

Photo courtesy of Clackamas Town Center

ENERGY SOLUTIONS FOR COMMUNITIES IN **CLACKAMAS COUNTY**

EDUCATION, TECHNICAL EXPERTISE AND CASH INCENTIVES BENEFIT MUNICIPAL GOVERNMENT, BUSINESSES AND RESIDENTS

Energy conservation helps communities thrive. By investing in energy projects, Clackamas County decision-makers and local businesses can reduce operating costs and free up funds for their core services. Energy-efficiency upgrades can help make buildings more comfortable and lower utility bills. In addition, reducing energy usage preserves the environment, and generating renewable power from local resources can improve energy security and boost the local economy.

Energy Trust of Oregon can help government and businesses in Clackamas County pursue clean energy projects ranging from commercial lighting upgrades to solar electric systems.

Energy Trust helps determine which upgrades will be the most energy efficient and offer the largest cash incentives. We can also connect you with experienced contractors who can get the job done right.

Meeting the needs of the community

Energy Trust assistance is available to Portland General Electric and NW Natural customers in Clackamas County—including business of all types and sizes and municipal governments. Cash incentives are available for a range of projects and, along with federal grants, tax credits and other funding sources can make energy upgrades more affordable.





EVANS FARMS GROWS WITH SOLAR

Evans Farms, a tree and plant nursery in Oregon City wanted to reduce its greenhouse gas output and become a more sustainable operation. After learning that the farm's largest irrigation pump was the biggest energy hog, farm owner Cindy Lou Pease together with her son and employee Josh Pease, began looking into what it would take to install a solar electric system that could power the pump.

Working with Energy Trust, Josh learned about great cash incentives and got help finding a reputable, reliable contractor. Based on Evans Farms' average power usage over the past several years, Energy Trust trade ally contractor Energy Unlimited designed and installed a 35.88-kilowatt solar array to produce enough power to accommodate the farm's overall needs.

"Without financial incentives such as those from Energy Trust, our project would have never happened," Josh said. The total cost for the project was \$258,080, and Energy Trust contributed \$44,229 in incentives.

Energy savings average about 30,000-33,000 kWh per year. That's a savings of approximately \$3,400-\$4,000 annually. Through net-metering with PGE, the solar electric system produces enough power beyond what's needed for the irrigation pump to help offset power consumption for the entire farm. For several months out of a typical year, the farm is powered 100 percent by solar.

"Having our irrigation pumping costs covered via solar power in the summer, when our harvest and sales season is slower, has been a great benefit," Josh said. "Having our electric power usage—and cost—offset by solar power production has been a great help financially for our operation."

ENERGY SOLUTIONS FOR BUSINESS AND GOVERNMENT

Energy upgrades can help governments and businesses reduce operating costs and meet sustainability goals. Clean energy projects help communities improve a wide range of facilities from offices to community centers to multifamily housing.

- Existing buildings—Energy Trust can provide incentives for capital improvement and maintenance projects that save energy including high-efficiency lighting, increased insulation, HVAC upgrades, boiler replacements, solar installations, and many more. Our energy experts can complete site evaluations to identify energy-saving opportunities within your building.
- New commercial and governmental buildings—Designing from the ground up with energy performance in mind can reduce future operating costs and help municipalities and businesses reach sustainability goals.

We provide cash incentives, professional support and early design assistance for new commercial and governmental building projects. Our energy experts can offer advice on how to build the most energy-efficient building using efficient heating and cooling equipment, modern weatherization methods and

- renewable energy systems. Past projects have included offices, community centers, retail spaces, and renewable energy systems for public, agricultural and industrial facilities.
- Multifamily residences—Energy Trust can help owners and managers of multifamily properties lower their energy bills and maintenance costs by offering a host of energy-saving solutions. We provide no-cost property evaluations to help identify opportunities for energy savings and give cash incentives for qualifying upgrades at your property. We'll also provide and install LED bulbs, showerheads, faucet aerators and advanced power strips in multifamily dwelling units all free of charge.
- Production efficiency—Manufacturing plants, farms,
 wastewater management and water treatment facilities and
 other industrial enterprises benefit from equipment upgrades
 and production process improvements. We offer project
 scoping resources and technical assistance from experts in any
 industry to help make energy investments a reality.

ENERGY SOLUTIONS FOR RESIDENCES

Energy Trust has the resources available to help Clackamas County residents reduce energy costs and increase comfort.

