Bolster participation among diverse customer and trade ally groups through further enhancements of targeted offerings and outreach based on continuous data input.
- Continue outreach that builds on existing relationships with trade allies while continuing to enhance participation through engagement across the supply chain to increase cost-effective savings acquisition.
- Grow the residential incentive portfolio by introducing multifamily measure options.
- Coordinate with NW Natural stakeholder and trade ally relationships to drive participation in Existing Homes offerings and EPS homes.
- Monitor and incorporate new gas saving technologies and products into the program.
- Continue to grow and develop builder and verifier networks through outreach activities to support increased market share of EPS homes.
- Prepare for 2019 Washington Residential Energy code changes, including monitoring and tracking updates and participating in stakeholder groups.
- Identify opportunities for operational efficiencies in incentive processing, trade ally management, quality assurance, and consolidated measure analysis and submission processes across sectors.
- Ensure program is forecasted, budgeted and managed to meet performance criteria as defined by the Washington Utility and Transportation Commission and as specified in the 2018 NW Natural Washington Energy Efficiency Plan, including incentive to delivery ratio, Utility Cost Test and Total Resource Cost Test results. Provide rationale as to why the portfolio should still only be evaluated on Utility Cost Test.

2018 Activities—Ongoing

- Work with NW Natural to ensure program delivery is in alignment with goals.
- Work with NW Natural to ensure compliance to Washington Utilities and Transportation Commission regulatory requirements and to provide robust and accurate reporting.

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Washington

- Explore and execute on strategies to increase incentive spending compared to total program delivery costs. Strategies and activities include supply chain and midstream efforts for gas fireplace electronic ignition and gas tank water heaters, Nest Seasonal Savings, Energy Saver Kit distribution and introduction of a consumer facing tankless water heater measure.
- Collaborate with NW Natural on marketing campaigns and strategies.

Existing Homes

Expand participation

- Support trade ally experience through customized in-person engagements that facilitates incentive application submission.

Grow program offerings and explore new savings opportunities

- Increase engagement across the supply chain to increase cost-effective savings acquisition of thermostat optimization, fireplace electronic ignition and midstream water heaters.

Streamline program operations

- Collaborate with Craft3, a nonprofit community development financial institution, to improve processes for financing with repayment through utility bills.
- Reduce administrative impacts through improved program quality assurance processes, leveraging technology innovations, program partners and available data resources.
- Launch updated Energy Saver Kit measures, including showerheads, shower wands and faucet aerators.

New Homes and Products

Maintain and grow program offerings and increase market penetration

- Promote EPS™, a home energy performance score, through engagement, training and support of verifier and builder networks.
- Collaborate with Bonneville Power Administration Simple Steps, Smart Savings™ to offer discounted showerheads at retail stores.

Technical and design assistance

- Support administration of third-party field quality assurance, including coordination with verifiers to maintain quality assurance and quality control procedures.
- Provide outreach and technical services to help participating builders maximize energy savings.

Streamline program operations and refine delivery strategy

- Collaborate with Axis software provider company, Pivotal, to identify database improvements.
- Use permit data to target builder recruitment and engagement with existing trade allies.

2018 Activities—New

Existing Homes

Expand participation and increase market share of efficient equipment

- Engage trade allies and other interested stakeholders to increase market share of smart thermostats.

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Washington

- Engage with community stakeholders and allies to drive participation and offerings aligned with community needs.
- Reach new and diverse customers through targeted marketing.
- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.

Grow program offerings

- Add offerings for small multifamily customers in Washington with support from Existing Multifamily PMC Lockheed Martin.

Explore new savings opportunities

- Assess introduction of additional small multifamily incentives in the residential portfolio as part of a midyear Washington Utilities and Transportation Commission tariff filing.

Streamline program operations

- Develop efficiencies and enhanced customer service through incentive processing changes, including direct deposit payments and automated communications
- Evolve quality assurance protocols to reduce administrative impacts, including exploration of new technologies, program partners and available data resources.

Deepen relationships with customers

- Leverage data analytics to target email marketing.
- Ensure culturally appropriate messaging for multiple Hispanic target markets through consulting with IZO Marketing.

Refine delivery strategies

- Diversify distribution of incentives across the supply chain to increase savings and participation across the service territory.

New Homes and Products

Expand participation and increase market share of efficient equipment

- Customize EPS market support for actor and stakeholders.

Comprehensive market delivery

- Identify market engagement strategies to support builder retention and recruitment.

Increase market penetration

- Support real estate market engagement across residential programs.

Deliver technical assistance and design support

- Provide early design assistance to builders and verifiers to identify more savings opportunities at the design phase.

2018 Key Assumptions, Risks and/or Challenges

Existing Homes

- A strong home improvement market will continue to bolster energy upgrade purchases.
- Additional financing options in the market will continue to compete with On-Bill Repayment
- Midstream engagement relies on market actors' acceptance of data reporting requirements.

New Homes and Products

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Washington

- New construction will continue to be robust in Clark County. High market adoption and participation in EPS New Homes is expected. The program will work to ensure accurate forecasting and budgeting for an evolving and expanding market.

2019 Expected Changes

- Expand specialized ally participation opportunities to increase low participation areas.
- Diversify distribution of incentives across the supply chain to increase savings acquisition and participation across the service territory.
- 2018 Washington Residential Energy code changes will impact 2019 planning and evaluation and 2020 New Homes administration and savings trends.

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Plans Residential Sector—Southwest

Year	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings aMW	levelized cost (\$ / KWh)	Savings therms	levelized cost (cents / therm)
2017 Reforecast		\$1.2	\$1.2			206,796	43.9
2018 Budget		\$1.3	\$1.3			199,880	47.1
2019 Projection		\$1.3	\$1.3			207,462	46.5

Incentives	475,510	641,256	652,556	683,571
Delivery Costs	285,746	285,746	301,585	301,585
ETO expenses				
Staffing	67,362	53,964	51,587	54,936
Marketing	10,000	10,000	10,000	10,000
Other Services	50,550	35,550	50,550	50,550
General	22,112	22,112	25,494	25,664
Allocations	170,795	149,481	166,353	164,822
Sub-Total before Admin Costs	1,082,075	1,198,109	1,258,125	1,291,128
Administrative Costs	45,592	47,802	59,319	56,767
TOTAL EXPENSE	1,127,667	1,245,911	1,317,444	1,347,895

Plans Northwest Energy Efficiency Alliance

Northwest Energy Efficiency Alliance Description

Northwest Energy Efficiency Alliance identifies and drives market transformation programs to accelerate and sustain market adoption of energy-efficient products, services and practices across commercial, industrial and residential sectors, working in coordination with Energy Trust. NEEA researches and assesses emerging energy-efficiency opportunities and facilitates coordinated regional strategies to permanently remove market barriers and leverage the collective scale and power of the region. NEEA's role in market transformation efforts varies by program, and generally focuses on activities with market participants upstream from Energy Trust and utility customers.

2018 Strategic Focus

Fill the energy-efficiency market transformation pipeline with new products/services/practices.

- Identify new opportunities through scanning, research and market partner engagement.
- Assess the potential and confirm the viability of newly identified emerging technologies, including technical analysis and assessment of market barriers.
- Screen, select and prepare technologies to enter the market transformation pipeline.

Create market conditions that will accelerate and sustain the market adoption of emerging energy-efficiency products, services and practices.

- Influence market actors to increase availability of energy-efficient products and services.
- Improve/ensure product quality.
- Build market knowledge and capability to support new products, services or practices.
- Identify and develop market resources that capitalize on the compelling value proposition for a new product, service or practice.
- Increase product awareness.
- Develop strategies to address price/first cost issues.
- Influence and support the successful implementation of more stringent building codes and appliance standards.

Accelerate and sustain market adoption of efficient natural gas products/practices/services resulting in increased consumer choice and efficiency of natural gas use in the Pacific Northwest

2018 Activities—Ongoing

Fill the pipeline with new energy-efficiency products, services and practices.

- Advance an initiative to replace packaged commercial rooftop units with a combination dedicated outdoor air system, heat recovery ventilator and variable capacity heat pump driven by a natural gas engine.
- Advance an initiative to drive adoption of optimized motor driven circulator systems for reduction in thermal energy losses of hot water systems.

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Northwest Energy Efficiency Alliance

Accelerate and sustain market adoption of energy-efficient electric products, services and practices.

- **Heat pump water heaters:** Increase emergency replacement penetration through targeted installer training and manufacturer incentives; support increased utility midstream program adoption; gather research and data necessary to advance the federal standard for small tanks.
- **Ductless heat pumps:** Develop improved consumer awareness/confidence/valuation tools.
- **Retail product portfolio:** Expand ENERGY STAR engagement to grow influence on manufacturers; Improve data management and analysis to better inform decisions and provide value to funders; refine and finalize evaluation approach.
- **Super-efficient heat pump dryers:** Complete market research to segment market and increase confidence and demand for super-efficient dryers; refine super-efficient dryer technology roadmap; support voluntary and Federal standards processes.
- **Manufactured homes:** Offer incentive and technical support to manufacturers to build NEEM 2.0 to help overcome cost and knowledge/capability barriers.
- **Next step homes:** Identify, validate and propose long-term state-specific energy code targets and measures; increase coordination and consistency between home certification programs in the region; garner utility support for builders and market partners to improve knowledge/awareness and reduce costs; develop and deliver technical training to improve builder knowledge/awareness.
- **Reduced wattage lamp replacement:** Negotiate and refine distributor contracts to prioritize aggressive restocking efforts; develop/improve distributor market intelligence reports.
- **Luminaire level lighting controls:** Deliver installer and distributor training to improve knowledge/awareness; leverage distributor platform to engage distributors and gather data; develop marketing strategies to support utilities in driving awareness; influence annual product specification revisions; leverage third-party research and customer demonstrations to inform program strategies.
- **Commercial code enhancement:** Assess and rank technologies/practices for inclusion in 2018 Washington state code proposals; explore collaboration opportunities with Next Step Homes initiative to leverage strategies and processes to influence and support code adoption.
- **Window attachments:** Collaborate with Attachment Energy Rating Council (AERC) on test procedures and rating protocols to establish standard measurement for product performance; drive increased manufacturer membership in AERC to improve product availability, performance and differentiation; support ENERGY STAR labelling process to improve Low-E Storm Window product differentiation and standards; build product confidence through support for regional demonstration projects.
- **Commercial and industrial infrastructure programs:** Support City of Portland disclosure ordinance with marketing and technical assistance for commercial real estate to improve awareness/adoption among target audience. Actively promote, support and grow Strategic Energy Management Hub as fundamental resource and customer engagement tool; continue convening/facilitating NW SEM Collaborative; coordinate planning with sponsors and execute 2018 regional Industrial Technical Training plan; continue Trade Ally NXT Level support and collaboration with utilities through promotional activities and evaluation of program impact.

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Northwest Energy Efficiency Alliance

Accelerate development and adoption of efficient natural gas products, practices and services.

- **Efficient gas water heaters:** Support launch and adoption of non-powered .67 Energy Star water heater; support development and complete testing of efficient gas heat pump water heaters from other manufacturers; submit draft WA code proposal for residential gas storage water heater damper requirements.
- **Combination space and water heating product:** Collaborate with manufacturers on design/build/test of combi units; identify and/or test additional technologies for combi units.
- **Rooftop HVAC:** Complete product field tests of condensing gas roof top units; engage in state building code process to establish path for additional make up air efficiency option.
- **Efficient gas dryers:** Continue ENERGY STAR product lab testing, finalize lab testing of modulating valve and heat recovery next tier product and provide data to Department of Energy and ENERGY STAR; engage extra-regional partners to expand influence with manufacturers; educate manufacturers on performance challenges.
- **Hearth products:** Influence product development of a low capacity hearth; draft code proposal to influence WA state building code to eliminate standing pilot lights.

2018 Activities—New

Fill the pipeline with new electric energy-efficiency products, services and practices.

- Explore advancement of initiatives in the following areas:
 - Residential: CO2 combined space and water heating
 - Residential: Ultra high definition TVs
 - Residential: Connected/advanced thermostats focusing on control of central and zonal systems
 - Residential/commercial: Inverter-driven packaged terminal heat pumps
 - Residential/commercial: Expand understanding of other window attachments including blinds and films
 - Commercial: Occupancy control of HVAC and task/ambient HVAC
 - Commercial/industrial/agricultural: Pump operator certification
 - Industrial: Smart compressed air valves
 - Agricultural: Pivot commissioning

Accelerate and sustain market adoption of energy-efficient electric products, services and practices.

- **Heat pump water heaters:** Complete market research to allow deeper analysis of potential audience and how to leverage other programs and partners; Explore methods for partnering with market actors to turn emergency replacements into planned replacements; explore funder interest in leveraging retail platform for a regional midstream approach for water heaters.

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Plans Northwest Energy Efficiency Alliance

- **Ductless heat pumps:** Investigate and implement cost containment strategies such as Quick Connect, Do It Yourself, Bulk Buys and non-traditional installers; Seek and leverage additional market transformation partners such as climate, health and advocates for hard-to-reach population.
- **Retail product portfolio:** Establish planning and coordination process for federal standards to maximize influence and impact.
- **Super-efficient heat pump dryers:** Leverage market test information to hone consumer, manufacturer and retail value propositions; develop retailer trainings; explore paired laundry opportunities; investigate new emerging technology for super-efficient dryers.
- **Manufactured homes:** Provide utility outreach and support to plan NEEM 2.0 incentive programs to reduce product cost; provide retailer sales tools and resources needed to sell NEEM 2.0 in order to improve knowledge/capability and clarify value proposition.
- **Next step homes:** Collaborate with commercial code enhancement to create state action plans to achieve long-term code targets; coordinate with city and utility activities to achieve Climate Action plans.
- **Reduced wattage lamp replacement:** Explore opportunities to expand distributor platform by bundling additional NEEA and utility pilot programs and continuing Low-Watt push; leverage Jan. 2018 Federal Standard to reinforce Low-Watt restocking and reduced 32 watt shipments to region.
- **Luminaire level lighting controls:** Develop training to familiarize installers and designers on product specifics; engage with key sales influencers (manufacturer reps, specifiers and designers); leverage Integrated Design Labs to build awareness.
- **Commercial code enhancement:** Complete and update State Coordination Plans for next code change cycles; implement market intervention strategies to improve coordination between utility programs, market practice and code process; convene utility design group for information exchange and lessons learned.
- **Window attachments:** Develop and test consumer messaging/marketing strategies; develop retail engagement strategy to improve availability/awareness of products; collaborate with utilities and RTF to develop downstream programs and incentives.
- **Commercial and industrial infrastructure programs:** Develop commercial real estate marketing plan to increase traffic to Navigator (BetterBricks site) and Spark tools. Commercial real estate value proposition and program activities with funder work group; investigate future role of NEEA in regional Strategic Energy Management (SEM) success and facilitate growth of North American-wide collaborative; launch Trade Ally NXT Level 2 training and differentiate value to trade allies.

Accelerate development and adoption of efficient natural gas products, practices and services.

- **Efficient gas water heaters:** Support expansion of utility rebates for ENERGY STAR water heaters to address low demand/awareness and prime the market for more efficient products; increase engagement with additional manufacturers to drive development of other gas heat pump water heater products.
- **Combination space and water heating product:** Collaborate with manufacturers to develop installation best practices and product sales tools; build awareness and demand through technology education and supply chain development; conduct product characterization to define cost, size and performance parameters required for success.

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- **Hearth products:** Partner with burner manufacturer to socialize testing results with major OEMs and influence product development of low capacity hearths; participate in codes and standards process to eliminate standing pilot light in Washington State building code.
- **Gas dryers:** Utilize Retail Products Platform to incentivize retailers to stock specified products; investigate additional gas dryer technologies.
- **Rooftop HVAC:** Implement supply chain and commercial building outreach strategy focused on educating and engaging the market, honing value proposition and overcoming adoption barriers; recruit one commercial facility for field study; identify and address utility program launch requirements.

2018 Key Assumptions, Risks and/or Challenges

- Funding will continue at current level.
- Deep collaboration with funding partners will continue.
- Less active federal/state bodies could slow work to drive change through codes and standards.
- Regulatory or governing body decisions could curtail investments in energy efficiency, including elimination/expiration of tax credits.
- Unpredictable economic and market dynamics with manufacturers, retailers and other supply chain participants could impact activities.
- There could be a Regional Technical Forum backlog for getting measures approved.
- Timely utility program uptake by funders could be impacted by issues with cost-effectiveness.
- Inconsistency in incentive approaches across the region can create market confusion.
- Ongoing viability of key market partners like ENERGY STAR, Attachment Energy Ratings Council could be threatened.
- Achieving regional consensus on value and prioritization of programs or infrastructure could result in reduced scope of work.
- Engagement with extra-regional partners may not be successful in driving necessary scale for program/product development.
- Mid-cycle assessment for natural gas market transformation could result in reduced scale/scope of work.

2019 Expected Changes

- Active engagement in the Reduced Wattage Lamp Replacement initiative will end.
- Additional new emerging technologies and products will be identified to fill the pipeline.

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Northwest Energy Efficiency Alliance

	Annual Expense			Electric		Gas	
	Electric	Gas	Total	Savings	levelized cost	Savings	levelized cost
				aMW	(cents / KWh)	therms	(cents / therm)
2017 Reforecast	\$7.3	\$1.1	\$8.4	7.7	1.2		
2018 Budget	\$7.1	\$1.4	\$8.5	7.2	1.3		
2019 Projection	\$6.9	\$1.8	\$8.8	5.3	1.7		

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Delivery Costs	8,070,829	8,070,829	8,132,667	8,481,547
ETO Expenses	79,782	72,559	110,972	112,926
Sub-Total before Admin Costs	8,150,611	8,143,388	8,243,639	8,594,473
Administrative Costs	343,414	324,910	388,675	377,876
TOTAL EXPENSE	8,494,025	8,468,298	8,632,314	8,972,349
NEEA by Program				
Commercial	2,852,738	2,844,116	2,682,976	2,745,947
Industrial	240,338	237,318	384,450	375,996
Residential	5,292,403	5,278,549	5,423,877	5,662,429
Washington	108,546	108,314	141,011	187,976
TOTAL EXPENSE	8,494,025	8,468,297	8,632,314	8,972,348

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Plans Renewable Energy Sector—Solar



Solar Program Description

The Solar program aims to create a vigorous and sustainable market for solar in Oregon that will ultimately thrive without incentives. The program design is based on offering incentives that are managed in response to market behavior; increasing consumer awareness through education and marketing; protecting consumers by enforcing business and quality standards; aiding the industry to drive down non-hardware soft costs; and ensuring a robust, qualified installer base. In 2018, the program will focus on improving equitable access to solar for lower-income customers and supporting innovative applications of solar that provide greater value to communities or the grid.

