



CLEAN AND AFFORDABLE ENERGY FOR OREGON

2019 ANNUAL REPORT



Energy Trust of Oregon's success in 2019 is proof that energy efficiency remains the most valuable and lowest cost energy resource—and after 17 years, we see plenty of opportunities to serve more Oregonians.

This report highlights all the different ways Energy Trust helps people and businesses achieve their goals, from helping a Gresham market save thousands of dollars a year by switching to energy-saving LED lights to helping rural Wallowa County generate clean, renewable energy with a new hydropower facility at Wallowa Lake.

Our incentives for residents not only help them save money at home but also improve their living conditions. Just ask the Hardestys in Bend, who saved more than \$3,000 on an energy-efficient heat pump that cut energy use in half and made their home more comfortable during chilly Central Oregon winters.

Lastly, we support a statewide network of trade ally contractors, most of them small businesses. One is Steve Campbell of Home Comfort Inspections & Services, who has built his business working with Energy Trust to test and seal ductwork at thousands of manufactured homes in Southern Oregon, all at no cost to low-income residents.

As we close the books on 2019, we are faced with the uncertainty surrounding the COVID-19 pandemic, which has challenged modern life—from healthcare and business to education and social connections—on an unprecedented scale. While we work together to come out of this crisis, we know energy efficiency and renewable energy will help utility customers stretch their dollars further, keep costs down for businesses and keep more people on the job.

As we look to recovery, Energy Trust will continue to prioritize strategies and new approaches to reach previously underserved customers who have been most impacted by disruptions: rural Oregonians, people of color and low- and moderate-income households. We will also look to invest in projects that deliver benefits beyond energy savings and generation, such as creating jobs, supporting healthier communities and working toward a cleaner environment. These are two of the focus areas in our 2020-2024 Strategic Plan, which positions Energy Trust to respond to changing needs and work toward our vision of clean, affordable energy for everyone.



MICHAEL COLGROVE
EXECUTIVE DIRECTOR



2019 IMPACT

We help Oregonians save energy, cut costs and invest in green power.

53.3

aMW

ELECTRIC SAVINGS
100% of 53.2 aMW Goal

2.7

aMW

RENEWABLE GENERATION
121% of 2.3 aMW Goal

5.9

MMTh

NATURAL GAS SAVINGS
98% of 6.0 MMTh Goal

SINCE 2002

Public benefits from
our work

\$ 8.2

BILLION

**SAVED ON UTILITY
BILLS OVER TIME**

\$ 8.3

BILLION

**ADDED TO
OUR ECONOMY**

32.7

MILLION TONS

**CARBON DIOXIDE
AVOIDED**

aMW is average megawatts; MMTh is million annual therms



IMPROVING COMMUNITIES

From Oregon's rural counties to its capital city, local governments, residents and employers are better managing resources, supporting jobs and reducing energy bills.

PAGE

5



IMPROVING BUSINESS

Businesses and nonprofits around the state are investing in upgrades that improve customer satisfaction, employee safety and bottom-line success.

PAGE

15

IMPROVING INDUSTRY

Oregon's factories are modernizing operations and finding efficiencies that save time, labor and money.

PAGE

9



IMPROVING HOMES

From manufactured homes to affordable housing, people are finding and fixing inefficiencies that improve comfort and put money back into their pockets.

PAGE

17





SALEM WASTEWATER TREATMENT PLANT GENERATES ENERGY

On average, wastewater treatment accounts for 25% of a city's electric bill in Oregon, but that's not the case in Salem. The city's new Willow Lake Wastewater Treatment Plant cogeneration facility will transform the city's waste into 7,600 megawatt hours of renewable power per year.

"Our cogeneration plant will supply 50% of Willow Lake's electricity needs, saving us \$300,000 a year," said Jue Zhao, wastewater treatment division manager. "We'll use excess thermal energy from the plant to heat our administrative building, saving another \$30,000 per year in natural gas costs."

Energy Trust provided \$3 million in incentives to support the project, which cost \$11.1 million. Salem also received \$3 million in funding made possible by customers enrolled in Portland General Electric's Green FutureSM program.

Willow Lake has also invested \$1.4 million in efficiency improvements that have slashed annual energy costs by roughly \$135,700. "We have a long and great history investing in energy efficiency with Energy Trust, which has supported us with more than \$826,000 in cash incentives over eight years," said Zhao. "They've helped us change our mindset to a culture of efficiency, where we factor energy into all our decision-making."

