

# Quarter One 2018 Report to the Oregon Public Utility Commission & Energy Trust Board of Directors



**ENERGY TRUST OF OREGON**  
**MAY 15, 2018**

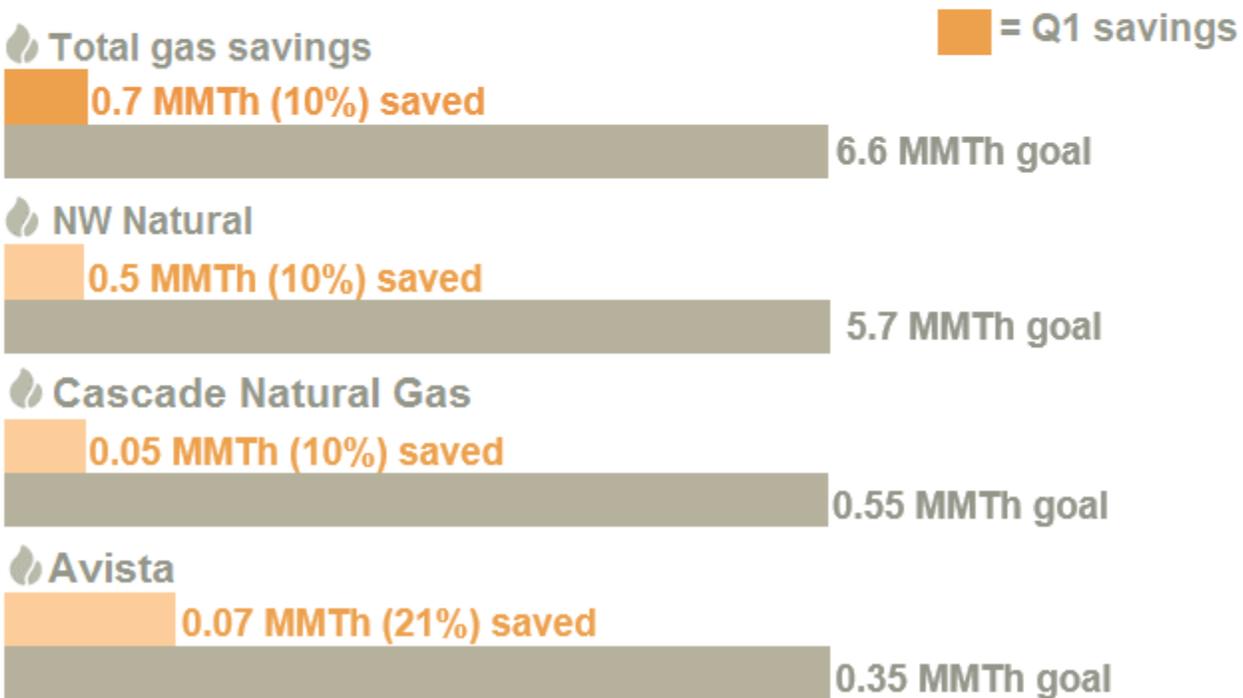
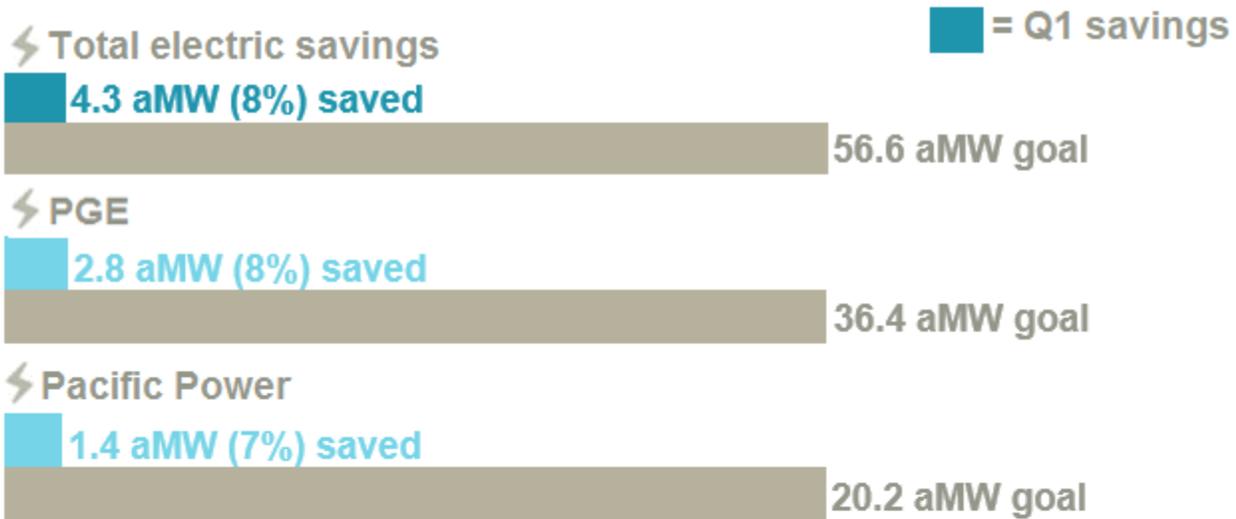
## TABLE OF CONTENTS

I	Results at a glance	2
II	Executive summary	5
III	Program and operations activity	8
IV	Revenues and expenditures tables	18
V	Savings and generation tables	20

A glossary of program descriptions and key terms is available online at [www.energytrust.org/reports](http://www.energytrust.org/reports)