The program works with an approved network of solar trade ally installers to provide incentives for construction of high-quality solar electric systems throughout Oregon. The program offers **standard incentives** for smaller-scale systems across all sectors and customer types. Starting in 2018, the program will provide periodic opportunities for **custom incentives** for solar projects that fall outside the standard offerings and provide additional community or utility benefits.

2018 Strategic Focus

- Provide incentives to help the market transition after the expiration of Residential Energy Tax Credits at the end of 2017.
- Respond to market, regulatory and policy changes that affect the solar industry and solar above-market costs.
- Support the solar industry in making business, process and technical improvements that reduce soft costs.
- Maintain a pipeline of solar projects across sectors through project support, education, marketing and collaboration with industry and advocates.
- Support innovative applications of solar and advanced solar technologies to provide additional community or utility benefits.
- Engage with stakeholders across the state to identify strategies for increasing solar adoption in low- and moderate-income communities.
- Support targeted demand-side management efforts with utilities.

2018 Activities—Ongoing

Adapt incentive offerings to market changes

- Moderately increase residential incentives to account for expected higher above-market costs and lower demand after the expiration of the Residential Energy Tax Credit.
- Refocus and simplify standard commercial incentives to target smaller projects.
- With lower expected demand and more focused standard incentives, re-allocate incentive funds to new initiatives noted below.

Support industry in soft-cost reduction

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Plans Renewable Energy Sector—Solar

- Continue lead generation services to quickly connect customers with trade allies and reduce trade ally customer acquisition soft costs. Enhance website with new online solar calculator and improved automation and tracking.
- Provide trade allies with continued business development opportunities to improve their technical expertise, customer acquisition, project accounting and internal quality management processes.
- Continue statewide marketing to support consumer education about solar.

Provide data and expertise for decision-makers

- Support the OPUC with expertise and market data relevant to ongoing solar-related work, including community solar program development, storage and resource value of solar docket.
- In partnership with the U.S. Department of Energy and software developer Kevala, continue development of mapping tools to provide context and visualization for localized solar impacts and benefits to the grid.
- Provide project development support to customers exploring the feasibility of using solar plus storage systems to provide grid benefits and/or improve community resilience.

2018 Activities—New

Enhance program delivery

- Implement PowerClerk 2, a new version of online incentive administration software that allows for better integrations and more customized offerings.
- Implement a new custom incentive for net-metered solar projects that fall outside the standard offerings and provide additional community or grid benefits. Use this pathway to collaborate with utility voluntary fund programs to support projects with additional community value.

Support applications of solar that provide higher utility value

- Explore and test ways to deploy solar to meet peak energy needs, including pairing with energy efficiency, storage or flexible loads. Test methods to influence adoption of solar systems with more advanced controls for storage or flexible loads.
- Support targeted demand-side management efforts with partner utilities. Coordinate with utilities and customers to pilot applications for advanced solar technologies, such as smart inverters and solar plus storage integration.
- Develop communication materials to address growing customer interest in solar plus storage.
- Leverage solar trade ally expertise to provide additional value for customers and utilities. For example, collaborate with efficiency programs to provide incentives when solar trade allies install smart thermostats at the time of solar installation.

Broaden access to solar and improve solar workforce diversity

- Solicit input from stakeholders on proposed strategies for increasing solar adoption in low- and moderate-income communities. With support from a U.S. Department of Energy grant, collaborate with the Clean Energy States Alliance and six other states to identify and prioritize strategies to increase access to solar for low- and moderate-income communities.

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Plans Renewable Energy Sector—Solar

- Design and test a solar incentive offer for moderate-income customers in owner-occupied, single-family homes.
- Evaluate tools for measuring baseline adoption of solar by customer demographic and identifying opportunities for increased access.
- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.

2018 Key Assumptions, Risks and/or Challenges

- The Residential Energy Tax Credit for solar systems will expire at the end of 2017. To qualify, customers must submit an application by December 31, 2017 and have systems installed by April 1, 2018. This will likely result in heavier installation volume in Q1 and early Q2 of 2018, followed by a drop in residential installations for the remainder of the year.
- Continued declines in solar costs are assumed. However, a current federal trade case may result in import tariffs that could significantly increase solar pricing in 2018 and beyond.
- If the legislature adopts a new state residential solar tax credit in the 2018 session, the above-market cost for a residential project may change quickly. The program will need to be prepared to make a swift change in incentive strategy if such legislation appears to move forward.
- OPUC's resource value of solar docket (UM 1716) will likely complete in 2018. The budget assumes any subsequent changes to net metering or compensation levels for solar generation would not be in place in time to impact above-market cost or incentive strategy in 2018.

2019 Expected Changes

- If above-market costs decline, the program will need to transition incentives out of segments of the market that need less support.
- The OPUC's community solar program will likely be active and available in 2019. As an alternative option to direct onsite installation of solar, this may influence demand for standard incentives.
- The Federal Investment Tax Credit will remain at 30 percent through 2019, and will step down to 26 percent in 2020.

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Plans Renewable Energy Sector—Solar

	ACTIVITY BASIS			ACCOUNTING BASIS		
	BUDGET	GOAL	COST	BUDGET	GOAL	COST
Year	(\$ millions)	aMW	(\$ mils / aMW)	(\$ millions)	aMW	(\$ mils / aMW)
2017 Reforecast	\$9.3	2.52	\$3.7	\$12.4	4.41	\$2.8
2018 Budget	\$9.5	1.32	\$7.2	\$9.6	1.89	\$5.1
2019 Projection	\$9.1	1.26	\$7.2	\$9.2	1.29	\$7.2

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	10,620,000	9,808,500	6,815,500	6,580,000
Delivery Costs				
Program Delivery	444,500	479,500	376,500	376,500
Performance Comp	10,000	10,000	10,000	10,000
Total Delivery Costs	454,500	489,500	386,500	386,500
ETO expenses				
Staffing	628,931	646,601	709,939	736,339
Marketing	177,000	179,250	234,500	229,500
Other Services	372,499	230,875	421,999	331,499
General	170,800	149,300	205,300	185,300
Allocations	444,051	396,322	408,195	391,406
Sub-Total before Admin Costs	12,867,781	11,900,348	9,181,933	8,840,544
Administrative Costs	542,165	474,808	432,914	388,695
TOTAL EXPENSE	13,409,946	12,375,156	9,614,847	9,229,239
Plus/minus Incentives committed for future yrs	(3,679,998)	(3,062,501)	(152,500)	(99,999)
TOTAL EXPENSE, Action Plan	9,729,948	9,312,655	9,462,347	9,129,240

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Plans Renewable Energy Sector—Other

Renewables

Other Renewables Program Description



The Other Renewables program supports renewable energy projects up to 20 megawatts in nameplate capacity that generate electricity using biopower, geothermal, hydropower and wind technologies. Most projects are less than 2 megawatts in size. The goal of the program is to expand Energy Trust's renewable energy portfolio across a range of technologies and improve market conditions.

The program provides project development assistance incentives and installation incentives. **Project development assistance incentives** can pay for a portion of the costs of feasibility studies, technical assistance or other non-capital cost assessments and investigations to help projects move from concept to construction. Qualified projects may access project development assistance incentives multiple times, up to the limits of funding caps, enabling applicants to move through consecutive development activities. The program also provides **installation incentives** calculated on a custom basis after a detailed technical and financial review of a project's application. All incentives are paid following successful project installation or activity completion.

2018 Strategic Focus

- Maintain development assistance and installation incentive support for a broad portfolio of technologies to sustain and grow Oregon's vibrant small- and community-scale distributed renewable energy generation markets.
- Focus outreach and project development assistance on technologies and project types able to offset onsite load or leverage additional benefits that can bring outside funders and financing.
- Continue innovative delivery models, such as the irrigation modernization initiative, to accelerate the pace of project development and completions.
- Continue efforts to optimize the performance of operating projects to maximize value for ratepayers.
- Support biopower projects using anaerobic digestion with entities that can benefit operationally and financially from generating electricity from materials such as fat, oils and grease; source separated municipal food waste; food processing waste and brewery waste. Continue to assess regional markets for co-digestible feedstock.

2018 Activities—Ongoing and New

Expand participation

- Focus development assistance outreach on irrigation hydropower and net-metered biogas projects while remaining open to supporting hydropower, biopower and geothermal projects outside of these target areas.
- Expand participation in the irrigation modernization initiative to meet increasing interest and market uptake.
- Expand outreach to smaller water resource recovery facilities that may be able to pursue on-site generation and net-zero energy use through solar and/or anaerobic digestion.
- Hold two competitive solicitations for projects seeking installation incentives greater than \$150,000.

Deepen relationships with customers

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Plans Renewable Energy Sector—Other

Renewables

- Support existing irrigation modernization participants with technical assistance and project development assistance.
- Transition the first set of irrigation modernization participants to hydropower project design and other project development activities.
- Build relationships with project developers and stakeholders with biomass, small hydropower and geothermal potential.
- Support water resource recovery facilities in their efforts to reduce energy use and add new net-metered renewable energy projects, in coordination with energy efficiency programs.
- Explore modest incentive support to encourage optimization of generation at previously incentivized and operating facilities.

Efficiently manage administrative functions

- Manage Renewable Energy Certificate (REC) delivery from new projects while continuing work with PGE and Pacific Power to initiate REC delivery for existing, operational projects.
- Respond to data requests related to OPUC dockets and activity, legislative activity and other requests.

2018 Key Assumptions, Risks and/or Challenges

- Staff assume there will be no new federal or state energy tax credits or incentive policies.
- The December 31, 2017 sunset of the Oregon Renewable Energy Development Grant will increase above market costs.
- Staff expect continued demand from the nascent clean fuels marketplace for sources of biogas to be processed into renewable natural gas for vehicle fueling and pipeline injection, reducing feedstock availability for renewable electricity generation.
- Staff anticipate flat or declining avoided-cost rates available for projects that sell power on the wholesale energy market, potentially leading to higher above market costs.

2019 Expected Changes

- Staff expect 2019 activities to be similar to 2018.

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Plans Renewable Energy Sector—Other

	ACTIVITY BASIS			ACCOUNTING BASIS		
	BUDGET (\$ millions)	GOAL aMW	COST (\$ mils / aMW)	BUDGET (\$ millions)	GOAL aMW	COST (\$ mils / aMW)
2017 Reforecast	\$5.3	0.32	\$16.6	\$5.6	0.00	\$3,345.7
2018 Budget	\$9.7	1.35	\$7.2	\$3.7	-	\$0.0
2019 Projection	\$5.5	0.40	\$13.8	\$11.1	1.56	\$7.1

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Incentives	4,967,377	4,216,735	2,348,720	9,570,050
ETO expenses				
Staffing	547,107	540,764	593,411	601,913
Marketing	18,000	8,500	3,000	3,000
Other Services	382,000	341,000	355,000	246,000
General	17,900	21,100	24,100	24,100
Allocations	224,916	216,076	225,463	211,422
Sub-Total before Admin Costs	6,157,300	5,344,175	3,549,694	10,656,485
Administrative Costs	259,429	213,225	167,363	468,537
TOTAL EXPENSE	6,416,729	5,557,400	3,717,057	11,125,022
Plus/minus Incentives committed for future yrs	1,207,723	(220,730)	6,031,280	(5,609,949)
TOTAL EXPENSE, Action Plan	7,624,452	5,336,670	9,748,337	5,515,073

Plans Management and General

Management and General Group Description

The Management and General group encompasses the executive, board relations, legal, finance, human resource and general office operations functions. It provides key leadership to support Energy Trust strategic goals and operations.

2018 Strategic Focus

- Seek continued improvements in program and administrative efficiencies, identifying metrics to measure productivity gains where practical and worthwhile.
- Enhance organizational and individual readiness and ability to serve and expand participation among an increasingly diverse customer base by supporting Energy Trust's Diversity Equity Inclusion Initiative.
- Develop staff and maintain culture of achievement and high employee engagement.
- Continue to be open to and prepare for emerging policy and funding opportunities.
- Manage risk, compliance, human resources, financial reporting, auditing and facilities.
- Support the board of directors.

2018 Activities—Ongoing

Executive

- Support and implement the goals and objectives detailed in Energy Trust's Diversity, Equity, and Inclusion Operations Plan.
- Continue to expand the understanding and application of Lean Startup methodologies in product design.
- Finalize the first phase of the Organizational Review Project by completing a set of structure and process improvement recommendations designed to ensure optimal performance of Energy Trust in the current and future energy environment.
- Complete the first phase of the Budget Review Project and consider recommendations for improvement to realize greater efficiencies and stakeholder engagement.
- Continue Executive Director customer and stakeholder engagement throughout Energy Trust territory to connect with utility partners, trade allies, public officials and board members.

Legal

- Support the organization with contract review, negotiation and drafting to manage organizational legal risk and ensure efficient and effective operations.
- Provide informed and efficient legal advice services to program and other Energy Trust staff.
- Manage legal risk and monitor relevant policy developments that may impact Energy Trust; provide information and training as needed.
- Support the board of directors in regular meetings and in planning activities, including the annual strategic planning retreat.

Human Resources

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Plans Management and General

- Continue to support Energy Trust's recruitment, hiring, and retention needs, with focus on strategic staff planning including, but not limited to, increasing diversity in Energy Trust's workforce.
- Continue to invest in staff development, including ongoing work on the career development program, to support managers and employees in developing critical skills and competencies needed to achieve strategic goals, broaden workforce capacity and retain a high performing staff.
- Establish process for improved manager onboarding and training for increased effectiveness and compliance.
- Manage and support Energy Trust's performance management process.

Finance

- Implement incentive payment process improvements identified in the previous year
- Expand electronic payment to appropriate participants
- Upgrade Great Plains Dynamics and improve reporting and query functionality
- Focus on continued excellence in financial operations, audit, budget, and reporting.

2018 Activities—New

Executive

- Support Energy Trust's Board of Directors' strategic planning process to kick off in May 2018 for the 2020-2024 Strategic Plan.
- Initiate a series of coordinated executive trainings and work sessions covering a variety of business management topics. Develop an organizational implementation plan based on the recommendations of the Organizational Review Project to ensure optimal operations of the organization.
- Develop an implementation plan to revise and update Energy Trust's budget process based on Phase I recommendations by the Budget Review Project Team as reviewed by the Board of Directors and the OPUC.

Legal

- Monitor 2018 regulatory and legislative policy developments and provide relevant legal and policy advice to Energy Trust.
- Provide legal advice and support for recommendations from the Organization Review project.
- Support initial research and information gathering efforts in anticipation of Energy Trust's next strategic planning development process.

Human Resources

- Begin implementation of recommendations from the Organizational Review project related to human resources processes, organizational structure and employee engagement.
- Develop onboarding process for managers, including a manager manual and training curriculum for new and aspiring managers.
- Support Energy Trust's Diversity, Equity and Inclusion Goals through enhanced recruitment, hiring and retention strategies aimed at diversifying Energy Trust's workforce.
- Implement an Applicant Tracking System to achieve efficiencies, gain data analysis capabilities and improve internal operations related to recruiting new employees.

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Plans Management and General

Finance

- Adapt policies and procedures to meet federal requirements for funding, in response to review performed in the prior year.
- Implement procurement and accounts payable automation to gain efficiencies and improve transparency in expense management.
- Implement on line time keeping for payroll to improve efficiency across the organization.

2018 Key Assumptions, Risks and/or Challenges

- Management of the organization will continue to evolve to maintain a highly efficient and effective enterprise.
- Pressure will continue to maintain low administrative costs, meet and exceed expectations, and adapt to changes as they arise.

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
ETO expenses				
Staffing	2,657,215	2,412,903	2,759,663	2,919,252
Other Services	639,500	411,906	1,152,650	771,500
General	169,230	122,644	158,910	157,410
Allocations	678,837	662,953	725,099	667,985
Total Expense	4,144,782	3,610,406	4,796,322	4,516,147

Plans General Communications and Outreach

General Communications and Outreach Description (Housed in Communications and Customer Service Group)

The Communications and Customer Service group engages customers, stakeholders and the public through general communications, results reporting, public relations, marketing, outreach, education initiatives, online resources and social media. Communications and Customer Service staff, services and resources create and strengthen public awareness of the value of energy efficiency and renewable energy; support customer access to information and cash incentives; position Energy Trust as an expert resource; expand the organization's reach to new customers and stakeholders; and support organizational transparency and accountability.

Work is performed by Communications and Customer Service staff in coordination with program staff, operations staff and program contractors. Staff apply expertise in project management and change management, and tap contracted resources for project support, creative services, market research, website and electronic forms development.

2018 Strategic Focus

- Deliver stakeholder and customer communications, and provide program and organizational support during periods of change or transition. Respond to data requests and inquiries related to regulatory and policy proceedings.
- Lead general outreach in coordination with programs and contracted resources to increase regional awareness, facilitate connection to offers and services, identify project opportunities through community planning processes, and expand participation in diverse and underserved communities and customer groups.
- Use a variety of research methods and contracted resources to gain customer and market insights that support initiatives for engaging diverse and underserved customer groups.
- Based on research, implement educational strategies—including community education, public service announcements and education-focused content on website—to expand customer awareness and participation over time.
- Apply Diversity, Equity and Inclusion Lens to activities that have significant impact on how we reach and engage customers. Learn and adapt based on observations.
- Drive innovation online to reduce costs and better serve customers and stakeholders with targeted resources and with easier online transactions using digital signatures and other tactics.
- Increase knowledge of stakeholder interactions through adoption of Stakeholder Relationship Management system.

