## 2015 ANNUAL REPORT





As I wrap up my 14 years leading Energy Trust of Oregon, I am proud to see us performing at our best ever—delivering the cleanest, lowest-cost energy we can buy for 1.5 million utility customers.

Over this time, Energy Trust helped Oregonians save and generate 667 average megawatts of electricity and save 45 million annual therms of natural gas, equivalent to the output of a power plant fueled by efficiency and renewable energy. We invested \$1.3 billion that will help save participants \$5.6 billion on utility bills over time. When people and businesses spend less on energy, they have more to spend on what matters—from healthcare to new hires.

As we celebrate our success, we also recognize that Oregon is undergoing major changes. In 2015, we evolved our programs to provide even more clean energy benefits by:

- Driving rapid consumer and business adoption of advancing technologies, including LED lighting
- Engaging designers and builders in new approaches to add more efficiency and solar energy features to residential, multifamily and commercial construction
- Designing new ways to serve a growing and increasingly diverse population
- Delivering benefits like water savings, rural economic development and environmental health to help customers fund energy efficiency and renewable energy projects

In the years ahead, I am confident Energy Trust will continue to deliver lasting, tangible benefits to those we serve. Thank you to our board of directors, staff, trade and program allies, utilities and above all our customers.

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Margie Harris, Executive Director



## **ABOUT US**

An independent nonprofit organization, Energy Trust helps meet Oregon's energy needs with the cheapest and cleanest options available. Our on-the-ground outreach, technical services, cash-back incentives and connections to local contractors help homeowners, renters, businesses, manufacturers, farmers and ranchers across the state cut costs with affordable, clean energy solutions. We also help customers power their homes or businesses with renewable energy from solar, biopower, hydropower, wind and geothermal sources.

We are funded by and serve customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas in Oregon, and NW Natural in southwest Washington. Our collaborations with utilities, community leaders, industry organizations, businesses and government agencies help us reach and serve all eligible customers. Working together, we connect Oregonians with smart energy choices that lead to job creation, local economic benefits and a healthier environment for years to come.







## **BLUE CHEESE, GREEN POWER**

#### ROGUE CREAMERY, GRANTS PASS

The owners of Rogue Creamery know that award-winning cheeses like Crater Lake Blue and Oregonzola begin in the barn with happy cows.

The 80-year-old company teamed up with Energy Trust to bring energy-efficiency and renewable energy solutions to its 75-acre dairy farm, while also creating optimal living conditions for its 120 grass-fed cows. Rogue's barn has a polyethylene roof to bring in daylight and LED lighting that automatically optimizes lighting levels. Together these technologies make it feel like a perfect sunny day, contributing to contented cows and robust milk production.

Energy Trust paid a cash incentive of \$29,426 toward the upfront cost of the LEDs and controls, which reduced the farm's annual energy costs by approximately \$14,600. "The lighting provides comfort and safety for both cows and employees working during evening and early morning hours," said David Gremmels, owner of Rogue Creamery.

To further offset energy use, Rogue sought guidance from Energy Trust on integrating a solar system onto the roof of the milking parlor. An \$8,910 Energy Trust cash incentive for the 9.9-kilowatt system enabled Rogue to generate 11,000 kilowatt hours of clean energy annually to power a mechanized milking station.

"We're impressed with the conscious commitment and collaboration offered by Energy Trust," said David. "We appreciate their proactive assistance in helping us make decisions."

Rogue is pleased with the success of its solar project and is making plans for a second solar-powered milking station.



Rogue Creamery is among the 1,800 businesses and homeowners who installed solar systems in 2015—a 40 percent increase compared to 2014.







## LEADING THE WAY TO BETTER LIVING

ORCHARDS AT ORENCO, HILLSBORO Residents at Orchards at Orenco enjoy year-round comfort with extremely low energy bills—a big plus for working families making less than half the median income. When construction completed in 2015, REACH Community Development's 57-unit affordable housing complex became the largest multifamily building in North America certified to Passive House standards, a rigorous building standard that results in buildings with ultra-low energy use.

Expert guidance and cash incentives from Energy Trust led to energy-efficiency features like a super-insulated and airtight building shell, triple-pane windows and heat recovery ventilators that provide fresh air while capturing heat from exhausted air. In addition to keeping apartments comfortable, these investments create tranquil living spaces by reducing outside noise.