- Existing homes—Homeowners can benefit from the free advice of a Home Energy Review—online or by phone—to help identify ways to reduce waste, improve comfort and save energy and money. Homeowners receive information about Energy Trust cash incentives to help offset project costs and get references to trusted trade ally contractors to do the work. Simple, low-cost changes such as switching to more efficient light bulbs can go a long way toward reducing energy bills. Homeowners and renters also may be eligible to receive a free Energy Saver Kit filled with instant, energy-saving products.
- Instant discounts—We offer instant discounts on energyefficient products at retailers across the state. From highperformance showerheads to ENERGY STAR® certified LEDs to efficient gas and electric water heaters.
- New homes—Builders and home buyers can use EPS™,
 Energy Trust's energy performance scoring tool, when
 preparing to build or buy a newly constructed home. Trade
 ally builders construct homes that have high-performance
 heating and cooling systems, better ductwork and ventilation,
 ENERGY STAR-rated appliances, efficient lighting, and options
 for solar electric systems.

RENEWABLE ENERGY SOLUTIONS

Energy Trust experts can assess public buildings, businesses, farms and industrial facilities in Clackamas County to determine if they are good candidates for renewable energy solutions.

Energy Trust offers technical assistance and cash incentives to customers interested in solar electric systems, biopower, small hydropower or geothermal projects. Implementation of these renewable energy solutions creates clean energy and provides savings for years to come.



Solar energy solutions

Solar energy systems help Oregon homes, businesses and government agencies to cut energy costs, use natural resources efficiently and minimize environmental impact. Solar electric systems continue delivering clean energy and savings long after the initial installation costs have been recouped, many of which are covered by Energy Trust cash incentives.

Energy Trust has a variety of resources available to help you determine if a solar energy system is right for your home or business. Available resources include:

- Cash incentives
- Solar ready design services
- Referrals to qualified solar professionals
- Information on tax benefits

To learn how Energy Trust can provide you with the information, tools and cash incentives you need to begin planning your solar electric project, visit our website www.energytrust.org/solar.

TRADE ALLY NETWORK

Energy Trust works with a network of nearly 2,400 trade ally contractors and other professionals who design and install energy-saving improvements and renewable power systems. Licensed and insured trade allies are trained to meet Energy Trust standards. They also can help homeowners, businesses and government agencies apply for Energy Trust cash incentives.

A number of trade ally contractors are based in the Clackamas County area. More information is available at www.energytrust.org/ta.



DARK BUILDINGS IN CLACKAMAS COUNTY BRIGHTEN ENERGY SAVINGS

The Clackamas County Public Services Building, built in 2004, and the Development Services Building, built in 2008, are both LEED*-certified, designed for energy-efficiency, lower operating costs and safety. The buildings have even been recognized as two of the most innovative and sustainable buildings in the community.

Despite their green design and environmental certifications, the public began to raise a collective eyebrow when passersby noticed that the lights were left on all night in both buildings. In reality, the building used only the minimum nighttime emergency lighting necessary to adhere to the fire marshal's standards. But because of the buildings' open floor plans, lighting designed to simply illuminate pathways around open cubicles, along hallways and in the lobbies for safety could be seen clearly from out on the street.

Still, the county wanted to relieve the public's concerns. The facilities management team for Clackamas General County, led by Jeff Jorgensen, collaborated with Johnson Controls, Energy Trust, the Clackamas County Office of Sustainability and the fire marshal to develop a motion-sensitive relay system that would trigger the emergency lights to come on only when people were actually in the building.

The new system uses relay sensors tied to a master control panel for each floor. As soon as someone enters a floor, a sensor is tripped. The emergency lighting and exit path illumination come on for that floor only and remain on until 30 minutes after the person has gone. This allows the buildings to remain completely dark when no one is present.

Energy Trust estimates that the new motion-sensitive emergency lighting will cut nighttime energy usage by at least 25 percent in the two buildings. The project cost the county just under \$75,000, and Energy Trust provided \$18,000 in incentives.



Our project was unique. Energy Trust had never encountered a situation quite like ours. However, they helped us come up with creative design solutions and find ways to reduce project costs. Everyone on the Energy Trust team was efficient and easy to work with.

Jeff Jorgensen, facilities manager Clackamas County



Get more from your energy. Contact us today at **1.866.368.7878** or visit **www.energytrust.org**.

Energy Trust of Oregon

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