# I Results at a glance<sup>1,2</sup>

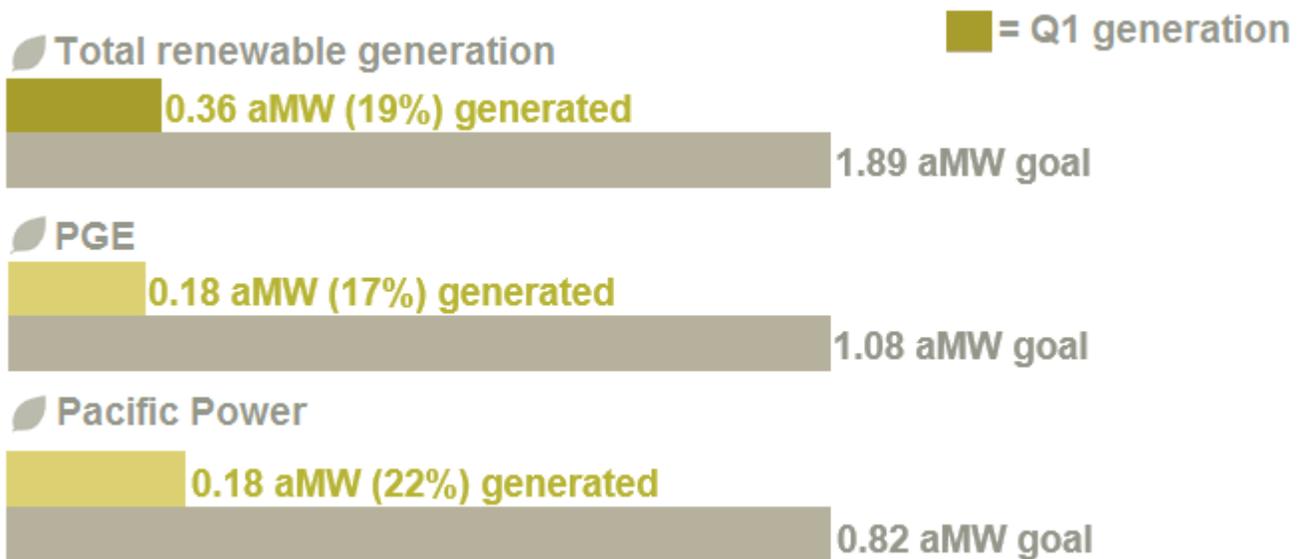
## Savings



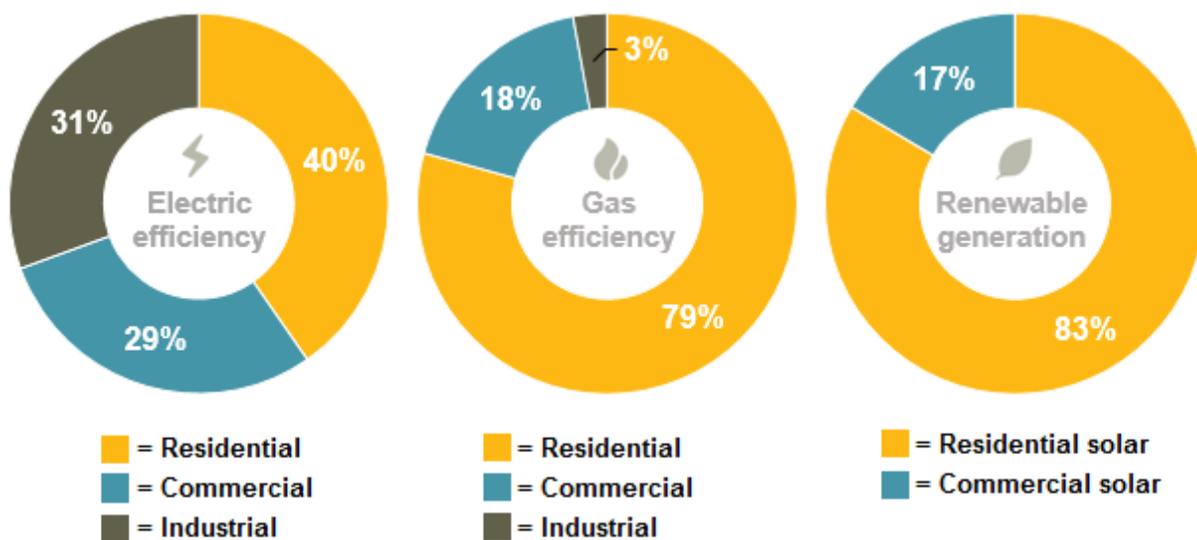
<sup>1</sup> This document reports net savings. Net savings are adjusted gross savings based on results of current and past evaluations.

<sup>2</sup> Note that aMW indicates average megawatts, MMTh indicates million annual therms and M is million.

## Generation



## Percent of savings and generation by sector year-to-date



## Customer satisfaction<sup>3</sup>



<sup>3</sup> From December 2017 through February 2018, Energy Trust delivered a short telephone survey to 554 randomly selected participants in five Oregon programs who completed projects between October and December 2017 and received an incentive or discount from Energy Trust. Results indicate satisfaction with overall program experience. New Buildings participants are surveyed annually, with the most recent survey in Q4 2017.

## Expenditures

### \$ Total

■ = Q1 expenditures



### \$ Energy efficiency



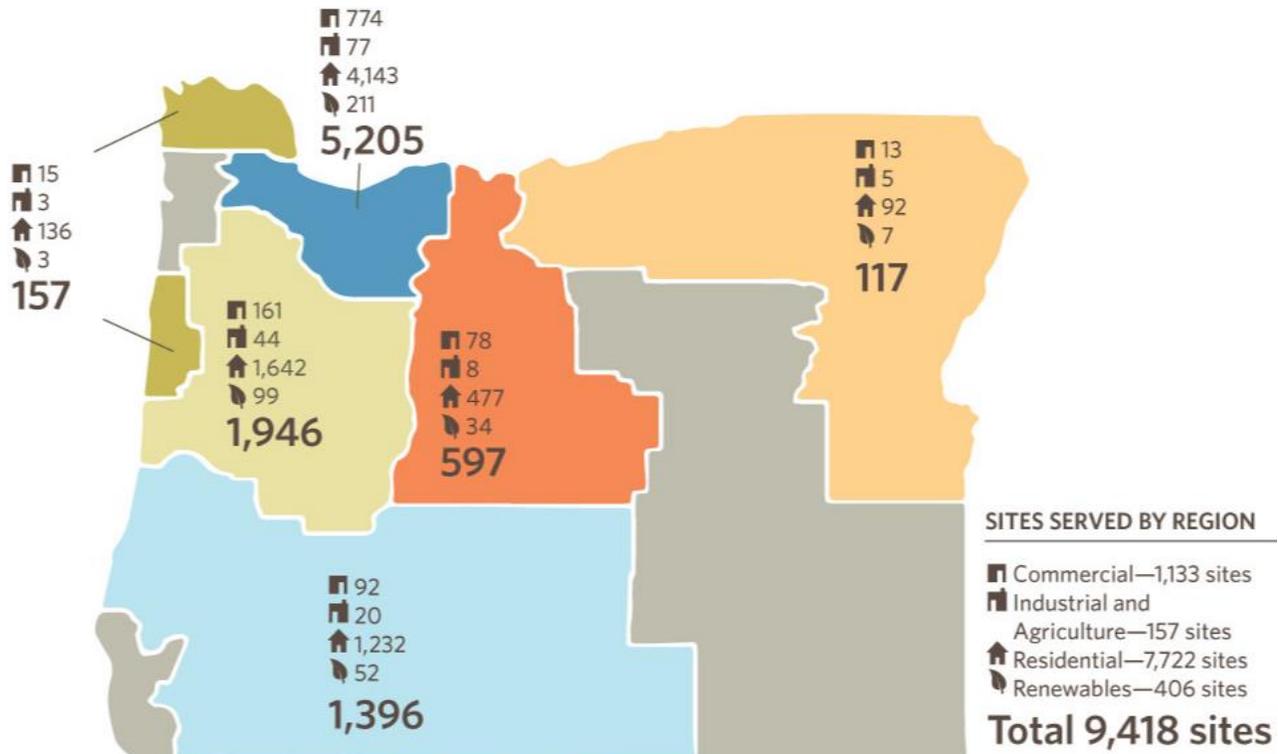
### \$ Renewable energy



### \$ Administrative



## Sites served by region



This document reports on Energy Trust services to Oregon customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista. Areas in gray are not served by these utilities.

