

# SMART IDEAS FOR YOUR BUSINESS® INDOOR LIGHTING

## FACT SHEET

“Keeping the lights on” is a significant cost for most businesses — anywhere from a quarter to half of total electricity cost. Fortunately, energy- and money-saving changes to your lighting are relatively simple to make and provide quick payback. Improvements in lighting technology mean that you don’t need to compromise on lighting quality to be energy efficient.

To reduce lighting-related energy costs, you need to do one or both of the following:

- » Reduce power consumption by using higher-efficiency lamps and ballasts
- » Reduce the number of hours the lights are on

ComEd’s *Smart Ideas for Your Business* program offers financial incentives to help you do both.

## RETROFITTING AND REPLACING OUTDATED FIXTURES

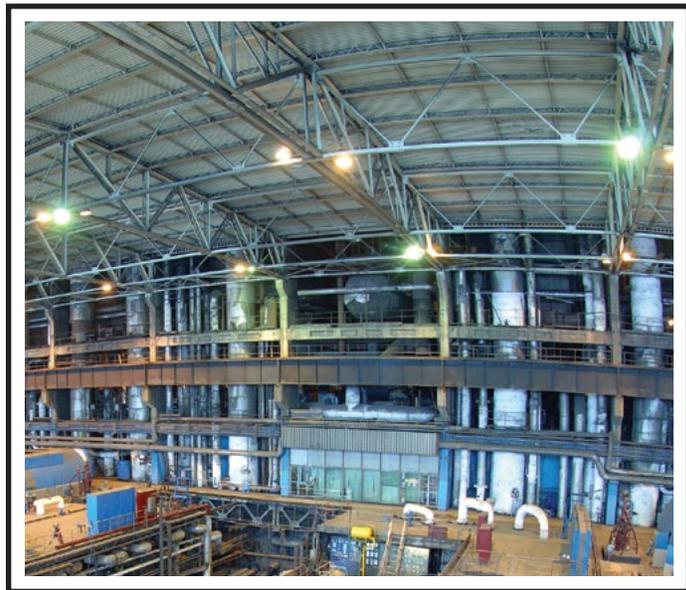
Replacing or retrofitting older fluorescent lamps and ballasts with new, more efficient lamps and ballasts is an easy and affordable way to reduce the electricity used by indoor lighting. For example, replacing obsolete T12 fluorescent lighting with a T8 fluorescent system can save your company 40 percent to 48 percent in energy costs. Upgrading also improves light quality, uniformity, light output, color and appearance.

Another popular route to energy savings is to replace old, high-intensity discharge (HID) fixtures—mercury vapor, metal halide, sodium—with new T8 or T5 fluorescent fixtures. The advantages of new T8 and T5 fixtures are straightforward: energy savings of 25 percent to 45 percent, instant on and off (i.e., no restrike time) and improved light quality.

ComEd’s *Smart Ideas* offers incentives for lighting fixture retrofits and replacements, as well as permanent lamp removal (delamping).



[ComEd.com/BizIncentives](http://ComEd.com/BizIncentives)



## MORE LIGHTING OPTIONS

An increasingly popular option for reducing power consumption is to use LED lamps and fixtures. *Smart Ideas* offers incentives for high-bay, low-bay, aisle and wall-wash LED fixtures that replace an HID fixture. To qualify, LED fixtures must be on the DesignLights Consortium (DLC) Qualified Products List, available at [www.designlights.org](http://www.designlights.org).

Replacing incandescent exit signs, which must be on continuously, with LED exit signs is fast and inexpensive. Even a smaller building can see significant energy savings. A typical exit sign drops from 40 watts (incandescent) to 5 watts, saving 300 kWh per year per sign.

*Smart Ideas* offers incentives for other lighting upgrades, including:

- » LED refrigerated display case lighting, “open” signs and channel sign letters
- » Pulse start and ceramic metal halide lighting
- » Induction lighting
- » Hardwired CFLs

## ENERGY-EFFICIENT LAMPS

*Smart Ideas* incentives are available for reduced-wattage lamps that can be installed as a direct replacement for standard lamps. Energy-efficient LED, compact fluorescent, linear fluorescent and ceramic metal halide lamps are available at a discount from participating electrical distributors—no application or rebate form needed. For a list of participating distributors, visit [www.ComEd.com/BizLights](http://www.ComEd.com/BizLights).

## SENSORS AND CONTROLS

The obvious way to reduce the amount of time your lights are on is to turn them off — a task that is easily automated. An occupancy sensor turns the lights on when it detects motion; lights go off when no motion is detected. How much does an occupancy sensor reduce energy? The U.S. Environment Protection Agency (EPA) developed general energy savings estimates for various commercial spaces that range from 13 percent to 50 percent in private offices and are as high as 80 percent in corridors, restrooms and storage closets.

Photo sensors are the key to “daylighting” or “daylight harvesting” — using natural sunlight from windows and skylights to supplement the artificial light. Well-planned and properly commissioned photo sensor controls are essential for energy savings and for overcoming the hurdles of heat and glare. Outdoors, timers control light levels based on schedules and lighting-level strategies.

Incentives for occupancy sensors, daylighting controls and occupancy sensors with photo sensors are available through the *Smart Ideas* program.



## CRITERIA TO CONSIDER WHEN SELECTING LIGHTING

Selecting the best lighting system for a facility is not as simple as choosing a light source that delivers the most light for the fewest watts consumed. More important than the wattage of a lighting system is the ability to see well and perform tasks in the space. Several factors contribute to efficient lighting design and should be considered when retrofitting a lighting system.

### » Lighting Uniformity

The ratio of the highest light level in the space compared to the lowest light level. Select a lighting system that delivers the closest maximum-to-minimum ratio possible. Uniform lighting throughout a space make it easier to see, even at lower overall light levels.

### » Color Temperature

The color of the light source being installed, as compared to the existing system. Choose a light source with a cool color temperature (4000K or higher) to see better in the space.

### » Lumen Depreciation

The decrease in the amount of light produced by a lighting system over time. Choose a light source that has consistent light output over lamp life.

### » Color Rendering (CRI)

The ability of a light source to make colors appear natural. The higher the CRI, the more colors look true to life. High CRI lighting sharpens the visual acuity in a space.

### » Energy Efficiency

Total system wattage compared to the existing lighting system. Energy-efficient lighting is not necessarily effective lighting.

### » Controllability

The ability to increase energy savings by using lighting control systems effectively.

## CONTACT US

For more information about *Smart Ideas for Your Business*, including applications and incentive amounts, visit [www.ComEd.com/BizIncentives](http://www.ComEd.com/BizIncentives). You can also reach us by phone at 888-806-2273 or email us at [SmartIdeasBiz@ComEd.com](mailto:SmartIdeasBiz@ComEd.com).