

SYNERGY PORTLAND METRO & HOOD RIVER

HIGHLIGHTS FROM ENERGY TRUST OF OREGON

BETTER LIVING ON A BUDGET

Residents at Orchards at Orenco in Hillsboro 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 last year, 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 ultra-low energy use.

Orchards installed energy-efficiency features like a super-insulated and airtight building shell, triple-pane windows and heat recovery ventilators that provide fresh air and capture heat from exhausted air.

"Local partners like Energy Trust of Oregon are important in helping us fund innovations and push the envelope in construction practices," said Ben Sturtz, housing development manager at REACH Community Development. "We believe Orchards will become a replicable industry model for building affordable passive housing."



CLEAN WATER SERVICES' NEW COGENERATION SYSTEM TURNS WASTE INTO WATTS

At Clean Water Services' Durham Treatment Facility in Tigard, a new cogeneration system converts wastewater and food grease into clean, renewable energy. The new system triples Clean Water Services' renewable energy generation, creating 60 percent of the electricity needed to run the water resource recovery facility when coupled with its existing 403-kilowatt solar electric system.

The 1.7-megawatt cogeneration system is fueled by biogas produced from the anaerobic digestion of municipal wastewater solids as well as fats, oils and grease from Washington County restaurants.

"Clean Water Services is turning a liability into an asset by harnessing energy that was literally going down the drain and using it to generate clean power. That's smart leadership and a cost-effective investment," said Betsy Kauffman, renewable energy sector lead, Energy Trust.



BUILDING EFFICIENCY INTO HABITAT FOR HUMANITY HOMES

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™, an energy performance score that indicates low energy consumption, utility costs and carbon footprint.



FARMERS AND FISH WIN BIG WITH SMALL HYDROPOWER

Farmers Irrigation District's new 3-megawatt hydropower turbine generates clean energy at irrigation districts while saving energy, supporting agriculture, increasing drought resilience and bolstering local economies. The Hood River district began investing in hydropower in 1986 to generate revenue and defray the cost of delivering water to approximately 5,800 acres and 1,900 residential and agricultural users, including the high-value pear, apple, wine grape and cherry crops for which the region is known.

The new turbine and generator at Farmers Irrigation District brings in \$130,000 more in revenue than the older turbines, and the district expects to save its customers \$100,000 to \$150,000 per year in maintenance costs. The project was made possible in part by Energy Trust, which provided a \$900,000 incentive for the project delivering electricity to Pacific Power.

"The potential exists over the next decade for irrigation districts across the state to upgrade to more modern infrastructure, saving water, restoring streams and generating green, renewable energy," said U.S. Senator Jeff Merkley. "These investments in irrigation systems are also investments in the future resiliency, competitiveness and livability of Oregon's rural economies."

HYDRAULIC TOOLS MANUFACTURER RETOOLS ENERGY COSTS

Energy use is a big topic at Stanley Hydraulics, a division of Stanley Black & Decker located in Milwaukee. The manufacturer helps other companies switch from older pneumatic tools to cleaner, more efficient hydraulic technology. When the company was tasked with reducing energy waste by 5 percent annually, they looked to Energy Trust's industrial Strategic Energy Management program for help.

Strategic Energy Management helped Stanley understand its energy costs and find ways to reduce energy consumption. The company also upgraded to high-bay LED lighting throughout the plant. Together, the Strategic Energy Management and lighting changes are estimated to save about \$45,000 annually. Stanley exceeded its corporate reduction goal and also received \$115,623 in cash incentives from Energy Trust.

"We have a better understanding of the factors that influence energy use, and we're using that knowledge to make lasting change throughout the company," said Bernadette Donald, Stanley's energy champion and environmental, health and safety manager.

TRADE ALLY SPOTLIGHT: HORTICULTURAL SERVICES

An Energy Trust trade ally for 12 years, Horticultural Services has provided greenhouse sales, design consultation and construction management expertise to nurseries in the Portland metro area and the Willamette Valley since 1995. The company supports a broad range of customers including growing production facilities, teaching and research greenhouses, retail garden centers and residential greenhouses.

"We also offer expertise regarding the incentives available for energy-efficiency greenhouse upgrades," said Chris Guntermann, vice president of technical integration, Horticultural Services. "We use Energy Trust's incentives to assist customers in upgrading their existing infrastructure to higher efficiency."



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