## II Executive summary

### A. Progress to energy efficiency and renewable energy goals<sup>4,5</sup>

- **Energy Trust is tracking in line with expectations at the end of Q1. Savings are typically lower in the first half of the year** as more studies and assessments are completed compared to the second half of the year when more projects close. This report focuses on the development of those potential projects expected to save or generate energy and contribute to organizational goals by year-end.
- **Electric efficiency improvements completed in Q1 saved 4.3 average megawatts** of electricity, about 8 percent of the 2018 goal of 56.6 aMW. Q1 2018 electric savings were approximately 28 percent less than savings in Q1 2017. Fewer savings in 2018 compared to 2017 were largely due to less savings from LEDs and residential products as the market transforms and baselines increase, as well as fewer large custom projects in Existing Buildings and Production Efficiency programs.
- **Gas efficiency improvements completed during Q1 saved approximately 668,868 annual therms** of natural gas<sup>6</sup>, about 10 percent of the 2018 goal of 6.6 million annual therms. Q1 2018 gas savings were approximately 4 percent greater than the savings in Q1 2017.
- **Renewable energy systems installed during Q1 will generate 0.36 aMW of electricity**, 19 percent of the 2018 goal of 1.89 aMW.
- **Savings and generation achieved in Q1 represent about 23,000 tons of carbon dioxide** kept out of the atmosphere, the equivalent of removing 4,000 cars from Oregon roads.

**4.3**  
AVERAGE  
MEGAWATTS SAVED

**0.7**  
MILLION ANNUAL  
THERMS SAVED

**0.36**  
AMW GENERATED

**23,000**  
TONS OF CARBON  
DIOXIDE AVOIDED

### B. Notable activities and trends

- **Energy Trust launched the first combined commercial and industrial Strategic Energy Management cohort in Northeast Oregon**—strengthening Energy Trust’s presence in a historically underserved area. The cohort represents a joint offering between the Existing Buildings and Production Efficiency programs to serve customers together and streamline the experience for participants.
- **Energy Trust began applying lean startup methodology to explore potential new offerings** for small- to medium-sized commercial and industrial customers, as well as for low-income tenants of multifamily buildings. These efforts will conclude in Q3 to help inform 2019 planning.
- **To help reach, serve and deliver benefits to more participants**, Energy Trust began work on an operations plan for its Diversity, Equity and Inclusion

  
COMMERCIAL  
AND INDUSTRIAL  
SEM COHORT IN  
NORTHEASTERN  
OREGON

<sup>4</sup> This document reports net savings, which are adjusted gross savings based on results of current and past evaluations.

<sup>5</sup> This report includes the best available energy savings data as of the date of submission. Energy savings reported here for periods prior to January 1, 2017, may be different than previously reported as a result of applying updated evaluation factors to Energy Trust savings and generation in Oregon through the annual true up process. The full True Up 2017 Report is available online at [www.energytrust.org/reports](http://www.energytrust.org/reports).

<sup>6</sup> The gas savings do not include results for NW Natural in Washington. These results are available at [www.energytrust.org/reports](http://www.energytrust.org/reports).

(DEI) Initiative, which includes identifying resources needed to achieve 10 goals by the end of 2020.

- **In Q1, the DEI Committee approved a new charter and recruited additional members** to represent all Energy Trust functions.
- **Of the 10 goals, Energy Trust prioritized a goal focused on data for 2018.** Doing so will support the organization in **understanding where participation gaps exist across a broad range of customer characteristics**, including communities of color, rural communities and people with low and moderate incomes. Initial work commenced to develop systems to collect, track, analyze and report demographic information.
- **For the first half of 2018, staff will focus on data collection, analysis and benchmarking.**
- **To increase Energy Trust’s capacity to innovate and adapt to change,** staff continued projects to improve organizational processes and readiness for the future:
  - **To recommend improvements to organizational processes, systems and structure,** Energy Trust completed five months of research and intake with stakeholders in 2017. In Q1, a team of staff began internal presentations to preview draft recommendations in areas including goal alignment, prioritization, decision-making, matrixed staffing approaches, data systems, staffing planning, staff development, innovation and organizational structure. Internal discussions will continue in preparation for a board meeting in June 2018.
  - **Energy Trust proposed a new budget process** after extensive review of the current budget process that included interviews with staff and external stakeholders. Staff anticipate the proposed process will bring significant improvements to engagement with the OPUC, utilities and stakeholders, as well as increased organizational flexibility and continued transparency and accountability. Energy Trust presented the proposed budget concept to OPUC staff for initial feedback. Additional presentations will be delivered to the board, advisory councils and utilities in Q2 before a final recommendation is made to the board of directors at its June meeting. Any resulting changes would be implemented in 2019 and 2020 for development of the 2021 budget.
- **To prepare for the 2020-2024 Strategic Plan and improve awareness about topics that may influence Energy Trust in the future,** the board asked staff to **prepare learning papers on a variety of topics**. The learning papers were presented at board meetings in Q1. Presentations will continue through Q2, and the papers will be made available on the Energy Trust website after all presentations have taken place.
- **In Q1, the Production Efficiency program and the New Buildings program released requests for proposals** for Program Delivery Contractors and Program Management Contractors, respectively. The Production Efficiency program reviewed its custom track contracting structure in 2017, which included multiple PDCs. Based on that review, the 2018 RFP for delivery of the



**FOCUSED ON  
UNDERSTANDING  
WHERE  
PARTICIPATION GAPS  
EXIST**



**PREPARED LEARNING  
PAPERS ON TOPICS  
OF INFLUENCE**

program's custom track consolidates the contracting structure to include delivery of the custom track, as well as industrial SEM and Allied Technical Assistance Contractor (ATAC) services. Energy Trust competitively bids contracts to ensure effective services and high value for utility customers. Staff will present New Buildings recommendations to the board in Q2 and Production Efficiency recommendations in Q3.

