

Energy-saving lighting can brighten your bottom line

Lighting improvements offer an affordable way to lower operating costs while shining an attractive light on your business. Start with easy, low-cost fixes. Move on to investments in new technologies that offer a quick return on investment, while improving light quality and reducing maintenance.



Simple fixes

Payback: Immediate

Start with simple steps such as turning off unnecessary lights, installing timers or clock switches to control lights and removing lamps in over-lit areas when appropriate. Keep light fixtures clean and dust free to maintain optimum light output.

Compact fluorescent lamps and fixtures

Payback: 1 to 3 years

Replacing incandescent bulbs with ENERGY STAR® qualified compact fluorescent lights (CFLs) cuts lighting energy use by about 65 percent per fixture and last up to 10 times longer, reducing labor costs. Today's generation of CFLs offer excellent performance and color rendition. Screw-based CFLs fit nearly any fixture that accepts an incandescent bulb. If you plan to replace an incandescent bulb that is controlled by a dimmer, photocell or occupancy sensor, check that the CFL is rated for that application. Whenever possible, replace incandescent fixtures with new CFL or linear fluorescent fixtures. This offers the best lighting performance and long-lasting savings.

High-performance exit signs

Payback: 1 to 3 years

New ENERGY STAR qualified exit signs are available that use light-emitting diode (LED), cold cathode or electroluminescent (glow-in-the-dark) technologies. One exit sign alone can save about \$10 annually on electricity costs and can last up to 10 years without a lamp replacement, compared to less than one year for an incandescent.

Cash in on financial incentives

Many lighting projects qualify for incentives that can lower your payback time to mere months. Energy Trust of Oregon, Inc. offers cash back on eligible lighting projects. Call Energy Trust at **1-877-510-6800** or visit **www.EnergyTrust.org**. Some projects also may be eligible for the 35-percent Oregon Business Energy Tax Credit. Contact Oregon Department of Energy (ODOE) at **1-800-221-8035** or **www.Oregon.gov/Energy**.

Be sure to get preliminary project approval from Energy Trust and ODOE before you purchase materials or begin work.

* U.S. Environmental Protection Agency ENERGY STAR program: energystar.gov/index.cfm?c=exit_signs.pr_exit_signs

find out more on the back >>>

Portland General Electric

T8 fluorescent lamps with electronic ballasts *Payback: 2 to 4 years*

Retrofit or replace your T12 fluorescent fixtures with high-performance T8 fluorescent lamps and electronic ballasts to achieve energy savings of 40 percent or more per fixture. T8s deliver other advantages, too, including better color rendition, no light flicker and less heat.

High-bay fluorescent T8 or T5 high-output *Payback 3 to 5 years*

A great option for indoor high-ceiling spaces is to replace metal halide and high pressure sodium fixtures with high-bay fluorescent T8 or T5 high-output fixtures. In addition to using up to 50 percent less energy, fluorescent high bays produce higher quality light, enjoy a longer lamp life and offer the opportunity to save even more with lighting controls.

Light-emitting diode (LED) lighting *Payback: 3 to 5+ years*

LED lighting is a promising new technology with an extremely long life and numerous applications. High-brightness, white-light LEDs are available for recessed cans, refrigerated display cases, track lighting, elevators, landscaping and other outdoor lighting. Color LEDs are available for indoor and outdoor signage, decorative lighting and traffic signals. The energy savings from LED lighting ranges from 25 to 90 percent. Because they can last up to 10 years, LEDs also deliver substantial maintenance savings.

Indoor lighting controls *Payback: 2 to 5 years*

Occupancy sensors can be an inexpensive way to trim energy use by 25 percent in conference rooms, private and open offices, restrooms, churches, schools and warehouses. Daylighting with photosensors offers similar savings in areas that have sufficient daylight for part of the day. Daylighting also has been shown to boost retail sales, student performance and employee productivity.

Outdoor lighting controls *Payback: 2 to 5 years*

Timers and photosensors can cut energy use by up to 50 percent on outdoor applications such as street and area lighting and signage. These inexpensive controls can also reduce peak electrical demand.



Take advantage of PGE's Outdoor Area Lighting Program

Need to upgrade your outdoor area lighting, or want freedom from maintaining the poles and outdoor lights on your property? PGE's Outdoor Lighting Program could be the answer. PGE will design, install, own and maintain outdoor lights and poles for a monthly fee on a five-year contract. The fee includes the cost of electricity. The service includes design and planning with a certified lighting designer who will help you achieve optimum results for your project. You avoid large up-front costs for purchase and installation of equipment, and there's no huge bill lurking in the future when lights need replacing.

PGE offers a variety of fixtures, including "dark sky-friendly" lighting that prevents light from escaping above the fixture. To learn more, call **503-736-5450** in Portland or **503-463-4348** in Salem.



Find more information online:

PortlandGeneral.com/Business

Or call the PGE Business Services Team at **503-228-6322** in Portland, **503-399-7717** in Salem, or **1-800-542-8818** outside of the Portland/Salem areas or at **Business.Services@pgn.com**.

Other ways PGE can help

- *Take advantage of our free classes and get expert advice on how to save energy and potentially save your business money.*
- *Contact us for assistance in identifying potential energy-saving opportunities.*