Since moving in last summer, we have never turned on our heat.
We have zero heating bills.

—Sylvia Barber, Orchards resident



## LIGHTING UP THE GOLDEN YEARS

WILLAMETTE VIEW SENIOR LIVING, PORTLAND With a 60-year history as a continuing care retirement community, Willamette View Senior Living is an industry leader in transforming the aging experience. The senior living community has applied that same innovative spirit to reducing energy costs.

After working with Energy Trust to make heating, ventilation and air conditioning improvements and an elevator upgrade that cut yearly energy costs by \$31,000 and maintenance costs by another \$42,000, Willamette View looked again to Energy Trust for technical expertise and support to modernize a kitchen and dining room. The remodel boasts the latest in energy-efficient equipment—natural gas convection ovens, electric steamers, exhaust hoods and LED lighting.

"Residents are so happy with the quantity and quality of light that they're starting to request LEDs in their apartments," said Meredith Rizzari, facilities and sustainability coordinator at Willamette View.



Energy Trust helped thousands of customers like Willamette View save 103 million kWh by installing nearly 3 million LEDs in 2015.





## FOUNDATION FOR A BRIGHT FUTURE

#### AWETASH TSEGAY, BEAVERTON

When she moved into a subdivision constructed by Willamette West Habitat for Humanity, the dream of owning a house became reality for Awetash Tsegay, mother of Nathaniel, 16, and Bethlehem, 14, originally from Ethiopia. Dedicated to fostering home ownership by building affordable housing, Habitat works with low-income families, volunteers and donors to sell homes at cost to qualifying residents like Awetash.

After making a modest down payment and contributing 500 hours of construction "sweat equity," Awetash purchased her three-bedroom house at 0 percent interest with a monthly payment structured to match her income. She doesn't worry about high energy bills because Habitat worked with Energy Trust to make sure her home has a low EPS<sup>TM</sup>, an energy performance score that indicates low energy consumption, utility costs and carbon footprint. Scores range from most efficient at zero to least efficient at 200. Thanks to energy-efficient design

features, Awetash's home has an EPS of only 32, and average monthly gas and electricity costs of \$62, well below what is typical for an 1,100-square-foot house.

"I'm happy," said Awetash. "The house stays comfortable year-round. I like the nice quiet neighborhood. And this home is ours."

As Oregon's population booms and more homes are built, Energy Trust works with designers, architects and builders to make sure houses are built with energy efficiency in mind.



In 2015, Energy Trust helped builders throughout Oregon integrate energy-efficiency features in 2,500 new homes with EPS, from 32 Habitat for Humanity homes to market-rate homes of all prices and sizes.



## KEEPING BUSINESS IN THE FAMILY

FOX HOLLOW RANCH, LLC, MADRAS

Time equals money for Fox Hollow Ranch, a family business that produces carrot seed, bluegrass seed and peppermint oil. Located in Oregon's high desert, all 600 acres require irrigation, an arduous task until Energy Trust helped Fox Hollow replace three irrigation pumps with a single 125-horsepower pump and variable frequency drive. The new technology automatically adjusts pump speed to optimize pressure and water flow requirements, saving the ranch approximately \$6,700 in annual energy costs while also reducing water use.



Fox Hollow is one of 350 farmers and 30 nurseries Energy Trust worked with in 2015 to save energy and water by upgrading irrigation equipment, helping ensure resilience in the face of future droughts.







And the benefits don't stop there. Depending on the weather and season, Fox Hollow runs anywhere from three to 20 lines off its main irrigation pipe. "Before, we spent a lot of time determining which pump to use when," said Nancy Richards, co-owner of Fox Hollow Ranch. "Now the variable frequency drive does that for us, making the job easier, quicker and safer for employees."

Several years ago, the ranch received Energy Trust cash incentives to help replace drains, gaskets, nozzles and leaking pipes, and schedule irrigation to optimize the frequency and duration of watering crops.

Cutting energy and water costs has helped increase our income enough to support a second family at the ranch. Our son's family has joined us and eventually will take over our growing business.

—Nancy Richards, co-owner, Fox Hollow Ranch





## SAVING MONEY FOR WHAT MATTERS

#### MEDFORD SCHOOL DISTRICT, MEDFORD

Medford School District upgraded lighting in several schools and renovated or constructed six schools to standards exceeding Oregon Energy Code, taking full advantage of Energy Trust services and cash incentives. These investments save the district more than \$70,000 in energy costs every year.