- **Energy Trust completed a transition to consolidate its three residential programs and align residential program management and delivery contracts according to this new structure.** In Q1, Existing Homes, New Homes and Products became one Residential program, increasing Energy Trust's flexibility to reach more residential customers, respond to new opportunities and reduce costs by \$1.2 million from 2017 to 2018. The program is now delivered by PMC CLEAResult, with CLEAResult as the delivery contractor for retail promotions and TRC as delivery contractor for EPS™ whole-home new construction.
- **Staff continued to respond to information requests from the Oregon Secretary of State audit division as part of a performance audit of the OPUC's oversight of Energy Trust.** The Secretary of State conducts periodic performance audits to evaluate how state agencies and programs are achieving desired results. The audit is expected to complete in 2018.

## III Program and operations activity

### A. Commercial sector highlights

- **The commercial sector implemented planned activities to result in savings and customer engagement in 2018**, such as developing and refining offerings, expanding outreach and analyzing data.
- **Savings from NEEA activities comprised approximately 13 percent and 18 percent of the sector's results** in PGE and Pacific Power territories, respectively. Savings in 2018 are from building code and equipment standards improvements, working with distributors and manufacturers to encourage stocking of efficient commercial lighting and efforts to promote and support commissioning of new and existing commercial buildings.

### Existing Buildings

*The Existing Buildings program offers energy-efficient improvements for existing commercial buildings of all sizes. Incentives are available for custom projects, including capital upgrades and operations and maintenance improvements; standard upgrades; lighting upgrades; and energy management offerings such as commercial Strategic Energy Management, with incentives, tools, training, and technical assistance to help customers reduce energy use through behavioral and operations improvement.*

- **The Existing Buildings program dedicated outreach and contractor recruitment resources** to increase participation of minorities and women in Energy Trust's Trade Ally Network. Energy Trust worked to **assess barriers that small businesses and minority-owned businesses face** when engaging in Energy Trust programs, such as speaking English as a second language. The program met with contractors and small businesses to discuss how it can support their needs and address barriers. Participants identified needs for clear paperwork, language-specific content and continued presence at trade shows, networking events and cultural events.
- **To streamline the experience of large commercial Strategic Energy Management (SEM) customers** participating in multiple program offerings, Energy Trust began using a key account management strategy with SEM as its central hub. Commercial SEM presents an opportunity to address large customers holistically while supporting energy projects across multiple programs. To test and demonstrate this approach, Energy Trust hosted a workshop with Portland Public Schools to organize and facilitate the district's energy management projects across the Existing Buildings, New Buildings and Solar programs.
- **To drive additional energy savings in commercial SEM**, the program rolled out its first Annual Organizational Energy Plan milestone incentive in Q1. Energy Trust now provides incentives for organizations that create a plan and achieve milestones, which helps returning SEM customers organize, prioritize and recommit to their SEM practices prior to re-enrollment for an additional year of participation.

# 13%

OF COMMERCIAL  
SECTOR SAVINGS IN  
PGE TERRITORY FROM  
NEEA ACTIVITIES

# 18%

OF COMMERCIAL  
SECTOR SAVINGS IN  
PACIFIC POWER  
TERRITORY FROM  
NEEA ACTIVITIES



ASSESSED  
PARTICIPATION  
BARRIERS FACED BY  
SMALL BUSINESSES  
AND MINORITY-OWNED  
BUSINESSES

- **Energy Trust made exceptions to eligibility criteria to boost applications for a multiyear Pay for Performance pilot.** As of Q1, two buildings have expressed interest in participating. The Pay for Performance offering for commercial customers provides incentives for capital and operations and maintenance improvements over a multiyear period to help achieve additional energy savings for comprehensive projects.
- **To expand Eastern Oregon outreach and build relationships with local businesses,** Energy Trust replaced a part-time subcontractor with a full-time, **dedicated account manager located in Eastern Oregon.**
- **At an Existing Buildings Winter Trade Ally Event, staff provided updates** on increased technical assistance and design support available to trade allies and technical consultants. In addition, attendees heard an update from Energy Trust's executive director and presentations on Oregon's economic outlook, labor shortages and workforce diversity.
- **Energy Trust held a trade ally networking event** in Bend to support and build awareness among Central Oregon trade allies. The event provided opportunities for new trade allies serving insulation, foodservice and other industries to connect with Existing Homes and Existing Multifamily staff.



EXPANDED  
OUTREACH IN  
EASTERN  
OREGON WITH  
DEDICATED  
ACCOUNT  
MANAGER

## Existing Multifamily

*The Existing Multifamily program serves buildings 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 offerings 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.*

- **Energy Trust analyzed program and market data to identify customers for targeted outreach** and to refine messaging by market segment and region. The program also analyzed the results of walkthrough surveys—on-site energy assessments that help customers identify energy-saving opportunities.
- **In Q1, Energy Trust concluded the field phase of a pilot** to determine if energy-efficient, electric wall heaters provide savings for multifamily customers. Because participation was lower than expected, Energy Trust is considering alternative approaches to obtain a more robust sample size.
- **The program began development of an online tool to enable customers to solicit multiple bids** for custom projects. The program conducted recruitment and training for a qualified group of trade ally contractors.
- **The program met with Oregon Housing and Community Services to** coordinate outreach efforts and help affordable housing participants access appropriate services through both entities.



DEVELOPED  
CUSTOMER TOOL  
TO SOLICIT  
MULTIPLE BIDS  
FROM TRADE  
ALLIES

## New Buildings

*New Buildings influences commercial design and construction practices to reduce 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 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 include modeled savings and standard incentive packages for small commercial buildings. Prescriptive and calculated incentives include standard offerings and lighting calculators.*

- **The New Buildings program continued to encourage innovation through the Path to Net Zero offering**, which supports buildings designed energy efficiency and solar to push savings to at least 40 percent better than code.
- **Energy Trust continued to develop a new net zero leadership event series to support and educate emerging building industry professionals in applying net-zero design strategies.** The event series supports local design communities and builds market capacity.
- **The program continued work to develop a variable refrigerant flow offering** for specific markets as identified in a 2017 pilot, such as offices and school buildings larger than 25,000 square feet. The new offering is expected in Q3 2018.
- **Energy Trust provided three training and education opportunities around the state for design professionals and building owners** on high-performance building design strategies and technologies, including two trainings with Portland schools. The program will expand school trainings to Southern Oregon as part of its strategy to maximize the benefits of investment in energy-efficiency for schools planning bond projects.

## B. Industry and agriculture sector highlights

- **The industry and agriculture sector implemented planned activities to result in savings and customer engagement in 2018**, such as recruiting new SEM participants and completing studies.
- **Savings from NEEA activities comprised approximately 1 percent and 2 percent of the sector's results** in PGE and Pacific Power territories, respectively. Savings in 2018 are from NEEA's reduced wattage lamp replacement initiative, certification of refrigeration operators in the industrial refrigeration market, as well as from a previously funded initiative to improve awareness of and establish standards for efficient motors.