2018 Activities—Ongoing

Communicate benefits and results

- Leverage media interest to increase customer awareness of the value of energy efficiency, renewable energy and Energy Trust as a resource.
- Deliver quarterly and annual public reports, preliminary annual report, utility reports and data analysis. Improve reporting tools for recurring data requests; continue focus on data integrity and utilization.

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Plans General Communications and Outreach

- Deliver organizational communications, including presentations, public meeting notes and budget outreach communications.
- Respond to inquiries from the OPUC, legislators, stakeholders, media, customers and others. Prepare brief summaries and support spokespersons on topics of recurring interest.
- Inform stakeholders through regular communications and information sessions on Energy Trust results, benefits and value to customers.
- Serve as resource to board and executive director. Coordinate executive director trips across service territory to meet with stakeholders, customers and public.

Connect customers and stakeholders to services through efficient operations

- Maintain regionally based staff in Eastern and Southern Oregon, serving as a resource to community, business, local governments and public sector stakeholders. Leverage local efforts and partnerships to spur participation in Energy Trust programs.
- Identify, review and approve requests for sponsorships, event participation and Energy Trust memberships.
- Support “Making Energy Work in Rural Communities” workshops in select communities.
- Provide financial support for locally based Resource Assistance for Rural Environments (RARE) interns as they continue energy planning and efforts leading to project activity; tap program resources and evaluate impact.
- Support efforts to expand participation by leading and sharing customer insights research, guiding marketing strategy and tactics, and implementing communications and outreach activities.
- Support energy efficiency and renewable energy program marketing and communications through centralized production design, creative services management, bulk email, media purchasing and relationships, and brand guidelines.
- Maintain and enhance the organization’s website, campaign microsites, social media accounts and bulk email platform, using best practices to ensure the best digital customer experience.
- Support the design and development of online self-service tools to increase operational efficiency and boost customer satisfaction. Lead maintenance and development of electronic customer application forms.
- Continue support for Customer Relationship Management (CRM) or other system enhancements that support effective targeted marketing, enable transactional email with customers, capture stakeholder information and improve reporting analytics.
- Maintain efficient and effective processes for reporting, advertising procurement and tracking, collateral development, website and forms updates, targeted email and newsletter distribution, and other support functions.
- Collaborate with programs and IT to explore and implement systems and strategies that support future targeted marketing needs.

Support organizational communications and initiatives

- Provide communications, outreach and marketing leadership on Diversity, Equity and Inclusion team.
- Provide project management, change management and other expertise to support cross-organization projects and teams, including utility-specific targeted demand-side management projects and a cross-program low-income coordination group.

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Plans General Communications and Outreach

- Continually improve presentation resources and staff representation of Energy Trust.
- Support internal communications.

2018 Activities—New

- Coordinate with residential sector as they expand capacity to reach underserved communities through contracts with community-based organizations. Identify and address gaps in general outreach.
- Use a variety of methods—including contracting with community-based organizations and businesses with specific expertise reaching underserved communities—to gain customer insights, market insights and baseline data that support initiatives for engaging diverse and underserved customer groups.
- Collaborate with IT and programs to explore methods for collecting, tracking, analyzing and reporting on customer demographic information so that the organization can track on awareness and participation metrics for underserved customer and contractor groups.
- Based on 2016 and 2017 research findings, reduce overall advertising investment and increase outreach and event marketing, while optimizing advertising to reach customers in all service territories.
- Complete marketing pilots targeted for Latino communities; review effectiveness and adjust and scale activity as needed.
- Develop education-focused web content for consumers who need additional information before taking action, and develop a campaign that drives to that content.
- Launch functionality in CRM system to allow for tracking stakeholder interactions; ensure user adoption.
- Build on success of previous LivingWise school curriculum by offering an in-class educational tool as a field test for school engagement activities in the 2017-2018 school year.
- Procure a third-party platform to provide digital transaction management services and enhance project efficiency with a trial implementation for several key processes.
- Launch redesigned online trade ally finder with a more intuitive, user-friendly interface based on 2016 market research.
- Deliver communications and outreach support for new or modified program offerings, such as manufactured home replacement, home scoring, community solar, residential sector and significant incentive changes.
- Participate in early planning and outreach for the 2020-2024 Strategic Plan, including delivery of topical content to the board of directors supporting understanding of stakeholders and potential community engagement approaches.

2018 Key Assumptions, Risks and/or Challenges

- The 2018 short legislative session will result in data requests and engagement at a level similar to past sessions, providing periods of increased work for communications and outreach staff.
- Energy-related policy decisions driving changes to programs or creating new opportunities related to our mission, including OPUC dockets and legislative actions, will require communications support and responsiveness to data requests. Potential policy decisions driving solar program changes will require Communications and Customer Service resources for communications and project management.

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Plans General Communications and Outreach

- Residential transition activities will primarily be addressed in 2017 with some remaining activity in Q1 2018.
- Resources to support operational changes, project needs and enhancements will need to be prioritized to determine timing and resource availability.

2019 Expected Changes

- Adapt and refine communications, outreach, marketing and online approaches based on changes in delivery of services to customers and market, opportunities to engage stakeholders, and systems improvements that enable process efficiencies or new functionality.
- Support stakeholder engagement and communications related to development of 2020-2024 Strategic Plan.

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
ETO expenses				
Staffing	1,717,405	1,674,489	1,923,311	2,002,010
Marketing	762,000	648,000	668,000	598,000
Other Services	659,000	609,000	698,000	648,000
General	79,000	77,500	93,500	93,500
Allocations	666,126	666,734	774,734	730,943
Total Expense	3,883,531	3,675,723	4,157,545	4,072,453

Plans Customer Service and Trade Ally

Customer Service and Trade Ally Description (Housed in Communications and Customer Service Group)

Energy Trust's Communications and Customer Service group provides staff, services and resources to administer and manage customer experience and the trade ally network. Communications and Customer Service supports customer access to information, services and cash incentives to support a consistent and positive customer experience, and contractor access to offers, training and customer leads. This is accomplished by working with programs and operational support groups on standards, training and strategic planning to support customers and a network of informed contractors with high-quality customer service.

The Customer Service and Trade Ally team delivers services through staff based in Communications and Customer Service, a call center contract for call-taking and administrative services, a trade ally insurance verification contract, and coordination across all Energy Trust business functions. Staff also coordinate with customer service and trade ally specialists at program delivery contractors.

2018 Strategic Focus

- Enhance and expand knowledge of Trade Ally Network through research, improved data collection, documentation of procedures, and creation of standardized reports.
- Ensure rural, minority- and women-owned businesses are aware of and access to the Trade Ally Network through outreach. Establish target goals for participation.
- Support programs in developing and understanding the value of ally membership and our programs for customers and contractors in a dynamic market with potentially decreasing incentives and program changes.
- Expand customer awareness of Energy Trust's ally network throughout our service territory to help drive savings and lower customer acquisition costs for contractors.
- Seek operational efficiencies across all functional areas through examination of core processes and identification of long-term customer experience goals, key performance metrics and support service needs; leverage residential changes for streamlining of processes and enhancements to customers and contractors.

2018 Activities—Ongoing

Systems and data

- Collaborate with forms manager and program staff to improve user experience for paper and online customer application forms and to ensure timely updates and maintenance of forms.
- Continue support for customer relationship management (CRM) system enhancements.
- Enhance e-communications targeting trade allies including the Insider newsletter.

Trade Ally Network

- Support redesign of web-based Trade Ally Finder through serving on the project team.
- Administer the Trade Ally Network, in alignment with program strategies, to ensure compliance and contractor access to program and technical information; communicate updates through forums, newsletters and other targeted communications.

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Plans Customer Service and Trade Ally

- Enhance trade ally online enrollment process to include new ally types and sub-programs.
- Work with programs to assess need and potentially expand the star rating to sectors other than residential and solar.

Customer experience and outreach

- Continue gaining insights from existing research and conduct additional market research to fill gaps in knowledge.
- Support the design and development of customer and ally online self-service tools to increase program operational efficiency and boost customer awareness and satisfaction.
- Provide strategic direction and guidance to programs and business functions to ensure high-quality customer service. Convene customer service staff from all business functions to ensure continuous process improvements and exceptional service to customers.
- Assist programs with strategic planning, communications and complaint resolution during planned measure or program design changes affecting customers or trade allies.
- Maintain general call center customer services and Interactive Voice Response system (IVR). Continue monitoring IVR system implemented in 2016 for customer experience and expected data and operational efficiencies.

2018 Activities—New

Systems and data

- Work with programs and IT to build a means to track projects completed by minority- and women-owned businesses, and other attributes, and develop strategies for increasing the number of projects submitted by minority- and women-owned businesses.
- Lead effort to consolidate trade ally data into a self-service Power BI dashboard through collaboration with the data warehouse team.
- Participate in Project Tracker forecast and project opportunities team to support requirements gathering, development of user interface and to serve as a change management resource.
- Determine, based on 2017 research, enhancements or changes to residential trade ally portal.
- Collaborate with programs to explore opportunities to expand lead generation services, similar to the current solar process, to efficiency programs.

Trade Ally Network

- Expand forums in rural and coastal areas to allow for trade ally outreach and training, and to improve contractor participation.
- Establish a goal to increase participation in Trade Ally Network by minority- or women-owned businesses.
- Continue work to assess potential outreach efforts, memberships and relationships that could support increasing the diversity of the Trade Ally Network, including women- and minority-owned businesses. Support outreach activities and track on progress to established goals.
- Examine Trade Ally Network enrollment requirements and ensure administration of the network provides access to all businesses seeking to serve Energy Trust customers.
- Explore a soft cost reduction strategy for Trade Ally Network.

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Plans Customer Service and Trade Ally

- Drive improvements to trade ally star rating, in collaboration with programs, to review scoring scale and methodology and maintain consistency across programs.

Customer experience and outreach

- Share findings from internal interviews on customer experience enhancements and goals.
- Complete transitions in residential sector, ensuring efficient customer and contractor operations.

2018 Key Assumptions, Risks and/or Challenges

- Customer interest in simplified, online and self-service options will continue, resulting in a need to be aware of best practices, stay current in service options and work closely with IT on long-term planning.
- Challenges to cost-effectiveness are likely to continue for many of incentives and offerings, requiring Energy Trust to continuously adapt and evolve to ensure value to our ally network and customers.
- Changes to program design, such as increased upstream incentives, will impact the customer and contractor experience. More resources will be required to support trade allies and articulate Energy Trust's value and benefit to trade allies.

2019 Strategic Focus

- Lead process improvement or customer experience initiatives that benefit business operations.
- Support changes to customers and contractor services as we work in new markets or adapt program design.

	2017 Budget	2017 Projection	2018 Budget	2019 Projection
Staffing	521,826	435,035	386,639	415,156
Marketing	1,000	1,000	1,000	1,000
Other Services	43,558	31,558	60,500	44,500
General	218,050	177,050	211,950	205,550
Allocations	155,540	116,297	126,243	116,107
TOTAL EXPENSE	939,974	760,940	786,332	782,313

Plans Planning and Evaluation

Planning and Evaluation Group Description

The Planning team develops forward-looking estimates of efficiency program costs and savings. The team works with utilities to develop forecasts for long-range savings and cost goals. The team also updates avoided costs; develops cost-effectiveness tools; provides planning support to renewables team; helps develop long- and short-term plans; works with program groups to integrate plans into program strategies, including projects to defer utility investments in local transmission and distribution; serves as a central point of coordination on market research; and manages savings and cost-effectiveness reporting.

The Planning Engineering team oversees the measure development process and acts as quality control agent for Energy Trust's estimates of measure energy savings, cost and cost-effectiveness. This group also coordinates the integration of emerging technologies into Energy Trust markets and programs.

The Evaluation team assesses the effectiveness of efficiency and renewable energy program implementation, and estimates savings and generation on a retrospective basis. Evaluation also manages the integration of new efficiency measures into Energy Trust's IT system and manages complex datasets for Energy Trust.

2018 Strategic Focus

- Refine ability to demonstrate Energy Trust's value in an evolving utility system and aid utilities in grid and gas system management—both total system and local—in addition to reducing overall electricity and gas requirements.
- Support programs evolution to adopt new measures and approaches to acquire savings after markets are transformed and some historical sources of savings are no longer available.
- Help utilities plan for the possible range of efficiency resources available in the future as technologies and grid needs evolve.
- Support exploration of strategic issues in preparation for the 2020-2024 Strategic Plan.
- Refine organization-wide planning, evaluation and other processes, including emerging technology development, measure development, pilot development and implementation, and use of data to target and reach all eligible customers and incorporating new savings approaches.

2018 Activities—Ongoing

- Deliver enhanced energy efficiency supply and cost estimates for use in integrated planning processes for the five utilities that fund Energy Trust.
 - Refine estimation process for valuing peak savings from efficiency measures.
 - Provide a broader range of energy savings estimates to reflect the possibility of additional savings from emerging technologies, behavioral approaches and broader application of advanced building practices.
 - Communicate with stakeholders to provide transparency on forecast modeling, and gather feedback on how to improve methods.

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Plans Planning and Evaluation

- Develop benefit/cost sensitivity analysis tools for use in the budget process.
- For Energy Trust standard and other reports, provide analysis and summarize savings, generation and economic performance. Lead discussion with regulators and stakeholders on the role of savings attribution in setting and tracking against goals.
- Develop and update measures as needed.
- Expand capability to utilize energy efficiency and renewable energy to reduce the cost of operating the grid.
 - Improve estimates of peak reduction from energy efficiency savings and renewable generation.
 - Continue technical analysis and support for two Pacific Power transmission and distribution deferral pilots and one or more NW Natural pipeline deferral pilots. Respond to opportunities for similar pilots with other utilities.
 - Complete process evaluations of transmission and deferral pilots, and start evaluating other similar pilots, as needed.
 - Draw lessons about requirements for success for these efforts, and determine applicability of specific analytic techniques and value of various resources.
 - Develop improved energy savings load shapes for selected measures that more accurately reflect summer peak savings, using prior metering and analysis.
 - Support regional End Use Load Research project, and use first data from additional metered sites to increase understanding of load shapes of energy savings.
 - Explore tools for identifying differential value of savings and generation at different locations across the grid.
 - Coordinate with utilities and Energy Trust programs to help utilities accomplish their demand response goals.
- Assist the renewable energy sector in analyzing and assessing specific renewable energy investments.
- Deliver impact evaluations of savings from all major efficiency programs and select renewable energy programs. Adjust methods to reflect increased importance of peak savings and generation.
- Conduct process evaluations on a periodic basis for all major programs.
 - Increase emphasis on evaluating success at reaching under-served markets and using data to target underserved and high-yield markets.
 - Develop, test and refine datasets that support targeted marketing to high-savings-yield and high potential under-served markets.
- Explore areas of expanded service if opportunities arise (e.g., further support for utility grid management programs).
- Streamline and integrate processes, including the pilot process and the measure maintenance and approval process.
- Broaden initiatives to work with built-in data loggers and/or communications for advanced equipment (lighting fixtures, HVAC equipment and water heaters) and service providers using that data to ensure that operations are efficient.
- Support ongoing market research and development.
- Use evaluation results and other intelligence to true up energy savings recorded in systems.
- Possibly release new avoided costs for 2019 measure and program planning, depending on whether utilities and OPUC identify value of seasonal peaks.

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Plans Planning and Evaluation

2018 Activities—New

- Develop and expand activities started in 2017, which represent the tip of several icebergs of work, which will engage us heavily in 2018.
- Use information from the new Regional Emerging Technology Advisory Committee process and regional project list to inform the development of pilots, field tests and measures by Energy Trust programs.
- Help integrate customer-centered design into Energy Trust initiative development processes.

2018 Key Assumptions, Risks and/or Challenges

- Energy Trust has achieved, or will shortly achieve, market transformation or saturation for many key efficiency measures, especially for efficiency in homes. New efficient technologies either have more modest savings and applicability, are far more costly, or are highly uncertain and will take some time to reach the market. Yet Energy Trust has exceeded savings goals consistently in recent years. This creates significant uncertainties about future savings and costs.
- Success in improving planning processes—both for local areas with transmission, distribution and pipeline constraints and system-wide constraints—depend on effective engagement with and support from the five utilities and two regulator commissions who serve our customers.
- Refinements to avoided cost forecasts depend on utility/regulatory agreement on methodologies to deal with uncertainty regarding future technologies, and to value summer versus winter peak and other details of power forecasting.
- The measure development process requires coordination between regionally coordinated emerging technology work, the Planning group, program managers and Program Management Contractors. Success is dependent on our ability to communicate, identify crucial research, set priorities and coordinate activities.

2019 Expected Changes

- Work on the upcoming strategic plan will transition to implementation and metrics
- Begin to standardize approach to using efficiency and renewable energy to reduce costs of grid and gas system.
- Draw inferences from last few years of emerging technology development work to assess what augmentation of the conservation supply is possible.
- As part of region, make decisions regarding the future role of Northwest Energy Efficiency Alliance for gas and electric efficiency and for grid management.

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Plans Planning and Evaluation

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Program Specific P&E				
Evaluation Services	2,030,000	1,302,340	3,081,074	2,661,072
Planning Services	378,300	360,735	382,000	376,000
Other	7,000	11,900	7,000	7,000
Total Program Specific P&E	2,415,300	1,674,975	3,470,074	3,044,072
Non Program Specific P&E				
Evaluation Services	170,000	172,000	155,000	130,000
Planning Services	160,000	237,568	410,000	410,000
Staffing	1,850,121	1,687,674	1,852,595	1,979,683
Other Services	150,000		100,000	100,000
General	60,950	64,225	109,038	109,088
Allocations	563,802	525,889	570,864	525,028
Total Non Program Specific P&E	2,954,873	2,687,356	3,197,497	3,253,799
GRAND TOTAL	5,370,173	4,362,331	6,667,571	6,297,871

Plans Information Technology

Information Technology Group Description

The Information Technology (IT) group builds technical mastery and continuously improves and enhances systems to deliver business value in collaboration with engaged product owners and users. The group builds and utilizes professional and technical skills to provide effective and efficient IT resources required by each energy program and operational support group. IT resources include hardware, infrastructure, information systems, reporting capabilities and technical support.