“As stewards of our ratepayers' money, we have a responsibility to do all we can to reduce operating costs.”

Jue Zhao
wastewater treatment division manager,
Willow Lake Wastewater Treatment Plant

NONPROFIT LEADS COUNTY TO INVEST IN RENEWABLE ENERGY

Wallowa County has weathered hard times, including the contraction of the timber industry and fluctuations in the tourism industry. Today, grassroots initiatives strengthen the local economy by keeping energy dollars close to home. Spearheaded by Wallowa Resources, a local nonprofit, residents are heavily invested in energy efficiency and renewable energy.

Wallowa Lake County Service District's new hydropower facility uses water from Wallowa Lake to generate 134 megawatt hours of clean energy annually. The project was developed in partnership with Wallowa Resources with \$80,000 from Energy Trust and funding from Pacific Power's Blue SkySM customers.

Wallowa Resources also received a \$10,000 Energy Trust solar innovation grant to put solar panels on the roof of an affordable housing project, Park Street Solar. The project brings solar access and financial benefits to lower-income occupants.

Wallowa Resources has more projects in early stage development: a 2-MW community solar system; a countywide energy plan; and an outreach plan to help landowners modernize irrigation piping, reduce energy costs and generate hydropower.

"Renewable energy contributes to energy independence and ecosystem health, supporting businesses and jobs in rural areas," said Matt King, energy program manager at Wallowa Resources.

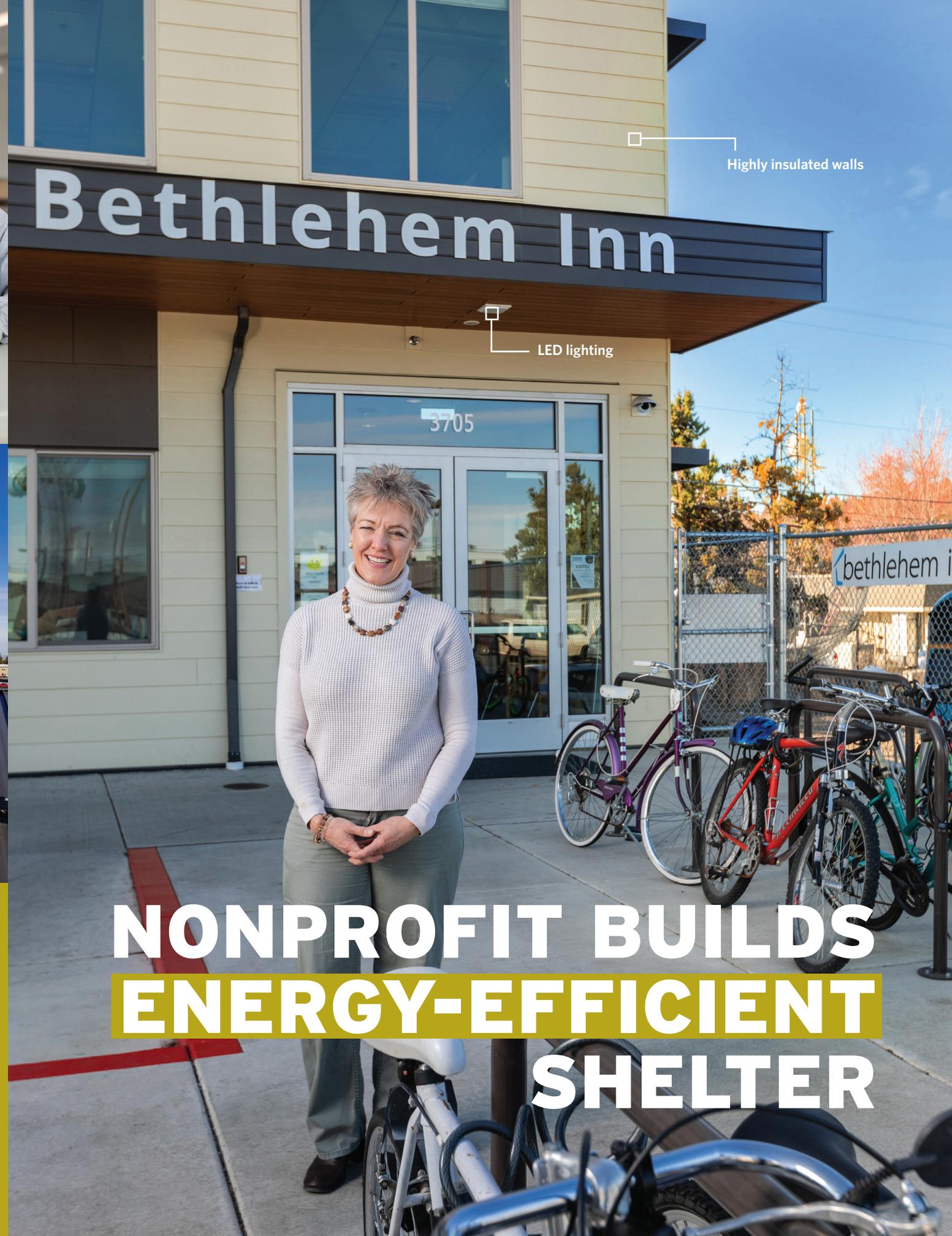
Formerly located in a 1960s motel, Bethlehem Inn, which offers temporary housing, meals and more for those experiencing homelessness, now boasts two new buildings that are models of energy efficiency and renewable energy. Over the past three years, the Bend nonprofit worked closely with Energy Trust on its Family Residence and Service Hub, which shelters up to 10 families and includes a commercial kitchen, and its Next Steps building, which accommodates up to 112 single adults.