**SUPPORT FOR  
EMERGING BUILDING  
INDUSTRY  
PROFESSIONALS ON  
NET-ZERO DESIGN**

**1%**

**OF INDUSTRY AND  
AGRICULTURE  
SECTOR ELECTRIC  
SAVINGS IN PGE  
TERRITORY FROM  
NEEA ACTIVITIES**

**2%**

**OF INDUSTRY AND  
AGRICULTURE  
SECTOR ELECTRIC  
SAVINGS IN PACIFIC  
POWER TERRITORY  
FROM NEEA**

## Production Efficiency

*Production Efficiency provides 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: standard, custom and energy performance management.*

- **In Q1, Energy Trust engaged nine customers in Continuous SEM** and began recruiting customers for the October 1 launch. To optimize the Continuous SEM offering, Energy Trust updated curriculum, resources, guidelines and eligibility requirements.
- **The Production Efficiency program continued to provide outreach, technical services and incentives** to reduce the energy use of new or expanding cannabis production facilities. Energy Trust engaged local market actors to inform planning strategies while sharing best practices with peers in other states. The program participated in the Cannabis Collaborative Conference by co-sponsoring with Resource Innovation Institute and presenting on net-zero strategies to help cannabis growers use efficiency and solar energy to reach net-zero energy use.
- **To engage more agricultural customers, Energy Trust conducted rural outreach** and delivered services to farmers and irrigators. The program leveraged collaboration with other agencies and nonprofits who are active in agriculture, such as Sustainable Northwest, Farmers Conservation Alliance and the Klamath Watershed Partnership.
- **The second phase of a megaproject is expected to complete in 2018.** The first phase completed earlier than planned in 2017 and saved twice as much energy as expected. Megaprojects are large commercial or industrial projects receiving more than \$500,000 in Energy Trust incentives for energy-efficiency upgrades. These projects are reviewed and approved by Energy Trust's board of directors and provide savings at a very low levelized cost.
- **Energy Trust identified opportunities for energy efficiency with a new irrigation district participant.** The Production Efficiency program works with irrigation districts participating in irrigation modernization projects with the Farmers Conservation Alliance and Energy Trust's Other Renewables program to help these customers explore opportunities for energy efficiency. This collaborative irrigation modernization strategy leverages the wide range of benefits irrigation modernization projects can provide, including energy generation, energy and water savings and investment in rural communities.

## C. Residential sector highlights

- **The residential sector implemented planned activities to result in savings and customer engagement in 2018**, such as updating incentives for heat pumps to include controls and developing new strategies for promoting smart thermostats.
- **Savings from NEEA activities comprised approximately 32 percent and 28 percent of the sector's results** in PGE and Pacific Power



**9 CUSTOMERS  
ENROLLED IN  
CONTINUOUS SEM**



**IDENTIFIED  
EFFICIENCY  
OPPORTUNITIES WITH  
A NEW IRRIGATION  
DISTRICT**

**32%**

**OF RESIDENTIAL  
SECTOR SAVINGS IN  
PGE TERRITORY FROM  
NEEA ACTIVITIES**

**28%**

**OF RESIDENTIAL  
SECTOR SAVINGS IN  
PACIFIC POWER  
TERRITORY FROM  
NEEA ACTIVITIES**

territories, respectively. Savings in 2018 are primarily from previously funded efforts to improve battery charger standards, as well as from residential building code improvements. Ductless heat pump, heat pump water heater and super-efficient dryer initiatives also deliver savings.

## Residential

*Energy Trust's residential program provides electric and gas energy-efficiency solutions for residential customers of single-family homes, manufactured homes and newly constructed homes. Cash-back incentives are available for energy-efficient HVAC systems, appliances and weatherization upgrades. Instant discounts are provided for water heating equipment, lighting and showerheads. The program delivers services through program tracks: home retrofit, manufactured homes, retail promotions and new construction.*

- **In Q1, Energy Trust transitioned to a consolidated Residential program structure.** Consolidating Energy Trust's three residential programs—Existing Homes, New Homes and Products—into a single program increases Energy Trust's flexibility to reach residential customers, respond to new opportunities and reduce costs by \$1.2 million from 2017 to 2018.
- **The Residential program developed new strategies to promote smart thermostat incentives** to homeowners and builders, such as an instant incentive to roll out in mid-2018. Retailers will apply this new instant coupon for smart thermostats at the point of sale. The incentive will reduce paperwork for the purchaser while collecting customer information—allowing Energy Trust to market related opportunities to the same customers in the future.
- **In Q1, Energy Trust supported an upcoming PGE effort to directly install smart thermostats.** Energy Trust coordinated with PGE to market smart thermostats to customers who are a good fit for the technology, capture energy savings and increase capacity for demand response.
- **The program promoted thermostat optimization** to customers who own Nest Thermostats. Thermostat optimization reduces energy use by making small, gradual temperature adjustments based on occupant habits and preferences. Energy Trust began work with Whisker Labs on a pilot to test optimization on thermostats manufactured by Honeywell, Ecobee and Emerson.
- **The program implemented a new incentive structure for EPS new home construction**, which reflects changes in Oregon's residential energy code. Improvements in Oregon's residential energy code increased the baseline against which Energy Trust's incentives are measured, lowering the amount of savings that can be claimed per home constructed.
- **The program worked with Oregon Home Builder's Association to provide trade allies with Construction Contractors Board accredited training and education on Oregon's new residential energy code**, which took effect January 1, 2018.
- **Starting January 1, 2018, a Home Energy Score and Home Energy Report are required for single-family homes listed for sale within the City of**



SUPPORTED  
UPCOMING PGE  
EFFORT TO DIRECTLY  
INSTALL SMART  
THERMOSTATS



TRAINING FOR TRADE  
ALLIES ON NEW  
ENERGY CODE

**Portland.** After transitioning out of scoring for the existing homes market in 2017, Energy Trust continues to offer EPS for new homes. In Q1, the program coordinated with the City of Portland to monitor home energy scoring activities, expand awareness and assess outreach opportunities. By the end of Q2, the City of Portland expects to have energy scores for approximately 5,000 homes.

- **Energy Trust developed a new incentive for installing heat pumps in manufactured homes**, which is expected to launch later in 2018.
- **The program began developing a methodology to produce a five-year measure savings assessment** that will allow staff and stakeholders to plan long-term, foresee future sources of savings and understand the possible impact of longer trends. The assessment will incorporate market intelligence, emerging technology roadmaps, resource planning, customer acquisition strategies and existing Integrated Resource Plan assessments.

## D. Renewable energy sector highlights

- **The renewable energy sector implemented planned activities to result in generation and customer engagement in 2018**, such as **modifying incentives following the expiration of the state Residential Energy Tax Credit** at the end of 2017 and dedicating incentives for a new hydropower installation project.