2018 Strategic Focus

- Enhance foundational systems including Project Tracking (PT), Customer Relationship Management (CRM) and web services.
- Revise data and reporting infrastructure to accommodate changing data and reporting needs from the business, including new visual presentation tools for data.
- Continue migration of applications to the cloud-computing environment.
- Build out performance monitoring tools that proactively assess health of computing resources.

2018 Activities—Ongoing

- **IT staff time allocation:** Maintain general distribution of IT staff time:
 - Operations support, administrative, professional development and outreach: 30 percent
 - Technical debt and upgrades: 30 percent
 - Enhancements and projects: 40 percent
- **Operations support:** Offer technical support and consultation for hardware and applications.
- **Help desk:** Utilize a centralized model for intake, tracking and resolution of user help requests.
- **System and hardware updates:** Deploy software updates and patches to desktop applications, operating systems, and preventative and emergency hardware replacement.
- **Backup and recovery:** Create nightly backups of email, files and data that staff can restore as needed to recover from various potential data-loss scenarios.
- **Bug fixes:** Develop fixes to reported bugs in PT and CRM.
- **Relieve technical debt:** Develop changes to improve underlying architecture of IT systems, removing known issues that impede performance, flexibility or robustness of systems.
- **Enhancements to PT, CRM and Business Intelligence (BI):** Develop systems changes to address reported user needs as prioritized by the Business Systems Prioritization Team.
- **Support for Business Systems Prioritization Team:** Consult with members of team in assessment of enhancements, including technical analysis.
- **IT Steering Committee:** Rely on IT Steering Committee to allocate IT resources among large projects and enhancements.
- **Professional development:** Support staff development of mastery of areas of technology that improve Energy Trust systems or IT processes.
- **Use external resources to increase capacity:** Bring in external development resources to supplement staff.

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Plans Information Technology

2018 Activities—New

- **Migrate select applications and services to the cloud:** Move some applications to the cloud and investigate the potential of moving others.
 - Applications most likely to move to the cloud:
 - Microsoft Office 365
 - SharePoint
 - Microsoft CRM
 - SQL Reporting database
 - Applications to investigate move to the cloud:
 - Project Tracking (PT)
 - Additional databases
 - File share
- **Complete migration of import service to version 2 web services:** Various applications and vendors use the import service to send bulk data into Energy Trust systems. All import services will be migrated to use V2 web services.
- **Revise our approach to reporting data:** Based on feedback from staff interviews in 2017, restructure how we surface views of data to users, improve the quality control process for data through “sanctioned datasets” and support the introduction of Microsoft PowerBI for dashboards, reporting and visual presentation.
- **Enable demographic data capture and analysis:** Update systems to support evolving needs of the organization to better collect, track, analyze, and report on demographic information related to program participation and Trade Allies.
- **Upgrade Microsoft Dynamics Great Plains:** Upgrade financial software to the latest version.
- **Update forecasting functionality in PT:** Enhance system to eliminate duplicate project data entry and improve organizational ability to report on forecasted projects.
- **Integrate reversal process into PT:** Add functionality to PT to track stages of reversals and other corrections to transactions. Changes will streamline the process and allow easier root cause analysis to reduce future corrections.
- **Integrate measure maintenance and approval process into PT:** Add functionality to PT to track and archive all documents and approvals related to measure approval and maintenance, replacing the current manual process.
- **Revise approach to file sharing.** As part of ongoing focus on security, staff will explore how to protect file server documents while allowing for file sharing and collaboration.

2018 Key Assumptions, Risks and/or Challenges

- **Significant backlog of systems enhancement requests:** We currently have backlogs for CRM and PT enhancements that represent more than two years of work with current staff levels. We are approaching this challenge in several ways. First, we are working with the business to create clearer estimates of the cost of each enhancement for them to better assess value, drop enhancements with limited value, and prioritize the enhancements with the highest value. Second, we plan to include sprints between major projects dedicated solely to enhancements to give this area more focus. Third,

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Information Technology

we will propose an increase in our contract staff budget to increase our throughput of enhancement work.

- **No significant changes will be needed to track program activities:** Programs will continue to track CRM and PT activities the same as in 2017.
- **IT job market in Portland will remain competitive:** There is significant demand for skilled IT professionals in the Portland market, which makes staff retention and hiring challenging.
- **Limit maximum number of IT projects:** In past years, staff found it challenging to balance multiple development projects at the same time. Managing more than two or three projects at once overwhelms the small team's ability to make progress due to frequent context switching. Sequencing development needs will continue to be an important aspect in addressing this challenge.

2019 Expected Changes

- Complete the migration of resources and applications to the cloud-computing environment.
- Modify systems and architecture based on a year of performance monitoring results.
- Extend proactive approach to assessing improvement to PT and CRM by working closely with business users to understand ongoing work processes.

	2017 Budget	2017 Forecast	2018 Budget	2019 Projection
Staffing	2,176,918	2,124,643	2,626,503	2,557,459
Other Services	35,000	35,000	180,000	22,000
Supplies and Equipment	78,450	73,450	135,350	101,450
Software	137,700	107,700	195,429	227,290
Depreciation	875,624	745,221	390,582	342,639
General	110,200	72,400	98,000	98,000
Allocations	179,107	177,629	181,682	177,447
Total General	1,381,081	1,176,400	1,001,043	946,826
Total Expense	3,592,999	3,336,043	3,807,546	3,526,285

Diversity, Equity and Inclusion

Diversity, Equity and Inclusion Initiative Description

Energy Trust strives to create a more diverse, equitable and inclusive organization to effectively serve our existing and expanding customer base. Energy Trust's Diversity, Equity and Inclusion Initiative spans all groups and activities in the organization. The DEI Initiative grew out of Energy Trust's 2015-2019 Strategic Plan, which prioritized expanding participation and improving operations.

The initiative seeks to:

- Inform and shape all aspects of our day-to-day work.
- Find eligible customers to participate in, benefit from and contribute to our results.
- Develop a supportive culture for diverse employees to work together.
- Engage diverse customers and contractors through program participation and contracting for goods and services, including contracting for program management and delivery services.
- Expand customer insights to inform programs and organization.
- Measure progress.

This initiative action plan document is provided as a summary of activities embedded in program, support and executive action plans and budgets. The information and budget figures provided below are not a comprehensive accounting of all Diversity, Equity and Inclusion activities or investments.

2018 Strategic Focus

- Energy Trust will adopt an initial organization-wide Diversity, Equity and Inclusion Operations Plan to guide and structure Diversity, Equity and Inclusion efforts.
- Energy Trust will focus on Diversity, Equity and Inclusion goals and objectives to drive program design and organization operations.
- Energy Trust will apply a Diversity, Equity and Inclusion Lens to ensure Diversity, Equity and Inclusion concepts are considered in making decisions. The lens is a set of questions to think through and ensure Diversity, Equity and Inclusion is considered at all stages of decision-making.
- Energy Trust staff will continue to learn about and better serve Oregon's increasingly diverse and dynamic customers and communities.

2018 Activities—Ongoing

Diversity, Equity and Inclusion Specific

- Establish and provide administrative support for Diversity, Equity and Inclusion team and creation of Diversity, Equity and Inclusion Operations Plan.
- Engage community-based organizations to seek insights, data and guidance on approaches.
- Promote Diversity, Equity and Inclusion organizational readiness activities for Energy Trust staff.

Energy Programs

- Develop and deepen relationships with organizations that reach and serve diverse customer groups.
- Analyze market and program participation data to identify key areas of opportunity, and refine messaging based on market segment and region.

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Diversity, Equity and Inclusion

- Develop outreach tactics for customer groups with lower participation rates, such as customers outside of the Portland Metro area and continue an emphasis on reaching a diverse set of customers, including size, type and location.
- Maintain account management approach with Program Management Contractor business development representatives who conduct direct outreach to property owners and managers, including dedicated representatives located outside of the Portland Metro area.
- Increase trade-ally driven program activity through enhanced trade ally support, one-on-one engagement and educational resources, and encouraging business development funds.
- Dedicate outreach and contractor recruitment resources to promote participation of minority- and women-owned businesses in Energy Trust's Trade Ally Network.
- Provide rural outreach and services to farmers, irrigators and their vendors, including collaborating with other agencies and nonprofits.
- Expand the delivery of energy-efficiency workshops for multifamily customers, presenting relevant information based on market segment and region.
- Maintain Savings Within Reach incentives for income qualified (moderate-income) homeowners reduce the up-front cost of energy upgrade projects. Incentives are paid to the trade ally and passed onto customers through lower up-front project costs. An on-bill loan repayment option is also available for customers of PGE, Pacific Power and NW Natural.
- Coordinate with Oregon Housing and Community Services, Community Action Partnership of Oregon and agencies serving low-income populations to develop energy-saving strategies.
- Use Energy Saver Kits as a customer engagement tool. Customers can order Energy Saver Kits from Energy Trust's website at no cost, including energy-saving LEDs, showerheads and faucet aerators.

Management and General (Executive, Finance and Human Resources, Legal)

- Invest in staff development to support managers and employees in developing critical skills and competencies needed to achieve strategic goals, broaden workforce capacity and retain high performing staff.

General Communications and Outreach

- Support efforts to expand participation by leading and sharing customer insights research, guiding marketing strategy and tactics, and implementing communications and outreach activities.
- Provide communications, outreach and marketing leadership on Diversity, Equity and Inclusion team.

2018 Activities—New

Diversity, Equity and Inclusion Specific

- Provide training and support for initial Diversity, Equity and Inclusion Operations Plan, including Diversity, Equity and Inclusion Goals and Objectives and use of Diversity, Equity and Inclusion Lens.
- Support implementation of board-level Diversity, Equity and Inclusion policy.
- Develop systems and process for demographic data collection and use.
- Support board of directors efforts to increase diversity of board members.

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Diversity, Equity and Inclusion Energy

Programs

- Apply Diversity, Equity and Inclusion Lens to activities that have significant impact on program design, delivery and management. Learn and adapt based on observations.
- Use data analytics to identify areas with high savings opportunities and lower participation rates.
- Refine program design and outreach strategies by incorporating lessons learned from market analysis and data-driven program outreach.
- Conduct research to identify opportunities to increase participation in specific market sectors.
- Dedicate outreach and contractor recruitment resources to promote participation of minorities and women in Energy Trust's Trade Ally Network.
- Establish relationships with organizations that focus on businesses representing diverse communities.
- Contract with community-based organizations to ensure residential offers and promotions engage underserved communities, in coordination with Communications and Customer Service. Contracted activities may include advising PMCs on best practices to engage customers and/or delivery of services.
- Add New Buildings Market Solutions offering for public sector facilities and low-income multifamily buildings, including features that help overcome barriers to energy efficiency faced by nonprofit developers building affordable housing.
- Solicit input from stakeholders on proposed strategies for increasing solar adoption in low- and moderate-income communities. With support from a U.S. Department of Energy grant, collaborate with the Clean Energy States Alliance and six other states to identify and prioritize strategies to increase access to solar for low- and moderate-income communities.
- Design and test a solar incentive offer for moderate-income customers in owner-occupied, single-family homes.
- Evaluate tools for measuring baseline adoption of solar by customer demographic and identify opportunities for increased access.

Management and General (Executive, Finance and Human Resources, Legal)

- Support Energy Trust's Diversity, Equity and Inclusion goals through enhanced recruitment, hiring, and retention strategies aimed at diversifying Energy Trust's workforce.
- Apply Diversity, Equity and Inclusion Lens to activities that have significant impact on recruiting, hiring and retention. Learn and adapt based on observations.

General Communications

- Lead general outreach in coordination with programs and contracted resources to increase regional awareness, facilitate connection to offers and services, identify project opportunities through community planning processes, and expand participation in diverse and underserved communities and customer groups.
- Use a variety of research methods and contracted resources to gain customer and market insights that support initiatives for engaging diverse and underserved customer groups.
- Apply Diversity, Equity and Inclusion Lens to activities that have significant impact on how we reach and engage customers. Learn and adapt based on observations.

Approved 2018-2019 Initiative Action Plan

Diversity, Equity and Inclusion

Customer Service and Trade Ally

- Develop an approach to increase participation in the Trade Ally Network by minority- or women-owned businesses, and projects submitted by minority- and women-owned businesses.
- Assess current events, memberships and relationships that support increasing the diversity of the trade ally network, including women- and minority-owned businesses.
- Focus outreach efforts to increase interest and participation by rural, minority- and women-owned businesses interested in joining the Trade Ally Network.
- Examine Trade Ally Network enrollment requirements to ensure access to all businesses seeking to serve Energy Trust customers.
- Apply Diversity, Equity and Inclusion Lens to activities that have significant impact on customer service and Trade Ally Network management. Learn and adapt based on observations.

Planning and Evaluation

- Apply Diversity, Equity and Inclusion Lens to planning and evaluation activities, and contracts. Learn and adapt based on observations.

Information Technology

- Build a means to collect, track and analyze demographic data about customers to develop baselines and measure progress against Diversity, Equity and Inclusion Goals for customer participation.
- Build a means to track projects completed by minority- and women-owned businesses to develop baselines and measure progress against Diversity, Equity and Inclusion Goals for Trade Ally Network participation.

2018 Key Assumptions, Risks and/or Challenges

- Outreach to community-based organizations may increase stakeholder feedback on Diversity, Equity and Inclusion efforts. This is an opportunity to learn and build on information received, but also a risk.
- In implementing an initial Diversity, Equity and Inclusion Operations Plan, Energy Trust may be challenged to achieve the plan's initial goals. The Diversity, Equity and Inclusion Operations Plan will require a continuous learning feedback loop, and goals, objectives, and strategies may evolve based on learning.

2019 Expected Changes

- Continuous learning and feedback will occur, and changes to the Diversity, Equity and Inclusion Operations Plan should be expected based on experience.
- Relationships with community-based organizations will inform our efforts in 2018, and these relationships could result in different program design ideas and consulting arrangements.

Approved 2018-2019 Initiative Action Plan

Diversity, Equity and Inclusion

Start Up expenditures in support of Diversity, Equity and Inclusion

The budget figures provided below represent discreet startup expenditures only. Incentives, contract costs, and other expenditures which benefit diverse participants are embedded throughout the organization and not called out separately in this budget.

	2018	2019
Community outreach	\$62,000	\$32,000
Customer research and data collection	\$157,000	\$147,000
Development and support of new DEI Advisory Council	\$100,000	\$75,000
Organization readiness, support and training	\$233,500	\$169,500
TOTAL	\$552,500	\$423,500

2017 Budget Recap Spending and Savings - R3: Reforecast

ENERGY EFFICIENCY

	BUDGET (\$M)			ELECTRIC		GAS	
	ELECTRIC	GAS	TOTAL	ELECTRIC SAVINGS GOAL (aMW)	Levelized Cost per kWh (in cents)	Annual Therms	Levelized Cost per Therm (in cents)
Commercial							
Business Energy Solutions – Existing Buildings	41.0	4.0	45.0	14.7	3.0	1,125,349	34.71
Business Energy Solutions – Multifamily	8.4	1.2	9.6	1.9	4.6	171,585	70.18
Business Energy Solutions – New Buildings	17.2	2.2	19.5	6.1	2.8	897,658	19.99
Mkt Transformation (Alliance)	2.5	0.3	2.8	1.9	2.6		
Total Commercial	69.2	7.7	76.9	24.6	3.0	2,194,592	31.59
Industrial							
Production Efficiency	34.2	2.7	36.9	16.5	2.3	1,112,759	21.42
Mkt Transformation (Alliance)	0.2	0.0	0.2	0.1	3.8		
Total Industrial	34.4	2.7	37.1	16.6	2.3	1,112,759	21.42
Residential							
Home Energy Solutions – Residential	39.0	11.5	50.4	17.4	2.3	2,965,574	29.00
Mkt Transformation (Alliance)	4.5	0.8	5.3	5.7	0.9		
Total Residential	43.5	12.2	55.7	23.1	2.0	2,965,574	30.92
Washington							
Business Energy Solutions – Existing Buildings		0.8	0.8			146,876	53.40
Home Energy Solutions – Existing Homes		1.2	1.2			206,796	43.90
Mkt Transformation (Alliance)		0.1	0.1				
Total Washington		2.2	2.2			353,672	49.06
Total Energy Efficiency	\$147.1	\$24.8	\$172.0	64.2	2.5	6,626,596	30.49

RENEWABLE RESOURCES

	ACTIVITY BASIS		ACCOUNTING BASIS		ACTIVITY BASIS		ACCOUNTING BASIS	
	BUDGET (\$M)		BUDGET (\$M)	ELECTRIC GENERATION GOAL (aMW)	(\$mils/ aMW)	ELECTRIC GENERATION GOAL (aMW)	(\$mils/ aMW)	
Other Renewables	5.3		5.6	1.32	4.06	1.89	2.94	
Solar Electric	9.3		12.4	2.67	3.49	1.89	6.54	
Total Renewable Resources	14.6		17.9					