In 2015, Medford became the first school district in Oregon to enroll in Energy Trust's commercial Strategic Energy Management initiative, where district employees received training and tools over a 10-month period.

They learned how to track energy use at all 19 district buildings, using the data to change behavior, make no- or low-cost operations and maintenance improvements and cut annual energy costs by another \$80,000. Almost half of the savings came from one commonsense decision to disconnect computers and appliances during summer break.

"Although we've been doing energy efficiency for a while, SEM turned out to be a gold mine of additional savings," said Lief Hochendoner, the district's resource conservation manager.

In addition to these simple energy game changers, one school has an extra advantage—Isobela Pickard, fifth grader and energy champion at Kennedy Elementary School. Isobela makes lunchtime rounds to encourage staff to turn off lights and computers, leaving "good job" notes as she goes.

"If we spend less money by turning off computers and lights, we can spend more money on books to help us learn," said Isobela.

The hundreds of thousands of dollars we're saving is money that will go directly back into the classroom.

## **ANNUAL RESULTS**



#### **ENERGY SAVINGS AND GENERATION**

- ✓ Exceeded electric savings goal with 54.1 average megawatts saved
- ✓ Exceeded natural gas savings goal with 6.5 million annual therms saved
- ✓ Exceeded renewable generation goal with 3.9 aMW generated

#### FINANCIAL HIGHLIGHTS

- √ Revenues totaled \$144.4 million, on target with budget
- √ Expenditures totaled \$164 million, on target with budget¹
- ✓ Delivered \$95.2 million in incentives
- ✓ Achieved an unmodified financial opinion from an independent auditor, available online at www.energytrust.org/financials

#### LEVELIZED COSTS

Levelized cost is Energy Trust's total cost to save or generate each unit of energy over the life of an upgrade, which can range from one to more than 20 years. Efficiency is the lowest-cost energy we can buy at just a fraction of the cost utilities would otherwise pay to buy energy from other sources.

- ✓ 2.6 cents/kWh (compared to 7.6 cents/kWh utilities would otherwise pay)
- ✓ 26.6 cents/therm (compared to 47 cents/therm utilities would otherwise pay)

## ANNUAL PERFORMANCE MEASURES SET BY THE OREGON PUBLIC UTILITY COMMISSION

- ✓ Achieved low administrative support costs at 5.5 percent of annual revenues
- ✓ Paid and committed \$2 million in project development assistance to 35 biopower, hydropower, geothermal and wind projects
- √ Achieved 95 percent overall customer satisfaction
- ✓ Achieved all other performance measures, available online at www.energytrust.org/annualreport

<sup>&</sup>lt;sup>1</sup> As intended, Energy Trust used program reserves to meet expenses in excess of revenue.





**3 million**LED lights installed



**2,400** contractors and professionals received business leads and training as part of Energy Trust's Trade Ally Network



**600** new building construction projects supported



**7,600** homeowners received personalized energy recommendations through a simple online tool



**350** farms and **30** nurseries saved energy and water



2 hydropower and2 biopower systemsreached commercial operation

## 14 YEARS OF AFFORDABLE ENERGY



# \$4.8 BILLION ADDED TO OREGON'S ECONOMY

Lower energy bills free up resources that flow into the economy, expanding purchasing power and creating jobs, higher wages and new business income. Energy Trust investments have cumulatively spurred \$4.8 billion in local economic activity since 2002, including \$1.5 billion in wages, \$266 million in small business income and employment equivalent to 3,900 jobs lasting a decade.



# **17.4 MILLION** TONS OF CARBON

TONS OF CARBON DIOXIDE AVOIDED

We all breathe a little easier when we use less energy from fossil-fueled power plants. Energy Trust investments in energy efficiency and renewable energy have kept 17.4 million tons of carbon dioxide out of the atmosphere, equal to removing 3 million cars from Oregon roads for a year.



# \$5.6 BILLION

**UTILITY BILLS** 

Since 2002, Energy Trust has invested \$1.3 billion to help participants save \$2.3 billion on their energy bills. Over time, the savings will add up to nearly \$5.6 billion.

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To see more of our 2015 achievements,
customer stories and financial information,
visit www.energytrust.org/annualreport

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