



SEE BETTER AND SAVE BETTER WITH LED STREETLIGHTS

Street lighting is essential for public safety and security along busy thoroughfares and quieter neighborhood streets. Throughout Oregon, more utilities and municipalities are upgrading to light emitting diode, LED, streetlights.

Over the past several months, these long-living, energy-saving workhorses have come way down in price—while their notable light quality keeps improving. LEDs improve lighting quality and visibility while using less electricity and reducing maintenance costs. Utilities and municipalities can also factor street lighting into their strategies for saving energy, lowering costs and complying with sustainability requirements by upgrading to LED technology.

“LED streetlights are a solid investment as an upgrade or new installation, made even better with cash incentives from Energy Trust of Oregon,” said Oliver Kesting, commercial sector lead, Energy Trust.

The Next Generation of Visibility and Efficiency

An LED is a semiconductor device, a more energy-efficient technology than even the most recent generation of high intensity discharge, HID, streetlights which include high-pressure sodium, HPS, and metal halide, MH, streetlights. By clustering several individual, solid LED bulbs and encasing them in diffuser lenses, manufacturers have created lamps that cast light in a focused rectangular pattern, directing light precisely where it is needed.

Manufacturers have also improved the color rendition of LEDs, so they produce a shade of light which appears whiter and provides greater clarity than the yellow hues of HPS lighting. The result is more uniform light coverage that improves visibility while using significantly less electricity than other alternatives.

LED STREETLIGHT ADVANTAGES

- **Better light quality:** white light and improved color rendition increases nighttime visibility.
- **More controlled coverage:** directional down lighting reduces light pollution while providing greater uniformity.
- **Longer lamp life:** LEDs last four times longer than HPS lights.
- **Less maintenance:** lamps are durable and do not have to be changed as frequently.
- **Lower cost:** LEDs use 60-70 percent less electricity and last longer, reducing energy and replacement costs.
- **Faster payback:** LED prices have come down, so retrofit projects are cost-effective when factoring in energy and maintenance savings.



CITY OF WEST LINN

- **Combination of PGE and city-owned streetlights**
- **Approximately 900 cobra head streetlights upgraded from HPS to LED**
- **Total cost savings from the LED conversion is estimated at \$20,000 annually**
- **West Linn's LED upgrades qualified for \$42,800 in Energy Trust incentives**

“Sustainability and environmental stewardship are key goals for the City of West Linn. The conversion to energy-efficient LED lighting was a perfect fit for our community in addition to the cost savings, Energy Trust incentives and other technical benefits of LED lighting.”

Lance Calvert, P.E., public works director/city engineer, City of West Linn



CITY OF ESTACADA

- **Combination of PGE and city-owned streetlights; city opting to shift ownership to utility**
- **Approximately 340 cobra head streetlights upgraded from HPS to LED**
- **Estacada's LED upgrades qualified for \$16,100 in Energy Trust incentives**

“We're a small city and we don't have the staff or equipment to be in the streetlight business so this was a prime time to upgrade our streetlights and switch ownership options. We were the first city in the area to have PGE make the conversion to LED. It saves energy and is the responsible choice for sustainability.”

Melanie Wagner, assistant to the city manager City of Estacada



CITY OF PORTLAND

- **Owns all of its streetlights**
- **Worked with Energy Trust to convert over 260 cobra head streetlights from HPS to LED**
- **Portland's LED upgrades qualified them for over \$15,000 in Energy Trust incentives**
- **Embarking on a \$18.5 million lighting efficiency project with a goal of installing 45,000 LED fixtures within three to five years**
- **In addition to their work with Energy Trust, the City of Portland also upgraded over 340 globe-style street lights to LEDs**
- **Upon completion, the city expects to save \$2 million in energy and maintenance costs**

“New tariff structures have enabled us to monetize the savings from LED streetlights. We are seeing about a 50 percent reduction in energy consumption and are saving about 20 percent in maintenance costs with the new fixtures.”

Tod Rosinbum, signals/street lighting/ITS City of Portland

Energy Trust is Your Source for LED Information and Incentives

With prices coming down on lamps and incentives available from Energy Trust, now is an excellent time to invest in LED streetlights. Typically, lower maintenance and energy savings more than compensate for the capital costs of the new technology.

The following customers may qualify for Energy Trust incentives:

- PGE customers with utility maintained and operated streetlights
- PGE customers who own and maintain their own streetlights
- Pacific Power customers with utility maintained and operated streetlights
- Pacific Power customers who own and maintain their own streetlights



To learn more about the benefits of LED streetlights, specific incentives and qualifying products visit us at www.energytrust.org or call **1.866.368.7878**.