TOTAL BUDGET - ALL

\$189.9

* some columns may not add due to rounding

ENERGY TRUST OF OREGON
Income Statement by Service Territory
2017 Forecast

	ENERGY EFFICIENCY							Oregon Total	NWN WA	ETO Total
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista			
REVENUES										
Public Purpose Funding	29,538,752	22,997,376	52,536,128	-	18,714,900	3,129,325	1,036,869	75,417,223	0	75,417,223
Incremental Funding Contributions	65,333,595	35,518,465	100,852,060	5,920,596				106,772,656	2,020,834	108,793,490
Revenue from Investments										
TOTAL PROGRAM REVENUE	94,872,346	58,515,841	153,388,188	5,920,596	18,714,900	3,129,325	1,036,869	182,189,878	2,020,834	184,210,712
EXPENSES										
Program Management (Note 3)	3,463,615	1,869,124	5,332,741	127,745	614,182	58,770	40,340	6,173,778	123,466	6,297,244
Program Delivery	27,052,726	16,031,736	43,084,462	758,233	4,825,464	543,546	262,284	49,473,990	498,542	49,972,532
Incentives	52,730,995	28,904,039	81,635,035	2,187,694	8,710,073	979,351	543,031	94,055,182	1,071,936	95,127,118
Program Eval & Planning Svcs.	2,125,233	1,206,710	3,331,939	63,259	348,782	35,570	22,404	3,801,952	163,179	3,965,131
Program Marketing/Outreach	2,675,908	1,544,924	4,220,830	24,014	744,602	55,362	50,984	5,095,791	103,832	5,199,623
Program Legal Services	-	-	-	-	-	-	-	-	-	-
Program Quality Assurance	41,282	24,367	65,649	-	17,231	1,033	1,087	85,000	-	85,000
Outsourced Services	851,931	482,151	1,334,081	18,922	245,778	17,506	15,462	1,631,750	36,550	1,668,300
Trade Allies & Cust. Svc. Mgmt.	339,493	190,157	529,648	5,348	98,326	7,406	6,341	647,070	34,640	681,710
IT Services	978,195	531,363	1,509,559	25,807	215,310	19,021	14,057	1,783,757	38,348	1,822,105
Other Program Expenses - all	279,648	157,041	436,689	11,712	49,070	4,874	3,135	505,481	47,101	552,582
TOTAL PROGRAM EXPENSES	90,539,026	50,941,612	141,480,633	3,222,734	15,868,818	1,722,439	959,125	163,253,751	2,117,594	165,371,345
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	1,790,001	1,007,141	2,797,141	63,715	313,736	34,053	18,961	3,227,606	41,866	3,269,472
Communications & Customer Svc (Notes 1 & 2)	1,822,386	1,025,362	2,847,747	64,868	319,411	34,671	19,307	3,285,998	42,623	3,328,621
Total Administrative Costs	3,612,387	2,032,503	5,644,888	128,583	633,147	68,724	38,268	6,513,604	84,489	6,598,093
TOTAL PROG & ADMIN EXPENSES	94,151,413	52,974,115	147,125,521	3,351,317	16,501,965	1,791,163	997,393	169,767,355	2,202,083	171,969,438
TOTAL REVENUE LESS EXPENSES	720,933	5,541,726	6,262,667	2,569,279	2,212,935	1,338,162	39,476	12,422,523	(181,249)	12,241,274
NET ASSETS - RESERVES										
Cumulative Carryover at 12/31/16	6,507,279	644,839	7,152,117	1,028,150	1,485,656	(335,865)	68,620	9,398,678	283,171	9,681,849
Change in net assets this year	720,933	5,541,726	6,262,667	2,569,279	2,212,935	1,338,162	39,476	12,422,523	(181,249)	12,241,274
Interest Attributed										
Ending Net Assets - Reserves	7,228,212	6,186,565	13,414,784	3,597,429	3,698,591	1,002,297	108,096	21,821,201	101,922	21,923,123
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	7,228,212	6,186,565	13,414,784	3,597,429	3,698,591	1,002,297	108,096	21,821,201	101,922	21,923,123
Assets Released for General Purpose										
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	7,228,212	6,186,565	13,414,784	3,597,429	3,698,591	1,002,297	108,096	21,821,201	101,922	21,923,123

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.

Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits does not allow allocation of admin costs to program expenses.

Note 3) Program Management costs include both outsourced and internal staff.

	RENEWABLE ENERGY			Other	TOTAL
	PGE	PacifiCorp	Total		All Programs
REVENUES					
Public Purpose Funding	8,702,515	6,586,018	15,288,533	-	90,705,755
Incremental Funding					108,793,490
Contributions					
Revenue from Investments				400,000	400,000
TOTAL PROGRAM REVENUE	8,702,515	6,586,018	15,288,533	400,000	199,899,245
EXPENSES					
Program Management (Note 3)	613,612	583,753	1,197,365		7,494,609
Program Delivery	274,120	205,380	479,500		50,452,032
Incentives	7,300,469	6,724,766	14,025,235		109,152,353
Program Eval & Planning Svcs.	97,469	91,148	188,617		4,153,748
Program Marketing/Outreach	103,850	88,900	192,750		5,392,373
Program Legal Services	2,026	1,974	4,000		4,000
Program Quality Assurance	-	-	-		85,000
Outsourced Services	268,004	251,371	519,375		2,187,675
Trade Allies & Cust. Svc. Mgmt.	43,196	36,034	79,230		760,940
IT Services	134,846	128,808	263,654		2,085,759
Other Program Expenses - all	155,706	139,091	294,797		847,379
TOTAL PROGRAM EXPENSES	8,993,298	8,251,225	17,244,523	-	182,615,868
ADMINISTRATIVE COSTS					
Management & General (Notes 1 & 2)	177,802	163,131	340,933		3,610,405
Communications & Customer Svc (Notes 1 & 2)	181,018	166,082	347,100		3,675,721
Total Administrative Costs	358,820	329,213	688,033		7,286,126
TOTAL PROG & ADMIN EXPENSES	9,352,118	8,580,438	17,932,556		189,901,994
TOTAL REVENUE LESS EXPENSES	(649,603)	(1,994,420)	(2,644,023)	400,000	9,997,251
NET ASSETS - RESERVES					
Cumulative Carryover at 12/31/16	7,543,333	7,376,941	14,920,274	9,271,809	33,873,932
Change in net assets this year	(649,603)	(1,994,420)	(2,644,023)	400,000	9,997,251
Interest Attributed					
Ending Net Assets - Reserves	6,893,730	5,382,521	12,276,251	9,671,809	43,871,183
Ending Reserve by Category					
Program Reserves (Efficiency and Renewables)	6,893,730	5,382,521	12,276,251		34,199,374
Assets Released for General Purpose				4,671,809	4,671,809
Emergency Contingency Pool				5,000,000	5,000,000
TOTAL NET ASSETS CUMULATIVE	6,893,730	5,382,521	12,276,251	9,671,809	43,871,183

Energy Trust of Oregon
Statement of Functional Expenses
2017 Forecast

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total
Program Expenses							
Incentives	95,127,119	14,025,235	109,152,354				109,152,354
Program Management & Delivery	56,357,642	489,500	56,847,142				56,847,142
Payroll and Related Expenses	3,736,757	1,187,365	4,924,122	2,412,903	1,674,489	4,087,392	9,011,514
Outsourced Services	4,682,875	759,625	5,442,500	411,906	1,257,000	1,668,906	7,111,406
Planning and Evaluation	2,410,558	145,117	2,555,675	5,375	126,306	131,680	2,687,355
Customer Service Management	355,257	71,429	426,686				426,686
Trade Allies Network	326,453	17,801	344,254				344,254
Total Program Expenses	162,996,661	16,696,072	179,692,732	2,830,184	3,057,795	5,887,979	185,580,711
Program Support Costs							
Supplies	12,664	4,022	16,686	9,315	6,601	15,916	32,602
Postage and Shipping Expenses	4,320	1,490	5,810	5,024	2,074	7,098	12,908
Telephone	3,456	1,592	5,048	2,019	1,660	3,679	8,726
Printing and Publications	2,016	995	3,011	5,678	3,468	9,146	12,157
Occupancy Expenses	273,734	94,378	368,113	159,930	131,438	291,369	659,481
Insurance	31,681	10,923	42,604	18,510	15,212	33,722	76,326
Equipment	4,464	117,139	121,603	2,608	2,144	4,752	126,355
Travel	70,250	16,500	86,750	50,300	45,000	95,300	182,050
Meetings, Trainings & Conferences	39,000	21,400	60,400	46,750	12,500	59,250	119,650
Interest Expense and Bank Fees				1,800		1,800	1,800
Depreciation & Amortization	28,599	9,860	38,460	16,709	13,732	30,441	68,901
Dues, Licenses and Fees	81,531	6,200	87,731	14,294	16,500	30,794	118,525
Miscellaneous Expenses	864	298	1,162	505	415	920	2,082
IT Services	1,822,105	263,654	2,085,759	446,779	367,184	813,962	2,899,722
Total Program Support Costs	2,374,686	548,451	2,923,137	780,221	617,928	1,398,149	4,321,286
TOTAL EXPENSES	165,371,347	17,244,522	182,615,869	3,610,405	3,675,723	7,286,128	189,901,997

OPUC Measure vs. 8%

5.1%

Energy Trust of Oregon
Program Expense by Service Territory
2017 Forecast

	PGE	Pacific Power	Subtotal Elec.	NWN	Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	ETO Total
Energy Efficiency												
Commercial												
Existing Buildings	\$25,987,724	\$15,060,691	\$41,048,415	\$1,150,287	\$2,102,187	\$600,053	\$132,286	\$3,984,814	\$45,033,229	\$847,860	\$45,881,089	
Multifamily Bldgs	6,105,611	2,261,791	8,367,402		1,060,366	54,586	100,161	1,215,113	9,582,515		9,582,515	
New Buildings	11,717,707	5,518,376	17,236,083	263,985	1,614,546	248,291	96,752	2,223,574	19,459,657		19,459,657	
NEEA	1,455,352	1,085,847	2,541,200		272,624	30,291		302,915	2,844,115	30,809	2,874,924	
Total Commercial	45,266,395	23,926,705	69,193,100	1,414,272	5,049,724	933,221	329,200	7,726,416	76,919,516	878,669	77,798,185	
Industrial												
Production Efficiency	21,650,274	12,547,472	34,197,746	1,937,042	566,112	170,220	24,687	2,698,061	36,895,807		36,895,807	
NEEA	135,913	101,405	237,318					237,318	237,318		237,318	
Total Industrial	21,786,187	12,648,877	34,435,064	1,937,042	566,112	170,220	24,687	2,698,061	37,133,125	0	37,133,125	
Residential												
Residential Combined	24,512,195	14,468,630	38,980,824	0	10,200,310	611,520	643,508	11,455,339	50,436,163	1,245,911	51,682,074	
NEEA	2,586,630	1,929,900	4,516,529		685,818	76,202		762,020	5,278,549	77,505	5,356,054	
Total Residential	27,098,824	16,398,529	43,497,353	0	10,886,129	687,722	643,508	12,217,359	55,714,712	1,323,416	57,038,128	
Energy Efficiency Program Costs	94,151,407	52,974,111	147,125,517	3,351,314	16,501,965	1,791,163	997,394	22,641,836	169,767,353	2,202,085	171,969,438	
Renewables												
Solar Electric (Photovoltaic)	6,758,157	5,616,998	12,375,155						12,375,155		12,375,155	
Other Renewable	2,593,961	2,963,439	5,557,400						5,557,400		5,557,400	
Renewables Program Costs	9,352,119	8,580,436	17,932,555	0	0	0	0	0	17,932,555	0	17,932,555	
Cost Grand Total	103,503,525	61,554,547	165,058,072	3,351,314	16,501,965	1,791,163	997,394	22,641,836	187,699,908	2,202,085	189,901,993	

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

COMBINED SERVICE TERRITORIES: Energy Efficiency & Renewables

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Washington (with NEEA)	Solar Renewables	Custom Renewables	ETO Total
Program Management	1,091,347	633,478	608,537	-	1,434,021	-	2,406,393	-	123,466	656,601	540,764	7,494,607
Program Delivery:	12,909,460	3,803,377	5,433,137	2,710,806	9,967,463	204,027	9,393,882	5,051,837	498,542	479,500	-	50,452,031
Incentives:	26,619,419	3,909,373	11,261,627	-	22,285,937	-	29,978,827	-	1,071,936	9,808,500	4,216,735	109,152,354
Program Eval & Planning Svcs.:	1,006,626	216,177	435,098	24,187	741,163	24,187	1,330,333	24,187	163,179	142,932	45,685	4,153,754
Program Marketing/Outreach:	1,074,109	375,879	531,172	-	280,501	-	2,834,133	-	103,832	184,250	8,500	5,392,376
Program Legal	-	-	-	-	-	-	-	-	-	2,000	2,000	4,000
Program Quality Assurance:	-	-	-	-	-	-	85,000	-	-	-	-	85,000
Outsourced Services:	75,251	22,999	130,000	-	294,500	-	1,109,000	-	36,550	180,375	339,000	2,187,675
Trade Allies & Cust. Svc. Mgmt.:	104,019	46,504	39,268	-	40,918	-	416,362	-	34,640	78,322	908	760,941
IT Services:	321,869	178,945	240,528	-	271,903	-	770,508	-	38,348	148,502	115,152	2,085,755
Other Program Expenses	103,304	28,121	33,668	-	163,790	-	176,597	-	47,101	219,366	75,431	847,378
TOTAL PROGRAM EXPENSES	43,305,404	9,214,853	18,713,035	2,734,993	35,480,196	228,214	48,501,035	5,076,024	2,117,594	11,900,348	5,344,175	182,615,871
ADMINISTRATIVE COSTS												
Management & General	856,169	182,183	369,965	54,072	701,461	4,512	958,889	100,356	41,866	235,276	105,657	3,610,406
Communications & Customer Svc	871,660	185,479	376,660	55,051	714,152	4,594	976,237	102,172	42,623	239,532	107,568	3,675,728
Total Administrative Costs	1,727,829	367,662	746,625	109,123	1,415,613	9,106	1,935,126	202,528	84,489	474,808	213,225	7,286,134
Total Program & Admin Expenses	45,033,233	9,582,515	19,459,660	2,844,116	36,895,809	237,320	50,436,161	5,278,552	2,202,083	12,375,156	5,557,400	189,901,998
Energy Savings (kwh)	128,637,496	16,766,029	53,358,285	16,866,941	144,225,803	946,017	152,006,993	49,966,575				562,774,139
Energy Savings (therms)	1,125,349	171,585	897,658	-	1,112,759	-	2,965,574	-	353,672			6,626,596
Energy Generation (kwh)										38,656,268	14,551	38,670,819

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

PGE

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	627,401	403,533	368,624		817,433		1,246,624		3,463,615
Program Delivery:	7,586,073	2,422,792	3,310,322	1,385,662	5,405,639	116,847	4,351,856	2,473,535	27,052,726
Incentives:	15,213,274	2,490,312	6,730,772		13,540,164		14,756,473		52,730,995
Program Eval & Planning Svcs.:	579,296	139,097	268,540	13,852	439,343	13,852	657,401	13,852	2,125,233
Program Marketing/Outreach:	631,611	239,439	322,992		164,581		1,317,285		2,675,908
Program Legal									-
Program Quality Assurance:							41,282		41,282
Outsourced Services:	47,648	14,651	78,233		172,795		538,604		851,931
Trade Allies & Cust. Svc. Mgmt.:	60,016	29,624	23,632		24,008		202,213		339,493
IT Services:	185,710	113,990	144,749		159,536		374,210		978,195
Other Program Expenses	59,604	17,914	20,261		96,102		85,767		279,648
TOTAL PROGRAM EXPENSES	24,990,633		11,268,125	1,399,514	20,819,601	130,699	23,571,715	2,487,387	90,539,026
ADMINISTRATIVE COSTS									
Management & General	494,077	116,080	222,776	27,669	411,614	2,584	466,024	49,177	1,790,001
Communications & Customer Svc	503,016	118,180	226,807	28,170	419,060	2,631	474,455	50,067	1,822,386
Total Administrative Costs	997,093		449,583	55,839	830,674	5,215	940,479	99,244	3,612,387
Total Program & Admin Expenses	25,987,726		11,717,708	1,455,353	21,650,275	135,914	24,512,194	2,586,631	94,151,419
Energy Savings (kwh)	80,711,811	12,392,888	35,376,355	9,659,744	100,362,026	541,787	93,612,772	28,615,995	361,273,378

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

Pacific Power

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	363,550	149,486	173,601		489,103		693,384		1,869,124
Program Delivery:	4,394,846	897,510	1,558,974	1,033,851	3,696,610	87,180	2,517,246	1,845,519	16,031,736
Incentives:	8,813,518	922,523	3,169,812		7,269,791		8,728,395		28,904,039
Program Eval & Planning Svcs.:	346,220	51,528	126,467	10,335	252,951	10,335	398,539	10,335	1,206,710
Program Marketing/Outreach:	365,946	88,699	152,111		95,383		842,785		1,544,924
Program Legal									-
Program Quality Assurance:							24,367		24,367
Outsourced Services:	21,818	5,427	36,844		100,144		317,918		482,151
Trade Allies & Cust. Svc. Mgmt.:	34,781	10,974	11,129		13,914		119,359		190,157
IT Services:	107,625	42,227	68,169		92,460		220,882		531,363
Other Program Expenses	34,542	6,636	9,542		55,696		50,625		157,041
TOTAL PROGRAM EXPENSES	14,482,846	2,175,010	5,306,649	1,044,186	12,066,052	97,515	13,913,500	1,855,854	50,941,612
ADMINISTRATIVE COSTS									
Management & General	286,333	43,001	104,915	20,644	238,552	1,928	275,077	36,691	1,007,141
Communications & Customer Svc	291,513	43,779	106,813	21,018	242,868	1,963	280,053	37,355	1,025,362
Total Administrative Costs	577,846	86,780	211,728	41,662	481,420	3,891	555,130	74,046	2,032,503
Total Program & Admin Expenses	15,060,692	2,261,790	5,518,377	1,085,848	12,547,472	101,406	14,468,630	1,929,900	52,974,114
Energy Savings (kwh)	47,925,684	4,373,141	17,981,930	7,207,198	43,863,776	404,230	58,394,221	21,350,580	201,500,760

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

NW Natural Industrial

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	31,812		4,344		91,589				127,745
Program Delivery:	99,056		7,363		651,814				758,233
Incentives:	929,161		229,574		1,028,959				2,187,694
Program Eval & Planning Svcs.:	23,414		4,760		35,085				63,259
Program Marketing/Outreach:	7,498		1,772		14,744				24,014
Program Legal									
Program Quality Assurance:									-
Outsourced Services:	1,670		1,772		15,480				18,922
Trade Allies & Cust. Svc. Mgmt.:	2,662		535		2,151				5,348
IT Services:	8,237		3,278		14,292				25,807
Other Program Expenses	2,644		459		8,609				11,712
TOTAL PROGRAM EXPENSES	1,106,154	-	253,857	-	1,862,723	-	-	-	3,222,734
ADMINISTRATIVE COSTS									
Management & General	21,869		5,019		36,827				63,715
Communications & Customer Svc	22,265		5,110		37,493				64,868
Total Administrative Costs	44,134	-	10,129	-	74,320	-	-	-	128,583
Total Program & Admin Expenses	1,150,288	-	263,986	-	1,937,043	-	-	-	3,351,318
Energy Savings (therms)	385,461		164,005		686,852	-	-	-	1,236,318