**MODIFIED INCENTIVES  
FOLLOWING  
EXPIRATION OF STATE  
TAX CREDIT**

## Solar

*The Solar program aims to create a vigorous and sustainable market for solar in Oregon by offering cash incentives that lower above-market costs for small residential and commercial solar projects, educating consumers, creating and enforcing quality standards and ensuring a robust network of qualified trade ally contractors. Staff review and adjust incentive levels regularly to manage budget and respond to changes in solar costs. The Solar program supports installation of distributed solar systems across all customer sectors and types.*

- **In 2018, the program will focus on improving equitable access to solar for lower-income customers** and supporting custom and innovative applications of solar that provide greater value to communities or the grid, such as advanced solar plus storage systems.
- **In Q1, the Solar program moderately increased residential incentives** to account for higher above-market costs and lower demand after the expiration of the Oregon Department of Energy Residential Energy Tax Credit at the end of 2017. The program also moderately increased standard commercial incentives and maximum project size caps.
- **Beginning in 2018, nonprofit and public solar projects can apply for both Energy Trust incentives and utility grants**, including the PGE Renewable Development Fund (RDF) and Pacific Power's Blue Sky<sup>SM</sup> program.
- **To support projects applying for utility grants, Energy Trust created a new solar development assistance offering.** Starting in Q2, solar development assistance will be available for voluntary grant projects and

accompanied by a reduced-rate standard incentive offering with a longer reservation period.

- **Energy Trust solicited input from stakeholders around the state on proposed strategies to increase access and solar adoption in low- and moderate-income communities.** With support from a U.S. Department of Energy grant, the program collaborated with Oregon Department of Energy, the Clean Energy States Alliance and five other states to identify and prioritize strategies.
- **The program supported the OPUC with expertise and market data** relevant to ongoing solar-related work, including community solar program development through docket UM 1930.



**SOLICITED INPUT ON STRATEGIES TO INCREASE ACCESS TO SOLAR FOR LOW AND MODERATE INCOME CUSTOMERS**

## Other Renewables

*The Other Renewables program supports renewable energy projects up to 20 megawatts in nameplate capacity that generate electricity using biopower, geothermal, hydropower and municipal-scale, community-owned 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 for renewable energy projects. 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.*

- **The Other Renewables program prioritized outreach for project development assistance for irrigation hydropower and net-metered biogas projects** through site visits to irrigation districts and municipalities in Southern Oregon.
- **Energy Trust began to transition the first set of irrigation modernization participants** to hydropower project design and other project development activities.
- **Energy Trust dedicated \$80,000 for a 22-kilowatt hydropower project installation on an existing drinking water pipeline in Wallowa State Park.** The project, owned by Wallowa County, will offset 85 percent of the energy used to pump water to the park and to residents of the Wallowa Lake County Service District. The hydropower installation is expected to reach commercial operation by the end of 2018.
- **The program continued to support project development assistance** at two water resource recovery facilities (also called wastewater treatment plants) in Salem and Milwaukie. The two plants are designing and developing biopower cogeneration systems that will help offset their onsite energy usage. The program also coordinated with the Production Efficiency program



**FUNDED 22-KW HYDROPOWER PROJECT IN EASTERN OREGON**

to ensure efficiency upgrades are considered in renewable energy project designs.

## E. Internal operations highlights

### Communications

- **Energy Trust received 138,600 website visits in Q1 2018**, generating 430,200 page views.
- **On average, visitors to the Energy Trust website in Q1 viewed three pages per visit** and spent about 3.5 minutes on the website. This is higher than Energy Trust's 2017 average, higher than the industry average and a good indicator of engagement by organic traffic—unpaid traffic from search engines.
- **Apart from the home page, which most new visitors found through organic search engine results, the top landing pages for new visitors** were the main page for the Residential program, the incentives page for smart thermostats and the order form for Energy Saver Kits.
- **The majority of web visitors were located in the Portland Metro area** (79 percent), followed by the Willamette Valley (10 percent), Southern Oregon (7 percent) and Central Oregon (3 percent). The remaining 1 percent of visits originated from Eastern Oregon, the Oregon Coast and locations outside of Oregon.
- **The organization garnered 49 news stories about Energy Trust** programs and services with a media value of \$66,500—the cost of purchasing the equivalent advertising space and air time—as a result of media outreach and responses to reporter inquiries.
- **Staff distributed five press releases in Q1 2018**, including an announcement about Energy Trust's first Eastern Oregon Strategic Energy Management cohort, and two requests for proposals for program management and delivery.

**138,600**  
WEBSITE VISITS

**49**  
NEWS STORIES ABOUT  
ENERGY TRUST

### Customer service

- **Energy Trust received 5,400 calls in Q1 2018**, a 10 percent decline from Q1 2017. This continued the overall trend of declining call volumes as Energy Trust builds more online self-service web content and tools.
- **Staff responded to 380 email inquiries in Q1 2018**, a 30 percent decline from Q1 2017.
- **Energy Trust received six complaints in Q1 2018 that could not be easily resolved** by a call center representative. This compares to no complaints received in Q1 2017, which was an unusually low quarter. Although the six complaints received in Q1 were on par with quarterly averages, five of these complaints related directly to a solar contractor that was unable to complete many projects for Oregon customers. All of these complaints were resolved or nearing resolution in Q2 2018.

**5,400**  
CUSTOMER CALLS  
RECEIVED

## Trade and program allies

- **Staff prepared educational content** for the Q2 Trade Ally Forums in Bend, Klamath Falls, Grants Pass, Pendleton and Portland.
- **To diversify and expand the Trade Ally Network, staff attended the 2018 Governor's Marketplace Conference** in Salem. The Governor's Office of Diversity, Equity and Inclusion/Affirmative Action hosts this event to build relationships between industry professionals, public agencies, private organizations and diversity practitioners.
- **Energy Trust solicited service territory information from trade allies** to improve Energy Trust's Trade Ally Portal, a website where contractors can enroll to become trade allies and access project data and resources.