“From the initial design stage, Energy Trust recommended strategies for saving energy and water and maximizing solar potential,” said Gwenn Wysling, executive director. “The process was very helpful and educational.”

Features such as extra insulation, daylighting, high-efficiency heat pumps and LED lighting are saving Bethlehem Inn an estimated \$16,700 per year on energy costs. In addition, each building was designed to be solar ready, with the roof oriented to maximize solar exposure and wiring and inverters included during construction. Bethlehem Inn received \$57,200 in Energy Trust cash incentives to help offset the cost of these improvements.

With financial support from Pacific Power’s Blue SkySM customers and other sources, Bethlehem Inn installed a 92-kilowatt-hour solar system on the Family Residence and Service Hub. Generating 119,000 kWh every year, the renewable power system further trims annual energy costs by an estimated \$11,000.

“The new facilities allow us to serve twice as many people,” said Wysling.



“**The cost savings from energy efficiency and solar power allow us to put our limited resources directly into essential services.**”

Gwenn Wysling
executive director,
Bethlehem Inn

NONPROFIT BUILDS ENERGY-EFFICIENT SHELTER



34-kilowatt solar system

FOOD INDUSTRY PRIORITIZES SUSTAINABILITY

Located in Hillsboro, Oregon Berry Packing has high standards for the blueberries, strawberries and black raspberries it supplies to buyers worldwide. Those standards include making sure its produce goes from field to market with a strong commitment to sustainability. “Increasingly, the food service industry looks for suppliers who are reducing their carbon footprint,” said Jeff Malensky, president.

To help achieve its sustainability goals and keep operating costs low, the family-owned business has partnered with Energy Trust on multiple projects that are saving an estimated 1.2 million kilowatt hours and \$80,000 every year.

A 34-kilowatt solar system produces an estimated 33,600 kWh per year, with production displayed on a monitor in the lobby and on the company’s website. “The display prompts discussions with customers about how we’re constantly improving all aspects of our operation,” said Malensky.

Inside the processing plant, new refrigeration controls trim energy use while keeping temperature and humidity constant—critical factors in maintaining flavor. The controls also result in equipment running less, making the plant much quieter for employees. “That silence is music to my ears,” said Malensky.

Oregon Berry Packing rounded out its energy-efficiency improvements by installing high-speed rollup doors to keep warm air from entering refrigerated areas.

Energy Trust provided technical assistance for the solar and refrigeration projects at no charge, making it easy for Oregon Berry Packing to understand the value of its investments. Energy Trust cash incentives totaling \$171,800 helped offset total project costs, which came to \$378,000.



“**With equipment running less, the plant is quieter. Keeping decibel levels down is critical in meeting worker safety standards.**”

Jeff Malensky
president,
Oregon Berry Packing

Irrigation system improvements have lightened the load at the Criss family farm near Klamath Falls—reducing energy, water and labor needed to grow 2,000 acres of alfalfa and grain.

Before the upgrade, the farm relied on traditional wheel lines, which had to be moved both morning and night. According to Chad Criss, who runs the farm with his wife and brother, it took nine days and a lot of labor just to irrigate one field. Criss researched options, decided on a pivot irrigation system and contacted Energy Trust to find out about cash incentives. That call opened the door to a bigger project that provided more benefits than he imagined.