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

NW Natural Gas

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	50,864	70,213	51,056		27,092		414,957		614,182
Program Delivery:	615,176	421,554	458,494	262,164	156,947		2,251,624	659,505	4,825,464
Incentives:	1,233,687	433,302	932,241		333,944		5,776,899		8,710,073
Program Eval & Planning Svcs.:	42,789	22,298	29,110		10,254		244,331		348,782
Program Marketing/Outreach:	51,213	41,661	44,736		4,309		602,683		744,602
Program Legal									
Program Quality Assurance:							17,231		17,231
Outsourced Services:	3,052	2,549	10,836		4,524		224,817		245,778
Trade Allies & Cust. Svc. Mgmt.:	4,865	5,154	3,273		629		84,405		98,326
IT Services:	15,053	19,834	20,048		4,177		156,198		215,310
Other Program Expenses	4,831	3,117	2,806		2,516		35,800		49,070
TOTAL PROGRAM EXPENSES	2,021,530	1,019,682	1,552,600	262,164	544,392	-	9,808,945	659,505	15,868,818
ADMINISTRATIVE COSTS									
Management & General	39,967	20,160	30,696	5,183	10,763		193,928	13,039	313,736
Communications & Customer Svc	40,690	20,524	31,251	5,277	10,958		197,436	13,275	319,411
Total Administrative Costs	80,657	40,684	61,947	10,460	21,721	-	391,364	26,314	633,147
Total Program & Admin Expenses	2,102,187	1,060,366	1,614,547	272,624	566,113	-	10,200,309	685,819	16,501,967
Energy Savings (therms)	537,222	146,436	607,170	-	384,087	-	2,518,365	-	4,193,280

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

Cascade Natural Gas

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	14,519	3,614	7,852		7,590		25,195		58,770
Program Delivery:	175,597	21,701	70,509	29,129	47,044		126,288	73,278	543,546
Incentives:	352,146	22,306	143,363		101,114		360,422		979,351
Program Eval & Planning Svcs.:	12,214	1,148	4,477		3,083		14,648		35,570
Program Marketing/Outreach:	14,618	2,145	6,880		1,296		30,423		55,362
Program Legal									
Program Quality Assurance:							1,033		1,033
Outsourced Services:	871	131	1,666		1,360		13,478		17,506
Trade Allies & Cust. Svc. Mgmt.:	1,389	265	503		189		5,060		7,406
IT Services:	4,297	1,021	3,083		1,256		9,364		19,021
Other Program Expenses	1,379	160	432		757		2,146		4,874
TOTAL PROGRAM EXPENSES	577,030	52,491	238,765	29,129	163,689	-	588,057	73,278	1,722,439
ADMINISTRATIVE COSTS									
Management & General	11,408	1,038	4,720	576	3,236		11,626	1,449	34,053
Communications & Customer Svc	11,615	1,057	4,806	586	3,295		11,837	1,475	34,671
Total Administrative Costs	23,023	2,095	9,526	1,162	6,531	-	23,463	2,924	68,724
Total Program & Admin Expenses	600,053	54,586	248,291	30,291	170,220	-	611,520	76,202	1,791,163
Energy Savings (therms)	167,145	7,721	87,468	-	36,344	-	203,807	-	502,485

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

Avista

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	3,201	6,632	3,060		1,214		26,233		40,340
Program Delivery:	38,712	39,820	27,475		9,409		146,868		262,284
Incentives:	77,633	40,930	55,865		11,965		356,638		543,031
Program Eval & Planning Svcs.:	2,693	2,106	1,744		447		15,414		22,404
Program Marketing/Outreach:	3,223	3,935	2,681		188		40,957		50,984
Program Legal									
Program Quality Assurance:							1,087		1,087
Outsourced Services:	192	241	649		197		14,183		15,462
Trade Allies & Cust. Svc. Mgmt.:	306	487	196		27		5,325		6,341
IT Services:	947	1,873	1,201		182		9,854		14,057
Other Program Expenses	304	294	168		110		2,259		3,135
TOTAL PROGRAM EXPENSES	127,211	96,318	93,039	-	23,739	-	618,818	-	959,125
ADMINISTRATIVE COSTS									
Management & General	2,515	1,904	1,839		469		12,234		18,961
Communications & Customer Svc	2,561	1,939	1,873		478		12,456		19,307
Total Administrative Costs	5,076	3,843	3,712	-	947	-	24,690	-	38,268
Total Program & Admin Expenses	132,287	100,161	96,751	-	24,686	-	643,508	-	997,395
Energy Savings (therms)	35,521	17,428	39,015	-	5,476	-	243,402	-	340,842

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

ENERGY EFFICIENCY

NW Natural Washington

EXPENSES	Existing Buildings	NEEA Commercial	Residential	NEEA Residential	Efficiency Total
Program Management	74,994		48,472		123,466
Program Delivery:	234,384	29,627	160,000	74,531	498,542
Incentives:	641,256		430,680		1,071,936
Program Eval & Planning Svcs.:	104,807		58,372		163,179
Program Marketing/Outreach:	40,332		63,500		103,832
Program Legal					
Program Quality Assurance					
Outsourced Services:	35,550		1,000		36,550
Trade Allies & Cust. Svc. Mgmt.:	17,316		17,324		34,640
IT Services:	22,312		16,036		38,348
Other Program Expenses	27,157		19,944		47,101
TOTAL PROGRAM EXPENSES	1,198,108	29,627	815,328	74,531	2,117,594
ADMINISTRATIVE COSTS					
Management & General	23,687	586	16,119	1,474	41,866
Communications & Customer Svc	24,116	596	16,411	1,500	42,623
Total Administrative Costs	47,803	1,182	32,530	2,974	84,489
Total Program & Admin Expenses	1,245,911	30,809	847,858	77,505	2,202,081
Energy Savings (therms)	146,876	-	206,796		353,672

**Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast**

RENEWABLE PROGRAMS

PGE Renewables

EXPENSES	Standard Solar	Custom Projects	Renewable Total
Program Management	358,713	254,899	613,612
Program Delivery:	274,120		274,120
Incentives:	5,346,000	1,954,469	7,300,469
Program Eval & Planning Svcs.:	76,145	21,324	97,469
Program Marketing/Outreach:	100,620	3,230	103,850
Program Legal	1,092	934	2,026
Program Quality Assurance:	-	-	-
Outsourced Services:	98,504	169,500	268,004
Trade Allies & Cust. Svc. Mgmt.:	42,772	424	43,196
IT Services:	81,098	53,748	134,846
Other Program Expenses	119,797	35,909	155,706
TOTAL PROGRAM EXPENSES	6,498,861	2,494,437	8,993,298
ADMINISTRATIVE COSTS			
Management & General	128,486	49,316	177,802
Communications & Customer Svc	130,810	50,208	181,018
Total Administrative Costs	259,296	99,524	358,820
Total Program & Admin Expenses	6,758,157	2,593,961	9,352,119
Energy Generation (kwh)	10,516,000	-	10,516,000

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2017 Forecast

RENEWABLE PROGRAMS

Pacific Power Renewables

EXPENSES	Standard Solar	Custom Projects	Renewable Total
Program Management	297,888	285,865	583,753
Program Delivery:	205,380		205,380
Incentives:	4,462,500	2,262,266	6,724,766
Program Eval & Planning Svcs.:	66,787	24,361	91,148
Program Marketing/Outreach:	83,630	5,270	88,900
Program Legal	908	1,066	1,974
Program Quality Assurance:	-	-	-
Outsourced Services:	81,871	169,500	251,371
Trade Allies & Cust. Svc. Mgmt.:	35,550	484	36,034
IT Services:	67,404	61,404	128,808
Other Program Expenses	99,569	39,522	139,091
TOTAL PROGRAM EXPENSES	5,401,487	2,849,738	8,251,225
ADMINISTRATIVE COSTS			
Management & General	106,790	56,341	163,131
Communications & Customer Svc	108,722	57,360	166,082
Total Administrative Costs	215,512	113,701	329,213
Total Program & Admin Expenses	5,616,999	2,963,439	8,580,439
Energy Generation (kwh)	28,140,268	14,551	28,154,819

2019 Budget Recap Spending and Savings - R2: Approved

ENERGY EFFICIENCY

	BUDGET (\$M)			ELECTRIC		GAS	
	ELECTRIC	GAS	TOTAL	ELECTRIC SAVINGS GOAL (aMW)	Levelized Cost per kWh (in cents)	Annual Therms	Levelized Cost per Therm (in cents)
Commercial							
Business Energy Solutions – Existing Buildings	48.7	6.2	54.9	15.08	3.4	1,496,301	37.83
Business Energy Solutions – Multifamily	8.2	1.2	9.5	1.56	5.4	161,758	57.61
Business Energy Solutions – New Buildings	18.2	2.6	20.8	6.62	2.9	987,271	22.47
Mkt Transformation (Alliance)	2.3	0.5	2.7	1.78	2.4		
Total Commercial	77.4	10.5	87.9	25.05	3.4	2,645,331	35.43
Industrial							
Production Efficiency	35.6	2.9	38.5	17.27	2.3	1,064,753	24.62
Mkt Transformation (Alliance)	0.4	0.0	0.4	0.11	6.0		
Total Industrial	36.0	2.9	38.9	17.38	2.4	1,064,753	24.96
Residential							
Home Energy Solutions – Residential	28.3	15.9	44.2	5.34	5.1	2,287,003	44.27
Mkt Transformation (Alliance)	4.3	1.4	5.7	3.43	1.5		
Total Residential	32.6	17.3	49.9	8.77	3.9	2,287,003	49.10
Washington							
Business Energy Solutions – Existing Buildings		0.9	0.9			160,000	52.58
Home Energy Solutions – Residential		1.3	1.3			207,462	46.46
Mkt Transformation (Alliance)		0.2	0.2				
Total Washington		2.4	2.4			367,462	51.81
Total Energy Efficiency	\$146.0	\$33.1	\$179.1	51.20	3.1	6,364,548	39.46

RENEWABLE RESOURCES

	ACTIVITY BASIS		ACCOUNTING BASIS	ACTIVITY BASIS		ACCOUNTING BASIS	
	BUDGET (\$M)		BUDGET (\$M)	ELECTRIC GENERATION GOAL (aMW)	(\$/mils/ aMW)	ELECTRIC GENERATION GOAL (aMW)	(\$/mils/ aMW)
Other Renewables	5.5		11.1	1.35	4.08	0.00	
Solar Electric	9.1		9.2	1.32	6.94	1.89	4.88
Total Renewable Resources	\$14.6		\$20.4	2.67	5.49	1.89	10.76

TOTAL BUDGET - ALL

\$199.5

¹ some columns may not add due to rounding

ENERGY TRUST OF OREGON
Income Statement by Service Territory
2019 Final Projection

	ENERGY EFFICIENCY									
	PGE	PacifiCorp	Total	NWN Industrial	NW Natural	Cascade	Avista	Oregon Total	NWN WA	ETO Total
REVENUES										
Public Purpose Funding	29,100,000	22,175,370	51,275,370	0	22,979,834	2,917,052	1,156,870	78,329,126	0	78,329,126
Incremental Funding Contributions	59,656,625	31,515,755	91,172,380	3,682,304				94,854,684	2,431,310	97,285,994
Revenue from Investments										
TOTAL PROGRAM REVENUE	88,756,625	53,691,125	142,447,750	3,682,304	22,979,834	2,917,052	1,156,870	173,183,810	2,431,310	175,615,120
EXPENSES										
Program Management (Note 3)	3,707,006	2,096,929	5,803,936	193,328	1,195,525	118,050	59,090	7,369,928	150,772	7,520,700
Program Delivery	27,020,688	16,309,134	43,329,820	842,973	6,448,569	821,348	303,266	51,745,976	582,528	52,328,504
Incentives	50,298,152	28,594,934	78,893,088	2,324,939	11,930,858	1,484,110	671,051	95,304,046	1,138,971	96,443,017
Program Eval & Planning Svcs.	2,968,876	1,712,445	4,681,322	74,453	703,170		69,709	34,783	5,563,435	183,432
Program Marketing/Outreach	2,250,373	1,232,143	3,482,516	24,865	869,551	83,322	42,560	4,502,813	109,189	4,612,002
Program Legal Services	-	-	-	-	-	-	-	-	-	-
Program Quality Assurance	34,346	19,780	54,125	0	27,798	2,042	1,034	85,000	0	85,000
Outsourced Services	655,752	357,557	1,013,310	19,291	229,786	21,333	10,881	1,294,600	36,550	1,331,150
Trade Allies & Cust. Svc. Mgmt.	313,953	175,036	488,990	5,164	165,085	13,793	7,091	680,123	39,896	720,019
IT Services	902,518	486,823	1,389,339	24,299	321,491	29,655	15,538	1,780,321	38,274	1,818,595
Other Program Expenses - all	386,265	227,317	613,580	17,909	78,621	8,496	3,868	722,475	49,301	771,776
TOTAL PROGRAM EXPENSES	88,537,929	51,212,098	139,750,026	3,527,221	21,970,454	2,651,858	1,149,162	169,048,717	2,328,913	171,377,630
ADMINISTRATIVE COSTS										
Management & General (Notes 1 & 2)	2,088,891	1,208,149	3,297,040	81,548	541,382	63,765	27,811	4,011,546	53,843	4,065,389
Communications & Customer Svc (Notes 1 & 2)	1,883,664	1,089,454	2,973,118	73,535	488,194	57,501	25,080	3,617,425	48,553	3,665,978
Total Administrative Costs	3,972,555	2,297,603	6,270,158	155,083	1,029,576	121,266	52,891	7,628,971	102,396	7,731,367
TOTAL PROG & ADMIN EXPENSES	92,510,484	53,509,701	146,020,184	3,682,304	23,000,030	2,773,124	1,202,053	176,677,688	2,431,309	179,108,997
TOTAL REVENUE LESS EXPENSES	(3,753,859)	181,424	(3,572,434)	0	(20,196)	143,928	(45,183)	(3,493,878)	0	(3,493,877)
NET ASSETS - RESERVES										
Cumulative Carryover 12/31/18 Approved Budget	4,310,310	2,028,505	6,338,815	200,000	1,110,851	451,926	129,358	8,230,950	200,000	8,430,950
Change in net assets this year	(3,753,859)	181,424	(3,572,434)	0	(20,196)	143,928	(45,183)	(3,493,878)	0	(3,493,877)
Interest Attributed										
Ending Net Assets - Reserves	556,451	2,209,929	2,766,381	200,000	1,090,655	595,854	84,175	4,737,072	200,000	4,937,073
Ending Reserve by Category										
Program Reserves (Efficiency and Renewables)	556,451	2,209,929	2,766,381	200,000	1,090,655	595,854	84,175	4,737,072	200,000	4,937,073
Assets Released for General Purpose										
Emergency Contingency Pool										
TOTAL NET ASSETS CUMULATIVE	556,451	2,209,929	2,766,381	200,000	1,090,655	595,854	84,175	4,737,072	200,000	4,937,073

Note 1) Management & General and Communications & Customer Service Expenses (Admin) have been allocated based on total expenses.

Note 2) Admin costs are allocated for mgmt reporting only. GAAP for Not for Profits does not allow allocation of admin costs to program expenses.

Note 3) Program Management costs include both outsourced and internal staff.