ATTENDED  
GOVERNOR'S  
MARKETPLACE  
CONFERENCE

## General outreach

- **Energy Trust expanded awareness about programs and services through presentations and events**, including the first annual Illinois Valley Senior Expo, State of Oregon Regional Solutions, a Native American Chamber of Commerce event and an Oregon Business and Industries event.
- **Outreach staff provided information about Energy Trust programs** through meetings with the City of Milwaukie's Building and Efficiency workgroup, the Coos County Housing Coalition, the Rogue Valley Hispanic Interagency Committee, Douglas County energy advocates, Multnomah County, the City of Portland, Sustainable Northwest and Oregon senators and legislators.
- **Staff met with Eastern Oregon stakeholders to explore how solar energy could benefit low- to moderate-income households.** Energy Trust discussed opportunities and strategies with representatives from municipalities, tribes, nonprofits, contracting services, investors, economic development agencies and the Pendleton Progress Board.
- **Staff worked with local and county housing task groups** to develop solutions to housing shortages in Umatilla, Union and Wallowa counties.
- **After a series of exploratory discussions around advanced energy planning**, the Confederated Tribes of the Umatilla Indian Reservation joined the joint commercial and industrial SEM cohort and moved forward on several Path to Net Zero buildings.
- **Energy Trust provided ongoing training and support** to AmeriCorps Resource Assistance for Rural Environments interns in Lake County, Hood River and Pendleton.



EXPLORED SOLAR  
ENERGY FOR LOW-  
TO MODERATE-  
INCOME  
HOUSEHOLDS IN  
EASTERN OREGON

## IT and business systems

- **Energy Trust conducted beta testing on changes to its existing Customer Relationship Management system** to help track and manage relationships with stakeholders representing a range of organizations, including government, community-based, utility and business associations.
- **Energy Trust processed 21,200 customer projects in Energy Trust systems**, including 15,000 submitted through web applications.

21,200

CUSTOMER  
PROJECTS  
PROCESSED

- **Staff tested new cloud-based disaster-recovery resources** to ensure continuity of operations and data recovery in the event of a natural disaster.
- **Staff enhanced bulk import of project information** into project tracking systems to streamline program work.
- **Staff developed new data structures and programming** to support moving quarterly data into a new business intelligence reporting tool called Microsoft Power BI. The new tool improves visualization and allows staff to more easily query and analyze information.

## Planning and evaluation

- **Energy Trust designated 332 new energy-efficiency measures** and revised 83 measures.
- **Staff completed and posted three evaluations and market studies** on the Energy Trust website, including Pilot Study of Tier 1 Advanced Power Strips in Multifamily, 2017 New Homes Gas Fireplace Survey and Production Efficiency Impact Evaluation Report.
- **Energy Trust participated in NEEA's second regionally co-funded Residential Building Stock Assessment** and summary report. The assessment is a critical source of information on efficient homes, home equipment (such as clothes washers, refrigerators, dishwashers and air conditioners) and installation rates for energy-efficiency offerings.
- **Staff provided 20-year energy efficiency forecasts** for NW Natural and Avista to incorporate into Integrated Resource Plans (IRPs), and kicked off the process to forecast and support Pacific Power's next IRP. Staff continued to support PGE and Cascade Natural Gas in IRP development.

**332**  
NEW ENERGY-  
EFFICIENCY  
MEASURES  
CREATED

## IV Revenues and expenditures tables<sup>7,8</sup>

### A. Revenues and expenditures summary

- Overall revenues totaled \$57.2 million for Q1 2018, 6 percent over what was budgeted.
- Q1 expenditures totaled \$29 million, of which \$8.4 million or 29 percent was for incentives. Typically, actual expenditures vary from budgeted expenditures by a few percentage points.
- Q1 electric efficiency expenditures were 14 percent below budget.
- Q1 gas efficiency expenditures were 13 percent over budget.
- Q1 renewable energy expenditures were 27 percent below budget.

### B. Revenues

Revenues include public purpose revenue plus incremental electric revenue from SB 838. Incremental revenues are those authorized under SB 838 to support capturing additional cost-effective electric efficiency savings above the amount supported by funding through SB 1149.

Source	Q1 actual revenues	Q1 budgeted revenues
Portland General Electric	\$ 10,751,654	\$ 11,062,554
PGE Incremental	\$ 19,076,737	\$ 16,398,684
Pacific Power	\$ 8,040,591	\$ 7,905,730
Pacific Power Incremental	\$ 9,744,469	\$ 9,051,379
NW Natural	\$ 8,205,506	\$ 8,303,853
NW Natural Industrial DSM	\$ -	\$ -
Cascade Natural Gas	\$ 1,096,006	\$ 870,400
Avista	\$ 289,217	\$ 289,217
<b>Total</b>	<b>\$ 57,204,181</b>	<b>\$ 53,881,817</b>

### C. Expenditures by utility<sup>9,10</sup>

Source	Q1 actual expenditures	Q1 budgeted expenditures
Portland General Electric	\$ 14,706,085	\$ 16,543,839
Pacific Power	\$ 9,041,963	\$ 11,435,887
NW Natural	\$ 4,138,562	\$ 3,603,320
NW Natural Industrial DSM	\$ 441,136	\$ 464,701
Cascade Natural Gas	\$ 335,560	\$ 430,018
Avista	\$ 399,983	\$ 188,980
Business development	\$ 248	\$ -
Low and moderate income grant	\$ 23,747	\$ -
<b>Total</b>	<b>\$ 29,087,284</b>	<b>\$ 32,666,745</b>

<sup>7</sup> Columns may not total due to rounding.

<sup>8</sup> The gas savings do not include results for NW Natural in Washington. These results are available at [www.energytrust.org/reports](http://www.energytrust.org/reports).

<sup>9</sup> In 2017, Energy Trust invested organization contingency pool funds to explore new business opportunities. Organization contingency pool funds are unrestricted donations and consulting fees, and are independent from ratepayer funds.

<sup>10</sup> Energy Trust received a grant from the U.S. Department of Energy to collaborate with the Oregon Department of Energy to increase access to solar energy for low- and moderate-income communities.

## D. Expenditures by sector and program

		Q1 actual expenditures		Q1 budgeted expenditures	
Commercial	Existing Buildings and Multifamily	\$	7,795,832	\$	9,427,951
	New Buildings	\$	2,665,046	\$	2,915,809
	NEEA Commercial	\$	813,525	\$	529,412
<b>Commercial total</b>		<b>\$</b>	<b>11,274,404</b>	<b>\$</b>	<b>12,873,172</b>
Industrial	Production Efficiency	\$	4,900,997	\$	5,056,485
	NEEA Industrial	\$	18,547	\$	253,148
<b>Industrial total</b>		<b>\$</b>	<b>4,919,544</b>	<b>\$</b>	<b>5,309,633</b>
Residential	Residential	\$	7,857,382	\$	8,855,666
	NEEA Residential	\$	1,309,862	\$	1,046,023
<b>Residential total</b>		<b>\$</b>	<b>9,167,244</b>	<b>\$</b>	<b>9,901,689</b>
<b>Energy efficiency total</b>		<b>\$</b>	<b>25,361,192</b>	<b>\$</b>	<b>28,084,495</b>
Renewables	Solar	\$	1,287,092	\$	1,717,433
	Other Renewables	\$	442,696	\$	706,522
<b>Renewable generation total</b>		<b>\$</b>	<b>1,729,788</b>	<b>\$</b>	<b>2,423,955</b>
Administration	Administration	\$	1,972,309	\$	2,158,295
<b>Administration total</b>		<b>\$</b>	<b>1,972,309</b>	<b>\$</b>	<b>2,158,295</b>
Other	<b>Business development</b>	\$	248	\$	-
	<b>Low and moderate income grant</b>	\$	23,747	\$	-
<b>Total expenditures</b>		<b>\$</b>	<b>29,087,284</b>	<b>\$</b>	<b>32,666,745</b>