“In addition to the pivot system, we removed our 70-horsepower pump and installed a 50-horsepower pump with a variable frequency drive,” said Criss. “The variable frequency drive runs everything more efficiently, reducing energy costs.”

The Criss farm received \$21,000 in Energy Trust cash incentives and expects to cut annual energy costs by an estimated \$5,900. Plus, the new system uses water more efficiently and could save the farm more than 24 million gallons of water every year.



We're able to irrigate more acres with less water and finish watering in less than three days.”

Chad Criss

owner,
Criss Family Farms



FAMILY FARM UPGRADES IRRIGATION

HOW ENERGY TRUST BENEFITS OREGON COMMUNITIES

ELECTRIC SAVINGS & GENERATION

Saving and generating enough electricity to power half of all homes in Oregon.

HELPS LOWER ENERGY BILLS

Saving energy helps lower utility bills for participants and helps keep energy costs more affordable for utility customers.

See Linda's story on page 17.

WATER SAVINGS

Switching to energy-efficient appliances like clothes washers can save thousands of gallons of water per year.

NATURAL GAS SAVINGS

Saving enough natural gas to heat almost all homes in Lane County.

ECONOMIC INVESTMENT

Adding \$8.3 billion to Oregon's economy.

UPGRADING INFRASTRUCTURE

Helping modernize outdated infrastructure like irrigation systems and public buildings.

See Chad's story on page 11.

GOOD JOBS

Supporting 1,900 local businesses with an estimated 12,000 employees via our Trade Ally Network.

See Juan's story on page 15.

LIVABLE HOMES

Making homes more comfortable, affordable and efficient: warmer in winter, cooler in summer.

RESILIENT COMMUNITIES

Pairing solar systems with storage make Oregon more resilient to risks like wildfires, droughts and earthquakes.

DOLLAR SAVING

Saving people and businesses \$8.2 billion on their utility bills over time.