	RENEWABLE ENERGY			Other	TOTAL
	PGE	PacifiCorp	Total		All Programs
REVENUES					
Public Purpose Funding	8,384,629	6,350,611	14,735,239	0	93,064,365
Incremental Funding Contributions					97,285,994
Revenue from Investments				230,000	230,000
TOTAL PROGRAM REVENUE	8,384,629	6,350,611	14,735,239	230,000	190,580,359
EXPENSES					
Program Management (Note 3)	831,273	516,979	1,348,252		8,868,952
Program Delivery	215,240	161,260	376,500		52,705,004
Incentives	10,203,775	5,946,275	16,150,050		112,593,067
Program Eval & Planning Svcs.	127,556	88,564	216,120		5,962,987
Program Marketing/Outreach	146,925	99,575	246,500		4,858,502
Program Legal Services	3,103	1,897	5,000		5,000
Program Quality Assurance	0	0	0		85,000
Outsourced Services	274,939	220,560	495,499		1,826,649
Trade Allies & Cust. Svc. Mgmt.	37,703	24,591	62,294		782,313
IT Services	163,633	99,512	263,146		2,081,741
Other Program Expenses - all	201,465	132,204	333,669		1,105,445
TOTAL PROGRAM EXPENSES	12,205,612	7,291,417	19,497,030	0	190,874,660
ADMINISTRATIVE COSTS					
Management & General (Notes 1 & 2)	282,186	168,573	450,759		4,516,148
Communications & Customer Svc (Notes 1 & 2)	254,463	152,011	406,473		4,072,451
Total Administrative Costs	536,649	320,584	857,232		8,588,599
TOTAL PROG & ADMIN EXPENSES	12,742,261	7,612,001	20,354,262		199,463,259
TOTAL REVENUE LESS EXPENSES	(4,357,632)	(1,261,390)	(5,619,023)	230,000	(8,882,900)
NET ASSETS - RESERVES					
Cumulative Carryover 12/31/18 Approved Budget	8,471,432	5,208,154	13,679,587	9,901,809	32,012,346
Change in net assets this year	(4,357,632)	(1,261,390)	(5,619,023)	230,000	(8,882,900)
Interest Attributed					
Ending Net Assets - Reserves	4,113,800	3,946,764	8,060,564	10,131,809	23,129,446
Ending Reserve by Category					
Program Reserves (Efficiency and Renewables)	4,113,800	3,946,764	8,060,564		12,997,637
Assets Released for General Purpose				5,131,809	5,131,809
Emergency Contingency Pool				5,000,000	5,000,000
TOTAL NET ASSETS CUMULATIVE	4,113,800	3,946,764	8,060,564	10,131,809	23,129,447

Energy Trust of Oregon
Statement of Functional Expenses
2019 Final Projection

	Energy Efficiency	Renewable Energy	Total Program Expenses	Management & General	Communications & Customer Service	Total Admin Expenses	Total
Program Expenses							
Incentives	96,443,016	16,150,050	112,593,066				112,593,066
Program Management & Delivery	58,566,734	386,500	58,953,234				58,953,234
Payroll and Related Expenses	4,336,223	1,338,253	5,674,476	2,919,252	2,002,010	4,921,262	10,595,738
Outsourced Services	5,823,472	809,999	6,633,471	771,500	1,246,000	2,017,500	8,650,971
Planning and Evaluation	2,897,795	153,120	3,050,915	11,484	191,400	202,884	3,253,799
Customer Service Management	367,770	52,832	420,602				420,602
Trade Allies Network	352,250	19,461	371,711				371,711
Total Program Expenses	168,787,260	18,910,215	187,697,475	3,702,236	3,439,410	7,141,646	194,839,121
Program Support Costs							
Supplies	13,240	4,220	17,461	10,052	6,877	16,929	34,390
Postage and Shipping Expenses	10,320	1,490	11,810	5,024	2,074	7,098	18,908
Telephone	3,456	1,592	5,048	2,019	1,660	3,679	8,726
Printing and Publications	2,016	995	3,011	5,678	3,468	9,146	12,157
Occupancy Expenses	273,072	94,150	367,222	159,543	131,120	290,664	657,885
Insurance	31,681	10,923	42,604	18,510	15,212	33,722	76,326
Equipment	4,464	150,639	155,103	2,608	2,144	4,752	159,855
Travel	70,250	19,000	89,250	55,400	50,000	105,400	194,650
Meetings, Trainings & Conferences	60,000	24,400	84,400	53,000	22,000	75,000	159,400
Interest Expense and Bank Fees				1,500		1,500	1,500
Depreciation & Amortization	224,983	9,763	234,746	16,544	13,597	30,141	264,887
Dues, Licenses and Fees	77,430	6,200	83,630	37,610	18,000	55,610	139,240
Miscellaneous Expenses	864	298	1,162	505	415	920	2,082
IT Services	1,818,596	263,146	2,081,742	445,918	366,476	812,395	2,894,137
Total Program Support Costs	2,590,373	586,816	3,177,189	813,911	633,043	1,446,954	4,624,143
TOTAL EXPENSES	171,377,633	19,497,031	190,874,663	4,516,147	4,072,453	8,588,600	199,463,264

OPUC Measure vs. 8%

6.2%

Energy Trust of Oregon
Summary by Service Territory and Program
2019 Final Projection

	PGE	Pacific Power	Subtotal Elec.	NWN Industrial	NW Natural Gas	Cascade	Avista	Subtotal Gas	Oregon Total	NWN WA	ETO Total
Energy Efficiency											
Commercial											
Existing Buildings	\$29,449,444	\$19,273,564	\$48,723,008	\$1,664,140	\$3,058,982	\$1,069,380	\$386,944	\$6,179,447	\$54,902,455	\$895,437	\$55,797,892
Multifamily Bldgs	6,139,755	2,085,536	8,225,292		1,104,718	38,402	104,144	1,247,264	9,472,556		9,472,556
New Buildings	13,010,165	5,168,598	18,178,763	53,641	2,168,544	233,851	142,515	2,598,551	20,777,314		20,777,314
NEEA	1,290,943	963,180	2,254,124		442,641	49,182		491,823	2,745,947	50,023	2,795,970
Total Commercial	49,890,308	27,490,879	77,381,186	1,717,781	6,774,886	1,390,816	633,603	10,517,086	87,898,272	945,460	88,843,732
Industrial											
Production Efficiency	21,973,585	13,671,983	35,645,568	1,964,523	684,119	194,539	35,686	2,878,866	38,524,434		38,524,434
NEEA	215,335	160,662	375,997						375,997		375,997
Total Industrial	22,188,919	13,832,645	36,021,565	1,964,523	684,119	194,539	35,686	2,878,866	38,900,431	-	38,900,431
Residential											
Residential Combined	17,965,152	10,346,205	28,311,358	-	14,320,304	1,052,132	532,766	15,905,201	44,216,559	1,347,895	45,564,454
NEEA	2,466,102	1,839,973	4,306,075		1,220,718	135,635		1,356,354	5,662,429	137,953	5,800,382
Total Residential	20,431,255	12,186,178	32,617,433	-	15,541,022	1,187,767	532,766	17,261,555	49,878,988	1,485,848	51,364,836
Energy Efficiency Program Costs	92,510,482	53,509,702	146,020,184	3,682,304	23,000,026	2,773,123	1,202,054	30,657,508	176,677,691	2,431,308	179,108,999
Renewables											
Solar Electric (Photovoltaic)	5,585,367	3,643,873	9,229,240						9,229,240		9,229,240
Other Renewable	7,156,894	3,968,129	11,125,023						11,125,023		11,125,023
Renewables Program Costs	12,742,261	7,612,002	20,354,263	-	-	-	-	-	20,354,263	-	20,354,263
Cost Grand Total	105,252,743	61,121,704	166,374,447	3,682,304	23,000,026	2,773,123	1,202,054	30,657,508	197,031,954	2,431,308	199,463,262

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2019 Final Projection

COMBINED SERVICE TERRITORIES: Energy Efficiency & Renewables

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Washington (with NEEA)	Solar Renewables	Custom Renewables	ETO Total
Program Management	1,389,304	738,416	585,273	-	1,857,625	-	2,799,310	-	150,772	746,339	601,913	8,868,952
Program Delivery:	14,676,546	3,879,767	5,432,950	2,586,278	10,768,389	337,194	8,686,838	5,378,016	582,528	376,500	-	52,705,006
Incentives:	33,154,721	3,344,092	12,003,809	-	22,190,236	-	24,611,186	-	1,138,971	6,580,000	9,570,050	112,593,065
Program Eval & Planning Svcs.:	1,445,104	352,336	864,311	44,022	908,996	22,968	1,879,763	45,936	183,432	174,012	42,108	5,962,988
Program Marketing/Outreach:	1,143,567	397,600	526,860	-	304,000	-	2,130,787	-	109,189	236,500	10,000	4,858,503
Program Legal	-	-	-	-	-	-	-	-	-	3,000	2,000	5,000
Program Quality Assurance:	-	-	-	-	-	-	85,000	-	-	-	-	85,000
Outsourced Services:	214,000	96,001	185,599	-	240,000	-	559,000	-	36,550	258,499	237,000	1,826,649
Trade Allies & Cust. Svc. Mgmt.:	103,833	46,804	35,442	-	37,203	-	456,840	-	39,896	62,185	109	782,312
IT Services:	321,251	178,601	235,280	-	271,379	-	773,813	-	38,274	148,215	114,930	2,081,743
Other Program Expenses	141,879	39,998	32,740	-	324,124	-	183,735	-	49,301	255,294	78,375	1,105,446
TOTAL PROGRAM EXPENSES	52,590,205	9,073,615	19,902,264	2,630,300	36,901,952	360,162	42,166,272	5,423,952	2,328,913	8,840,544	10,656,485	190,874,664
ADMINISTRATIVE COSTS												
Management & General	1,215,852	209,776	460,128	60,811	853,149	8,327	1,078,104	125,399	53,843	204,388	246,371	4,516,148
Communications & Customer Svc	1,096,399	189,167	414,922	54,837	769,331	7,508	972,185	113,079	48,553	184,308	222,166	4,072,455
Total Administrative Costs	2,312,251	398,943	875,050	115,648	1,622,480	15,835	2,050,289	238,478	102,396	388,696	468,537	8,588,603
Total Program & Admin Expenses	54,902,456	9,472,558	20,777,314	2,745,948	38,524,432	375,997	44,216,561	5,662,430	2,431,309	9,229,240	11,125,022	199,463,267
Energy Savings (kwh)	132,116,008	13,647,786	58,008,673	15,635,327	151,325,843	947,602	46,759,218	30,083,175				448,523,632
Energy Savings (therms)	1,496,301	161,758	987,271	-	1,064,753	-	2,287,003	-	367,462			6,364,548
Energy Generation (kwh)										11,275,000	13,653,560	24,928,560

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

PGE

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	745,251	478,321	366,736		984,941		1,131,757		3,707,006
Program Delivery:	8,036,722	2,513,183	3,404,521	1,211,363	5,812,177	193,112	3,513,677	2,335,933	27,020,688
Incentives:	17,601,900	2,166,191	7,506,447		13,068,811		9,954,803		50,298,152
Program Eval & Planning Svcs.:	776,946	231,192	548,104	25,212	509,346	13,154	838,614	26,308	2,968,876
Program Marketing/Outreach:	627,559	257,552	330,367		173,350		861,545		2,250,373
Program Legal									-
Program Quality Assurance:							34,346		34,346
Outsourced Services:	114,688	62,186	116,150		136,855		225,873		655,752
Trade Allies & Cust. Svc. Mgmt.:	55,647	30,318	22,180		21,214		184,594		313,953
IT Services:	172,166	115,692	147,240		154,748		312,672		902,518
Other Program Expenses	78,283	26,541	20,489		186,711		74,241		386,265
TOTAL PROGRAM EXPENSES	28,209,162		12,462,234	1,236,575	21,048,153	206,266	17,132,122	2,362,241	88,537,929
ADMINISTRATIVE COSTS									
Management & General	652,178	135,969	288,119	28,589	486,620	4,769	438,033	54,614	2,088,891
Communications & Customer Svc	588,104	122,611	259,812	25,780	438,811	4,300	394,998	49,248	1,883,664
Total Administrative Costs	1,240,282		547,931	54,369	925,431	9,069	833,031	103,862	3,972,555
Total Program & Admin Expenses	29,449,444		13,010,165	1,290,944	21,973,584	215,335	17,965,153	2,466,103	92,510,490
Energy Savings (kwh)	80,894,429	10,323,338	40,287,867	8,954,395	99,379,986	542,695	27,713,930	17,228,717	285,325,357

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

Pacific Power

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	487,483	162,475	145,694		650,528		650,749		2,096,929
Program Delivery:	5,252,426	853,672	1,352,527	903,805	4,041,984	144,082	2,017,785	1,742,853	16,309,134
Incentives:	11,503,780	735,806	2,982,115		7,656,530		5,716,703		28,594,934
Program Eval & Planning Svcs.:	532,482	78,531	217,747	18,810	328,471	9,814	506,962	19,628	1,712,445
Program Marketing/Outreach:	410,287	87,485	131,246		107,858		495,267		1,232,143
Program Legal									-
Program Quality Assurance:							19,780		19,780
Outsourced Services:	75,059	21,123	46,143		85,151		130,081		357,557
Trade Allies & Cust. Svc. Mgmt.:	36,419	10,298	8,811		13,200		106,308		175,036
IT Services:	112,676	39,298	58,495		96,285		180,069		486,823
Other Program Expenses	51,234	9,015	8,140		116,172		42,756		227,317
TOTAL PROGRAM EXPENSES	18,461,846	1,997,703	4,950,918	922,615	13,096,179	153,896	9,866,460	1,762,481	51,212,098
ADMINISTRATIVE COSTS									
Management & General	426,826	46,186	114,462	21,330	302,775	3,558	252,265	40,747	1,208,149
Communications & Customer Svc	384,892	41,648	103,217	19,235	273,029	3,208	227,481	36,744	1,089,454
Total Administrative Costs	811,718	87,834	217,679	40,565	575,804	6,766	479,746	77,491	2,297,603
Total Program & Admin Expenses	19,273,564	2,085,537	5,168,597	963,180	13,671,983	160,662	10,346,206	1,839,972	53,509,700
Energy Savings (kwh)	51,221,578	3,324,449	17,720,806	6,680,933	51,945,857	404,907	19,045,288	12,854,458	163,198,275

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

NW Natural Industrial

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	41,557		774		150,997				193,328
Program Delivery:	149,629		6,864		686,480				842,973
Incentives:	1,338,099		40,120		946,720				2,324,939
Program Eval & Planning Svcs.:	32,947		2,032		39,474				74,453
Program Marketing/Outreach:	8,988		324		15,553				24,865
Program Legal									
Program Quality Assurance:									-
Outsourced Services:	6,531		481		12,279				19,291
Trade Allies & Cust. Svc. Mgmt.:	3,169		92		1,903				5,164
IT Services:	9,805		610		13,884				24,299
Other Program Expenses	3,329		85		14,495				17,909
TOTAL PROGRAM EXPENSES	1,594,054	-	51,382	-	1,881,785	-	-	-	3,527,221
ADMINISTRATIVE COSTS									
Management & General	36,854		1,188		43,506				81,548
Communications & Customer Svc	33,233		1,071		39,231				73,535
Total Administrative Costs	70,087	-	2,259	-	82,737	-	-	-	155,083
Total Program & Admin Expenses	1,664,141	-	53,641	-	1,964,522	-	-	-	3,682,305
Energy Savings (therms)	500,577	-	24,798	-	751,105	-	-	-	1,276,479

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

NW Natural Gas

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	77,872	86,463	61,411		54,353		915,426		1,195,525
Program Delivery:	837,241	454,293	570,094	423,999	153,000		2,840,635	1,169,307	6,448,569
Incentives:	1,833,712	391,569	1,256,971		400,637		8,047,969		11,930,858
Program Eval & Planning Svcs.:	73,896	37,743	82,167		27,079		482,285		703,170
Program Marketing/Outreach:	65,457	46,556	55,321		5,416		696,801		869,551
Program Legal									
Program Quality Assurance:							27,798		27,798
Outsourced Services:	12,006	11,241	19,450		4,276		182,813		229,786
Trade Allies & Cust. Svc. Mgmt.:	5,825	5,480	3,714		663		149,403		165,085
IT Services:	18,023	20,913	24,656		4,835		253,064		321,491
Other Program Expenses	6,120	3,934	3,431		5,048		60,088		78,621
TOTAL PROGRAM EXPENSES	2,930,152	1,058,192	2,077,215	423,999	655,307	-	13,656,282	1,169,307	21,970,454
ADMINISTRATIVE COSTS									
Management & General	67,743	24,465	48,024	9,803	15,150		349,163	27,034	541,382
Communications & Customer Svc	61,088	22,061	43,306	8,840	13,662		314,859	24,378	488,194
Total Administrative Costs	128,831	46,526	91,330	18,643	28,812	-	664,022	51,412	1,029,576
Total Program & Admin Expenses	3,058,983	1,104,718	2,168,545	442,642	684,119	-	14,320,304	1,220,719	23,000,032
Energy Savings (therms)	729,937	141,719	839,544	-	255,710	-	1,985,478	-	3,952,388

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2019 Final Projection

ENERGY EFFICIENCY

Cascade Natural Gas

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	Residential	NEEA Residential	Efficiency Total
Program Management	27,273	3,006	6,622		13,849		67,300		118,050
Program Delivery:	294,108	15,792	61,478	47,111	63,996		208,940	129,923	821,348
Incentives:	644,151	13,612	135,549		98,837		591,961		1,484,110
Program Eval & Planning Svcs.:	21,172	1,312	8,861		3,909		34,455		69,709
Program Marketing/Outreach:	22,966	1,618	5,966		1,540		51,232		83,322
Program Legal									
Program Quality Assurance:							2,042		2,042
Outsourced Services:	4,197	391	2,097		1,216		13,432		21,333
Trade Allies & Cust. Svc. Mgmt.:	2,036	191	401		188		10,977		13,793
IT Services:	6,301	727	2,659		1,375		18,593		29,655
Other Program Expenses	2,139	137	370		1,435		4,415		8,496
TOTAL PROGRAM EXPENSES	1,024,343	36,786	224,003	47,111	186,345	-	1,003,347	129,923	2,651,858
ADMINISTRATIVE COSTS									
Management & General	23,682	850	5,179	1,089	4,308		25,653	3,004	63,765
Communications & Customer Svc	21,355	767	4,670	982	3,885		23,133	2,709	57,501
Total Administrative Costs	45,037	1,617	9,849	2,071	8,193	-	48,786	5,713	121,266
Total Program & Admin Expenses	1,069,380	38,403	233,852	49,182	194,538	-	1,052,133	135,636	2,773,124
Energy Savings (therms)	213,242	5,084	80,049	-	48,176	-	154,279	-	500,829

**Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

Avista

EXPENSES	Existing Buildings	Multifamily Buildings	New Buildings	NEEA Commercial	Production Efficiency	NEEA Industrial	NEEA Residential	NEEA Residential	Efficiency Total
Program Management	9,868	8,151	4,036		2,957		34,078		59,090
Program Delivery:	106,420	42,827	37,466		10,752		105,801		303,266
Incentives:	233,079	36,914	82,607		18,701		299,750		671,051
Program Eval & Planning Svcs.:	7,661	3,558	5,400		717		17,447		34,783
Program Marketing/Outreach:	8,310	4,389	3,636		283		25,942		42,560
Program Legal									
Program Quality Assurance:							1,034		1,034
Outsourced Services:	1,519	1,060	1,278		223		6,801		10,881
Trade Allies & Cust. Svc. Mgmt.:	737	517	244		35		5,558		7,091
IT Services:	2,280	1,971	1,620		252		9,415		15,538
Other Program Expenses	774	371	225		263		2,235		3,868
TOTAL PROGRAM EXPENSES	370,648	99,758	136,512	-	34,183	-	508,061	-	1,149,162
ADMINISTRATIVE COSTS									
Management & General	8,569	2,306	3,156		790		12,990		27,811
Communications & Customer Svc	7,727	2,080	2,846		713		11,714		25,080
Total Administrative Costs	16,296	4,386	6,002	-	1,503	-	24,704	-	52,891
Total Program & Admin Expenses	386,944	104,144	142,514	-	35,686	-	532,765	-	1,202,055
Energy Savings (therms)	52,545	14,956	42,881	-	9,762	-	147,246	-	267,390