## E. Incentives paid

Quarter	PGE efficiency	Pacific Power efficiency	NW Natural efficiency	Cascade Natural Gas efficiency	Avista efficiency	PGE generation	Pacific Power generation	Total
Q1	\$3,807,004	\$2,180,736	\$1,311,985	\$94,172	\$124,349	\$487,488	\$399,020	\$8,404,755
<b>Total</b>	<b>\$3,807,004</b>	<b>\$2,180,736</b>	<b>\$1,311,985</b>	<b>\$94,172</b>	<b>\$124,349</b>	<b>\$487,488</b>	<b>\$399,020</b>	<b>\$8,404,755</b>

## V Savings and generation tables<sup>11,12,13,14,15</sup>

### A. Savings and generation by fuel

	Q1 savings/generation	YTD savings/generation	Annual goal	Percent achieved YTD
Electric savings	4.3 aMW	4.3 aMW	56.6 aMW	8%
Natural gas savings	668,868 therms	668,868 therms	6,551,970 therms	10%
Electric generation	0.36 aMW	0.36 aMW	1.89 aMW	19%

### B. Progress toward annual efficiency goals by utility

	Q1 savings	Annual goal	Percent achieved YTD	Annual IRP target	Percent achieved YTD
Portland General Electric	2.8 aMW	36.4 aMW	8%	36.12 aMW*	8%
Pacific Power	1.4 aMW	20.2 aMW	7%	19.8 aMW	7%
NW Natural	543,117 therms	5.7 million therms	10%	5.7 million therms*	10%
Cascade Natural Gas	53,135 therms	547,106 therms	10%	548,212 therms*	10%
Avista	72,616 therms	349,520 therms	21%	349,520 therms**	21%

*Integrated Resource Plan targets are shown in net savings, and have been updated from the IRP targets Energy Trust submitted to utilities for inclusion in their current IRP filings based on 2018 net-to-gross ratios.*

\* Integrated Resource Plans for PGE, Pacific Power and Cascade Natural Gas are pending acknowledgement by the OPUC.

\*\* Avista has not yet determined an IRP target for 2018. Energy Trust's program goal is used in lieu of a 2018 IRP target.

<sup>11</sup> Columns may not total due to rounding.

<sup>12</sup> This document reports net savings. Net savings are adjusted gross savings based on results of current and past evaluations.

<sup>13</sup> Electric savings also include transmission and distribution savings.

<sup>14</sup> The gas savings do not include results for NW Natural in Washington. These results are available at [www.energytrust.org/reports](http://www.energytrust.org/reports).

<sup>15</sup> Energy Trust reports 100 percent of generation and capacity for renewable energy installations supported by Energy Trust's cash incentives. While some of these projects have additional sources of funding, Energy Trust enabled project completion.

### C. Electric savings by sector and program

		Q1 savings aMW	YTD savings aMW	Annual goal aMW	Percent achieved YTD
Commercial	Existing Buildings and Multifamily	0.8	0.8	16.8	5%
	New Buildings	0.2	0.2	6.3	4%
	NEEA Commercial	0.2	0.2	1.8	10%
	<b>Commercial total</b>	<b>1.2</b>	<b>1.2</b>	<b>24.8</b>	<b>5%</b>
Industrial	Production Efficiency	1.3	1.3	19.2	7%
	NEEA Industrial	0.0	0.0	0.1	13%
	<b>Industrial total</b>	<b>1.3</b>	<b>1.3</b>	<b>19.3</b>	<b>7%</b>
Residential	Residential	1.2	1.2	7.2	17%
	NEEA Residential	0.5	0.5	5.3	10%
	<b>Residential total</b>	<b>1.7</b>	<b>1.7</b>	<b>12.4</b>	<b>14%</b>
	<b>Total electric savings</b>	<b>4.3</b>	<b>4.3</b>	<b>56.6</b>	<b>8%</b>

### D. Natural gas savings by sector and program

		Q1 savings thm	YTD savings thm	Annual goal thm	Percent achieved YTD
Commercial	Existing Buildings and Multifamily	77,758	77,758	1,647,484	5%
	New Buildings	41,582	41,582	936,040	4%
	<b>Commercial total</b>	<b>119,339</b>	<b>119,339</b>	<b>2,583,524</b>	<b>5%</b>
Industrial	Production Efficiency	19,235	19,235	1,064,753	2%
	<b>Industrial total</b>	<b>19,235</b>	<b>19,235</b>	<b>1,064,753</b>	<b>2%</b>
Residential	Residential	530,293	530,293	2,903,694	18%
	<b>Residential total</b>	<b>530,293</b>	<b>530,293</b>	<b>2,903,694</b>	<b>18%</b>
	<b>Total natural gas savings</b>	<b>668,868</b>	<b>668,868</b>	<b>6,551,970</b>	<b>10%</b>

Energy Trust allocated budget to NEEA for gas market transformation activities. While there were no associated savings in 2018, savings are expected in subsequent years.

### E. Renewable energy generation by utility

	Q1 generation aMW	YTD generation aMW	Annual goal aMW	Percent achieved YTD
Portland General Electric	0.18	0.18	1.08	17%
Pacific Power	0.18	0.18	0.82	22%
<b>Total</b>	<b>0.36</b>	<b>0.36</b>	<b>1.89</b>	<b>19%</b>

### F. Renewable energy generation by program

	Q1 generation aMW	YTD generation aMW	Annual goal aMW	Percent achieved YTD
Other Renewables	0.00	0.00	0.00	n/a
Solar	0.36	0.36	1.89	19%
<b>Total generation</b>	<b>0.36</b>	<b>0.36</b>	<b>1.89</b>	<b>19%</b>

**G. Incremental utility SB 838 expenditures<sup>16</sup>**

<b>Utility</b>	<b>2018 Q1 SB 838 Expenditures</b>
Portland General Electric \$	198,040
Pacific Power \$	150,082
<b>Total \$</b>	<b>348,122</b>

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<sup>16</sup> Reflects expenditures by Pacific Power and PGE in support of utility activities described in SB 838. Reports detailing these activities are submitted annually to the OPUC.