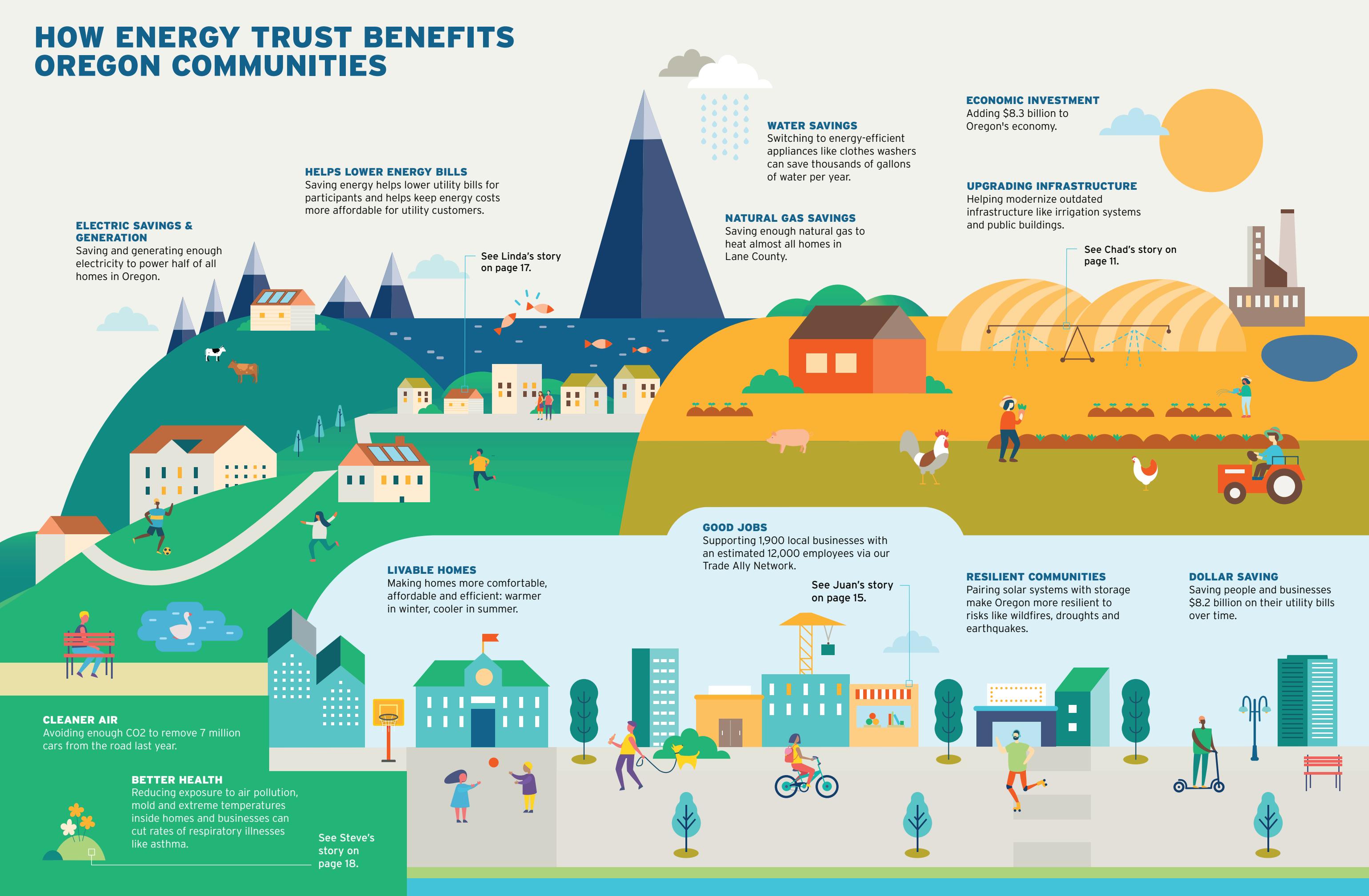
CLEANER AIR

Avoiding enough CO2 to remove 7 million cars from the road last year.

BETTER HEALTH

Reducing exposure to air pollution, mold and extreme temperatures inside homes and businesses can cut rates of respiratory illnesses like asthma.

See Steve's story on page 18.





SMALL BUSINESS LIGHTS UP PRODUCTS

When La Tapatia 2 couldn't find replacement bulbs for its antiquated outdoor lighting, the Mexican grocery and meat market in Gresham turned to Energy Trust for help. "Energy Trust told us we could save thousands of dollars switching to LEDs," said Juan Alvarez, owner.

That kind of savings is a big deal for a small corner market, but the LEDs delivered a side benefit that turned out to be equally important. "Now, we have less vandalism," said Alvarez. "The new lighting is brighter and not easily breakable. Security is better. Customers and neighbors say it looks amazing."

Happy with the outcome, Alvarez didn't wait long before turning to the store's interior. Taking advantage of a special Energy Trust promotion, La Tapatia 2 was able to replace all overhead fluorescent lighting with LEDs and low-power ballasts at no cost to the store. The LEDs brighten surroundings, eliminate dark corners and highlight what's on the store's shelves. "The first day after installation, customers commented that they could see our products better," said Alvarez.

La Tapatia 2 received \$27,000 in Energy Trust cash incentives for its lighting projects, which cost \$34,000 to install. The upgrades shaved an estimated \$2,600 from the store's annual energy costs.

The experience at La Tapatia 2 proved so successful that a store employee encouraged her church in Gresham to look into Energy Trust's offerings. The church also went ahead with a lighting upgrade.

“
The new lighting is brighter, which improves security and makes it easier for customers to see products.”

Juan Alvarez
owner,
La Tapatia 2



TRADE ALLY SUPPLIES ENERGY-EFFICIENT EQUIPMENT TO LOCAL RESTAURANTS

Hongs Inc. Restaurant Equipment & Supplies describes itself as a small business with big aspirations. As an Energy Trust trade ally, the family-owned Portland business has helped hundreds of restaurants and commercial kitchens cut their energy costs and stay competitive.

"We help our customers save money by installing ENERGY STAR® qualified steamers, natural gas fryers, refrigerators, ventilation hoods and more," said David Hong, owner. "The savings can be significant. A new fryer can reduce energy expenses by \$1,000 a year."

That's a big deal for Hongs' clients, many of which are family-owned Asian restaurants. Hongs estimates the savings for equipment, helps restaurants find installers and shows them how to apply for Energy Trust cash incentives, which can pay 50% to 80% of the cost.

Since 2003, trade allies such as Hongs have helped almost 5,000 restaurants and commercial kitchens receive \$10.9 million in Energy Trust cash incentives.

PROGRAM HELPS FAMILY AFFORD NEW HEAT PUMP FOR MANUFACTURED HOME

For years, Bend resident Linda Hardesty had been frustrated with her electric furnace. It was so inefficient it sometimes cost her \$600 a month to heat her and her husband's 1,500-square-foot manufactured home. They often set the thermostat extra low to save money. "Our only income is Social Security," she said, "so it was beyond our financial means to upgrade the heating system."