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
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ENERGY EFFICIENCY

NW Natural Washington

EXPENSES	Existing Buildings	NEEA Commercial	Residential	NEEA Residential	Efficiency Total
Program Management	48,622		102,150		150,772
Program Delivery:	173,286	47,916	229,183	132,143	582,528
Incentives:	455,400		683,571		1,138,971
Program Eval & Planning Svcs.:	51,678		131,754		183,432
Program Marketing/Outreach:	74,000		35,189		109,189
Program Legal					
Program Quality Assurance					
Outsourced Services:	1,000		35,550		36,550
Trade Allies & Cust. Svc. Mgmt.:	19,137		20,759		39,896
IT Services:	16,005		22,269		38,274
Other Program Expenses	18,597		30,704		49,301
TOTAL PROGRAM EXPENSES	857,725	47,916	1,291,129	132,143	2,328,913
ADMINISTRATIVE COSTS					
Management & General	19,830	1,108	29,850	3,055	53,843
Communications & Customer Svc	17,882	999	26,917	2,755	48,553
Total Administrative Costs	37,712	2,107	56,767	5,810	102,396
Total Program & Admin Expenses	895,437	50,023	1,347,896	137,953	2,431,307
Energy Savings (therms)	160,000	-	207,462		367,462

**Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2019 Final Projection**

RENEWABLE PROGRAMS

PGE Renewables

EXPENSES	Standard Solar	Custom Projects	Renewable Total
Program Management	451,219	380,054	831,273
Program Delivery:	215,240		215,240
Incentives:	4,000,000	6,203,775	10,203,775
Program Eval & Planning Svcs.:	100,467	27,089	127,556
Program Marketing/Outreach:	143,125	3,800	146,925
Program Legal	1,816	1,287	3,103
Program Quality Assurance:	-	-	-
Outsourced Services:	156,439	118,500	274,939
Trade Allies & Cust. Svc. Mgmt.:	37,633	70	37,703
IT Services:	89,697	73,936	163,633
Other Program Expenses	154,499	46,966	201,465
TOTAL PROGRAM EXPENSES	5,350,135	6,855,477	12,205,612
ADMINISTRATIVE COSTS			
Management & General	123,692	158,494	282,186
Communications & Customer Svc	111,540	142,923	254,463
Total Administrative Costs	235,232	301,417	536,649
Total Program & Admin Expenses	5,585,367	7,156,894	12,742,262
Energy Generation (kwh)	6,732,000	10,020,000	16,752,000

Energy Trust of Oregon, Inc
Detail by Service Territory and Program
2019 Final Projection

RENEWABLE PROGRAMS

Pacific Power Renewables

EXPENSES	Standard Solar	Custom Projects	Renewable Total
Program Management	295,120	221,859	516,979
Program Delivery:	161,260		161,260
Incentives:	2,580,000	3,366,275	5,946,275
Program Eval & Planning Svcs.:	73,545	15,019	88,564
Program Marketing/Outreach:	93,375	6,200	99,575
Program Legal	1,184	713	1,897
Program Quality Assurance:	-	-	-
Outsourced Services:	102,060	118,500	220,560
Trade Allies & Cust. Svc. Mgmt.:	24,552	39	24,591
IT Services:	58,518	40,994	99,512
Other Program Expenses	100,795	31,409	132,204
TOTAL PROGRAM EXPENSES	3,490,409	3,801,008	7,291,417
ADMINISTRATIVE COSTS			
Management & General	80,696	87,877	168,573
Communications & Customer Svc	72,768	79,243	152,011
Total Administrative Costs	153,464	167,120	320,584
Total Program & Admin Expenses	3,643,873	3,968,128	7,612,002
Energy Generation (kwh)	4,543,000	3,633,560	8,176,560

Financial Glossary

(for internal use) - updated December 1, 2017



Administrative Costs

Costs that, by nonprofit accounting standards, have general objectives which enable an organization's programs to function. The organization's programs in turn provide direct services to the organization's constituents and fulfill the mission of the organization.

i.e. management and general and general communication and outreach expenses.

Administrative costs are part of, but not all of the cost included in an OPUC performance metric. See **Program Delivery Efficiency** metric for further information about the metric.

- I. **Management and General**
 - Includes governance/board activities, interest/financing costs, accounting, payroll, human resources, general legal support, and other general organizational management costs.
 - Receives an allocated share of indirect costs.
- II. **General Communications and Outreach**
 - Expenditures of a general nature, conveying the nonprofit mission of the organization and general public awareness.
 - Receives an allocated share of indirect costs.

Allocation

- A way of grouping costs together and applying them to a program as one pool based upon an allocation base that most closely represents the activity driver of the costs in the pool.
- Used as an alternative to charging programs on an invoice-by-invoice basis for accounting efficiency purposes.
- An example would be accumulating all of the costs associated with customer management (call center operations, Energy Trust customer service personnel, complaint tracking, etc). The accumulated costs are then spread to the programs that benefited by using the ratio of calls into the call center by program (i.e. the allocation base).

Allocation Cost Pools

- Employee benefits and taxes.
- Office operations. Includes rent, telephone, utilities, supplies, etc.
- Information Technology (IT) services.
- Planning and evaluation general costs.
- Customer service and trade ally support costs.
- General communications and outreach costs.
- Management and general costs.
- Shared costs for electric utilities.
- Shared costs for gas utilities.
- Shared costs for all utilities.

Auditor's Opinion

- An accountant's or auditor's opinion is a report by an independent CPA presented to the board of directors describing the scope of the examination of the organization's books, and certifying that the financial statements meet the AICPA (American Institute of

Certified Public Accountants) requirements of GAAP (generally accepted accounting principles).

- Depending on the audit findings, the opinion can be unmodified or modified regarding specific items. Energy Trust strives for and has achieved in all its years an unmodified opinion.
- An unmodified opinion indicates agreement by the auditors that the financial statements present an accurate assessment of the organization's financial results.
- The OPUC Grant Agreement requires an unmodified opinion regarding Energy Trust's financial statements.
- Failure to follow generally accepted accounting principles (GAAP) can result in a qualified opinion.

Board-approved Annual Budget

- Funds approved by the board for *expenditures* during the budget year (subject to board approved program funding caps and associated policy) for the stated functions.
- Funds approved for *capital* asset expenditures.
- Approval of the general allocation of funds including commitments and cash outlays.
- Approval of expenditures is based on assumed revenues from utilities as forecasted in their annual projections of public purpose collections and/or contracted revenues.

Reserves

- In any one year, the amount by which revenues exceed expenses for that year in a designated category that will be added to the cumulative balance and brought forward for expenditure to the next budget year.
- In any one year, if expenditures exceed revenues, the negative difference is applied against the cumulative carryover balance.
- Does not equal the cash on hand due to noncash expense items such as depreciation.
- Tracked by major utility funder and at high level program area--by EE vs RE, not tracked by program.

Committed Funds

- Represents funds obligated to identified efficiency program participants in the form of signed applications or agreements and tracked in the project forecasting system.
- If the project is not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Funds are expensed when the project is completed.
- Funds may be held in the operating cash account, or in escrow accounts.

Contract obligations

- A signed contract for goods or services that creates a legal obligation.
- Reported in the monthly Contract Status Summary Report.

Cost-Effectiveness Calculation

- Programs and measures are evaluated for cost-effectiveness.
- The cost of program savings must be lower than the cost to produce the energy from both a utility and societal perspective.
- Expressed as a ratio of energy savings cost divided by the presumed avoided utility and societal cost of energy.
- Program cost-effectiveness evaluation is "fully allocated," i.e. includes all of the program costs plus a portion of Energy Trust administrative costs.

Dedicated Funds

- Represents funds obligated to identified renewable program participants in the form of signed applications or agreements and tracked in the project forecasting system.
- May include commitments, escrows, contracts, board designations, master agreements.
- Methodology utilized to develop renewable energy activity-based budgets amounts.

Direct Program Costs

- Can be directly linked to and reflect a causal relationship to one individual program/project; or can easily be allocated to two or more programs based upon usage, cause, or benefit.

Direct Program Evaluation & Planning Services

- Evaluation services for a specific program rather than for a group of programs.
- Costs incurred in evaluating programs and projects and included in determining total program funding caps.
- Planning services for a specific program rather than for a group of programs.
- Costs incurred in planning programs and projects and are included in determining program funding expenditures and caps.
- Evaluation and planning services attributable to a number of programs are recorded in a cost pool and are subsequently allocated to individual programs.

Escrowed Program (Incentive) Funds

- Cash deposited into a separate bank account that will be paid out pursuant to a contractual obligation requiring a certain event or result to occur. Funds can be returned to Energy Trust if such event or result does not occur. Therefore, the funds are still “owned” by Energy Trust and will remain on the balance sheet.
- The funds are within the control of the bank in accordance with the terms of the escrow agreement.
- When the event or result occurs, the funds are considered “earned” and are transferred out of the escrow account (“paid out”) and then are reflected as an expense on the income statement for the current period.

Expenditures/Expenses

- Amounts for which there is an obligation for payment of goods and/or services that have been received or earned within the month or year.

Project Tracking Projects Forecasting

Module developed in Project Tracking system (PT) to provide information about the timing of future incentive payments, with the following definitions:

- Estimated-Project data may be inaccurate or incomplete. Rough estimate of energy savings, incentives and completion date by project and by service territory.
- Proposed-Project that has received a written incentive offer but no agreement or application has been signed. Energy savings, incentives and completion date to be documented by programs using this phase. For Renewable projects-project that has received Board approval.
- Accepted-Used for renewable energy projects in 2nd round of application; projects that have reached a stage where approval process can begin.
- Committed-Project that has a signed agreement or application reserving incentive dollars until project completion. Energy savings/generations, incentives and completion date by project and by service territory must be documented in project records and in PT. If project not demonstrably proceeding within agreed upon time frame, committed funds return to incentive pool. Reapplication would then be required.
- Dedicated-Renewable project that has been committed, has a signed agreement, and if required, has been approved by the board of directors.

Incentives**I. Residential Incentives**

- Incentives paid to a residential program participant (party responsible for payment for utility service in particular dwelling unit) exclusively for energy efficiency and renewable energy measures in the homes or apartments of such residential customers.

II. Business Incentives

- Incentives paid to a participant other than a residential program participant as defined above following the installation of an energy efficiency or renewable energy measure.
- Above market cost for a particular renewable energy project.

III. Service Incentives

- Incentives paid to an installation contractor which serves as a reduction in the final cost to the participant for the installation of an energy efficiency or renewable energy measure.
- Payment for services delivered to participants by contractors such as home reviews and technical analysis studies.
- End-user training, enhancing participant technical knowledge or energy efficiency practices proficiency such as Strategic Energy Management programs, where some level of tracking of particular sites and participants is part of the program design.
- Lighting, hot water, and energy control devices through retailer buy down, on line fulfillment, and direct installation.

Indirect Costs

- Shared costs that are “allocated” for accounting purposes rather than assigning individual charges to programs.
- Allocated to all programs and administration functions based on a standard basis such as hours worked, square footage, customer phone calls, etc.
- Examples include rent/facilities, supplies, computer equipment and support, and depreciation.

IT Support Services

- Information technology costs incurred as a result of supporting all programs.
- Includes energy savings and incentive tracking software, data tracking support of PMCs and for the program evaluation functions.
- Includes technical architecture design and physical infrastructure.
- Receives an allocation of indirect shared costs.
- Total costs subsequently allocated to programs and administrative units.

Outsourced Services

- Miscellaneous professional services contracted to third parties rather than performed by internal staff.
- Can be incurred for program or administrative reasons and will be identified as such.

Program Costs

- Expenditures made to fulfill the purposes or mission for which the organization exists and are authorized through the program approval process.
- Includes program management, incentives, program staff salaries, planning, evaluation, quality assurance, program-specific marketing and other costs incurred solely for program purposes.
- Can be direct or indirect (i.e. allocated based on program usage.)

Program Delivery Efficiency Measure

The program delivery efficiency measure is a maximum threshold for administrative and program support costs as a percentage of total annual revenues.

Administrative costs adhere to generally accepted accounting practices for nonprofit organizations. Program support costs were defined in coordination with the Commission to enable comparison with other recipients of public purpose funding. For the purposes of this measure, program support costs are defined as program costs, except for direct program costs, in the following areas: program management, program delivery, program incentives, program payroll and related expenses, outsourced services, planning and evaluation services, customer service management, and trade ally network management. [source: OPUC Docket No. UM 1158]

Program Delivery Expense

- This will include all PMC labor and direct costs associated with: incentive processing, program coordination, program support, trade ally communications, and program delivery contractors.
- Includes contract payments to NEEA for market transformation efforts.
- Includes performance compensation incentives paid to program management contractors under contract agreement if certain incentive goals are met.
- Includes professional services for items such as solar inspections, anemometer maintenance and general renewable energy consulting.

Program Legal Services

- External legal expenditures and internal legal services utilized in the development of a program-specific contract.

Program Management Expense

- PMC billings associated with program contract oversight, program support, staff management, etc.
- ETO program management staff salaries, taxes and benefits.

Program Marketing/Outreach

- PMC labor and direct costs associated with marketing/outreach/awareness efforts to communicate program opportunities and benefits to rate payers/program participants.
- Awareness campaigns and outreach efforts designed to reach participants of individual programs.
- Co-op advertising with trade allies and vendors to promote a particular program benefit to the public.

Program Quality Assurance

- Independent in-house or outsourced services for the quality assurance efforts of a particular program (distinguished from program quality control).

Program Reserves

- Negotiated with utilities annually, with a goal of providing a cushion of approximately 5% above funds needed to fulfill annual budgeted costs. Management may access up to 50% of annual program reserve without prior board approval (resolution 633, 2012).

Program Support Costs

- Source of information is contained in statement of functional expense report.
- Portion of costs in OPUC performance measure for program administration and support costs.
 - Includes expenses incurred directly by the program.
 - Includes allocation of shared and indirect costs incurred in the following categories: supplies; postage and shipping; telephone; printing and publications; occupancy expenses; insurance; equipment; travel; business meetings; conferences and training; depreciation and amortization; dues, licenses, subscriptions and fees; miscellaneous expense; and an allocation of information technology department cost.

Project Specific Costs (for Renewable Energy)

- Expenses directly related to identified projects or identified customers to assist them in constructing or operating renewable projects. Includes services to prospective as well as current customers.
- Must involve direct contact with the project or customer, individually or in groups, and provide a service the customer would otherwise incur at their own expense.
- Does not include general program costs to reach a broad (unidentified) audience such as websites, advertising, program development, or program management.
- Project-Specific costs may be in the categories of; Incentives, Staff salaries, Program delivery, Legal services, Public relations, Creative services, Professional services, Travel, Business meetings, Telephone, or Escrow account bank fees.

Savings Types

- **Working Savings/Generation:** the estimate of savings/generation that is used for data entry by program personnel as they approve individual projects. They are based on deemed savings/generation for prescriptive measures, and engineering calculations for custom measures. They do not incorporate any evaluation or transmission and distribution factors.
- **Reportable Savings/Generation, also known as Net Savings:** the estimate of savings/generation that will be used for public reporting of Energy Trust results. This includes transmission and distribution factors, and evaluation factors of free riders, spillover and savings realization rates, plus any other corrections required to the original working values. These values are updated annually, and are subject to revision each year during the “true-up” as a result of new information or identified errors.
- **Gross Savings/Generation:** the estimate of savings from program participants, regardless of whether they are free-riders.
- **Contract Savings:** the estimate of savings that will be used to compare against annual contract goals. These savings figures are generally the same as the reportable savings at the time that the contract year started. For purposes of adjusting working savings to arrive at this number, a single adjustment percentage (a SRAF, as defined below) is agreed to at the beginning of the contract year and is applied to all program measures. This is based on the sum of the adjustments between working and reportable numbers in the forecast developed for the program year.
- **Savings Realization Adjustment Factors (SRAF):** are savings realization adjustment factors applied to electric and gas working savings measures in order to reflect more

accurate savings information through the benefit of evaluation and other studies. These factors are determined by the Energy Trust and used for annual contract amendments.

The factors are determined based on the best available information from:

- Program evaluations and/or other research that account for free riders, spill-over effects and measure impacts to date; and
- Published transmission and distribution line loss information resulting from electric measure savings.

Total Program and Admin Expenses (line item on income statement)

- Used only for cost effectiveness calculations, levelized cost calculations and in management reports used to track funds spent/remaining by service territory.
- Includes all costs of the organization--direct, indirect, and an allocation of administration costs to programs.
- Should not be used for external financial reporting (not GAAP).

Total Program Expenses (line item on income statement)

- All indirect costs have been allocated to program costs with the exception of administration (management and general costs and communications & outreach).
- Per the requirements of Generally Accepted Accounting Principles (GAAP) for nonprofits, administrative costs should not be allocated to programs.
- There is no causal relationship—costs would not go away if the program did not exist.

Trade Ally Programs & Customer Service Management

- Costs associated with Energy Trust sponsorship of training and development of a trade ally network for a variety of programs.
- Trade Ally costs are tracked and allocated to programs based on the number of allies associated with that program.
- Costs in support of assisting customers which benefit all Energy Trust programs such as call center operations, customer service manager, complaint handling, etc.
- Customer service costs are tracked and allocated based on # of calls into the call center per month.

True Up

- True-up is a once-a-year process where we take everything we've learned about how much energy programs actually save or generate, and update our reports of historic performance and our software tools for forecasting and analyzing future savings.
- Information incorporated includes improved engineering models of savings (new data factor), anticipated results of future evaluations based on what prior evaluations of similar programs have shown (anticipated evaluation factor), and results from actual evaluations of the program and the year of activity in question (evaluation factor).
- Results are incorporated in the Annual Report (for the year just past) and the True-up Report (for prior years).
- Sometimes the best data on program savings or generation is not available for 2-3 years, especially for market transformation programs. So for some programs, the savings are updated through the annual true-up 2 or 3 times