When Hardesty learned about the special promotion Energy Trust offers to help owners of manufactured homes upgrade their heating, she couldn't believe her luck. "Our new energy-efficient heat pump and thermostat cost \$5,500, but Energy Trust paid \$3,100 of the balance, leaving us with an amount we could manage."

Taking advantage of the promotion was a breeze. "Bend Heating & Sheet Metal came out to give us an estimate. They did the installation, they programmed our thermostat, they even handled the paperwork. It was so easy," said Hardesty. Randall Marchington, the contractor who installed the new heat pump, noted how "this offer makes a high-efficiency heating system financially reachable for more residents of manufactured homes. They tend to be older people living on very modest means."

More than 600 owners of manufactured homes have reaped the benefits of this promotion, which offers special pricing and increased cash incentives for ducted or ductless heat pumps installed by participating trade allies.



“
We are warmer and more comfortable now. And our electric bill shows our usage is half what it used to be!”

Linda Hardesty
 Bend homeowner



TRADE ALLY SEALS 3,000 HOMES IN SOUTHERN OREGON

Steve Campbell has helped nearly 3,000 manufactured home owners like Linda across Southern Oregon. Because of the statewide Energy Trust offering that pays cash incentives to him and other contractors for testing and sealing ducts in manufactured homes, Campbell is able to provide his critical services for free.

This no-cost service makes a huge difference for Campbell's customers. "About 90% have limited incomes," he said. "Some are seniors living off Social Security. Others live off \$800 a month but pay more than \$300 on heating because their ducts are disconnected or have holes. The heat they're paying for never makes it into their home."

After Campbell tightens up the ducts, residents have healthier air and are less likely to have mold or rodent debris come through ductwork. "One customer cried because heat was finally coming into her child's bedroom," he shared. "Most of my customers struggle to pay their energy bills and they certainly couldn't afford to pay for duct sealing. Helping them brings me a lot of gratification."

Across the state, 18 other trade allies deliver this no-cost service. Since the program started, they've tightened up more than 21,000 of Oregon's 170,000 manufactured homes.

TRANSPARENCY & ACCOUNTABILITY

EXCEEDED PERFORMANCE MEASURES SET BY THE OREGON PUBLIC UTILITY COMMISSION

- Energy Trust's costs to save energy are 3.0 cents/kilowatt hour and 39.0 cents/therm, far lower than what utilities would pay for energy from other sources
- We achieved 96% customer satisfaction
- The benefits of all programs far exceeded the costs
- We maintained low administrative and program support costs at 6.2% of annual revenues (\$11.4 million)
- Read the full list of Energy Trust's performance measures and results in our 2019 Annual Report to the Oregon Public Utility Commission at www.energytrust.org/reports

REVENUES AND EXPENDITURES ON TARGET

- Revenues totaled \$183.5 million
- Expenditures totaled \$183.7 million
- We delivered \$99.9 million in incentives, with most of the remainder for delivery of customer services

REPORTING AND OVERSIGHT

- Every dollar received and invested was accounted for in monthly, quarterly and annual financial statements
- Financial statements were audited annually by an independent auditor; Energy Trust has a perfect track record of unmodified financial audits, available online at www.energytrust.org/financials
- Each kilowatt hour and therm acquired was reported quarterly and annually
- Programs were evaluated by a third party
- We contracted for our five-year independent management audit
- We received guidance from three volunteer advisory councils: Conservation Advisory Council, Diversity Advisory Council and Renewable Energy Advisory Council

As an independent nonprofit organization, Energy Trust provides comprehensive energy efficiency and renewable energy programs to 1.7 million customers of PGE, Pacific Power, NW Natural, Cascade Natural Gas and Avista in Oregon and NW Natural in Southwest Washington. Our success is measured in kilowatt hours of electricity saved or produced with renewable energy, therms of natural gas saved, and efficient and effective delivery of services to all utility customers. To see more of our achievements, customer stories and financial information, visit www.energytrust.org/annualreport.

POWERED BY LOCAL BUSINESS

We work with 1,900 local trade ally businesses who connect customers to incentives and services. We provide resources, funding and training to help these businesses build skills and expertise in new areas of opportunity. By connecting customers to contractors in their communities, we help sustain local businesses.



421 SW Oak St., Suite 300
Portland, Oregon 97204
1.866.368.7878 | energytrust.org

This annual report is printed on recycled paper that contains post-consumer waste.