

# Guide to Green Lighting

## Progress Lighting

For more than 100 years, Progress Lighting has continued to build on its reputation as a leader and trendsetter in residential decorative lighting. While we are focused on the many aspects of “green” lighting, our commitment to consumers, homeowners and homebuilders is to provide products that maximize energy savings without sacrificing aesthetic appeal.

Progress Lighting has responded to the ever-changing needs of the lighting industry with extensive research and development programs that ensure high standards of quality and innovation for green lighting in home applications.

And we’re excited to share our knowledge with you.

Progress Lighting’s *Guide to Green Lighting* offers solutions for light commercial and residential lighting with fixtures in contemporary, modern and classic designs, all of which will lower energy costs and contribute to a healthier environment.

## Table of Contents

- Green Lighting Guide..... 2
- Shared Interior Spaces.....11
- Working Interior Spaces..... 47
- Outdoor and Utility Spaces ..... 61
- Concealed Lighting  
for Interior Spaces .....75

## LEEDing by Example



### LEED Headquarters

To solidify our environmental commitment, Progress Lighting (Hubbell Lighting, Inc.) moved into its LEED-certified headquarters in 2007. This building incorporates many forms of energy efficient lighting and controls, as well as daylighting and other energy efficient and sustainable elements.

### Lighting Solutions Center

The first floor of the new corporate headquarters is home to the company's unique Lighting Solutions Center. This self-contained 25,000-square-foot space provides real world solutions to the most challenging and timely lighting issues. Additionally, unique teaching tools in the Lighting Solutions Center include a fixture comparison mechanism that directly compares differences in energy usage and cost savings.

*Solid State Lighting Lab*



## What Does Green Mean?

Sustainable or green building design is the dominant subject just about everywhere you turn. Flip through your favorite magazine, watch a popular television program or surf the Internet and you'll see that everyone is "going green."

But what does that mean to you and how can you get started?

Simple changes in home lighting habits are an easy first step, resulting in less greenhouse gas emissions and significant financial savings as well.

For instance:

By replacing standard incandescent fixtures with those using green-friendly compact fluorescent bulbs, over the long run a household can save an estimated \$30 per CFL over its lifetime. Fluorescent bulbs are more expensive than incandescent, but last as much as ten times longer, and use significantly less energy over their lifetime.

The following pages contain many tips for those who are just beginning to 'go green' as well as technical information about lighting that will help you understand what 'green lighting' means.

## Your Home, Your Work, Your Environment

How we light up the places where we live, work and play makes a significant difference in how we feel; it also makes a big impact on the environment. Proper and effective lighting placement and energy-efficient fixture operation is important with any lighting application. Effective lighting can increase comfort and productivity while saving energy costs and minimizing pollution.

## Did You Know?

Despite various new and efficient technological advancements, lighting remains one of the least energy-efficient practices in the home. Nearly 90 percent of energy in traditional incandescent sources is lost to heat, leaving only 10 percent for light. Lighting generally accounts for nearly a tenth of a homeowner's energy bill, and is one of the least environmentally sound aspects of modern living. CFLs produce 75% less heat than incandescent sources, which is 75% less load on your HVAC system due to contributions from lighting.

This need not be the case with the lighting technology currently available. Energy efficient lighting can reduce energy consumption by as much as 75 percent. Additionally, energy-efficient sources last an average of 10 times longer than incandescent sources. The following pages contain information and resources that can help you contribute to a greener environment.

## Awards for Green Product Innovation and Design



Progress Lighting is dedicated to providing beautiful, functional products that incorporate state-of-the-art features. We are very proud to have been recognized by leaders in the lighting industry, such as the Illuminating Engineering Society of North America (IESNA), Energy Star, the American Lighting Association (ALA) and others.



Award	Given By	Year(s)
Partner of the Year	ENERGY STAR	2007
Progress Report	IESNA	2007 (Copenhagen, Lakeland, Strata)
Innovation Award Winner	Home Builder Executive	2006
Best In Class	Professional Builder	2006
Best In Class	Custom Builder	2006
Lighting For Tomorrow	DOE/ALA/CEE/EPA	2007 (Strata*)
		2006 (Fairview)
		2006 (Lakeland)
		2006 (International**)



\* winner in outdoor category of Solid State Lighting products  
 \*\* honorable mention



## Green Basics

It can be a daunting task when you see unfamiliar terms and acronyms. Included in this book are some terms that relate to lighting and sustainability practices.

### Green Friendly

Green friendly lighting products are less damaging to the environment than traditional lighting products, such as incandescent bulbs. They light more efficiently and reduce power consumption to contribute to a healthier living environment.



### Incandescent

The standard incandescent bulb incorporates a tungsten filament. When the filament is heated it glows. Incandescent bulbs tend to have a very poor lamp life and lose most of their energy (up to 90%) to heat.



### CFL

Compact fluorescent lamps (CFL) are filled with low-pressure gas. The gas emits ultraviolet light that is converted to visible light when it strikes phosphors on the glass. CFLs generate significantly more light per watt than incandescent lamps and have a far superior lamp life.

### LED



LED stands for Light Emitting Diode. An LED is a semiconductor device that emits visible light when an electric current passes through it. LEDs don't burn out like traditional bulbs, they simply dim over time. They use two to five times less energy than an incandescent lamp.

## ENERGY STAR

Besides saving energy, when you choose Energy Star qualified products, you help protect the environment from air pollution associated with power generation.

If just one room in every U.S. home was brightened by Energy Star qualified lighting, the change would have the pollution savings equal to removing more than 8 million cars from the road.

Energy Star is the mark of quality for energy efficient, green friendly lighting. Progress Lighting offers a wide array of Energy Star fixtures and was named the 2007 Energy Star Product Manufacturing Partner of the Year.

Most Energy Star fixtures include lamps that last more than 10,000 hours.

Energy Star fixtures are tested to meet strict energy efficiency guidelines set by the US Environmental Protection Agency (EPA) and US Department of Energy (DOE).

### More Light for Less Money

A 20-watt CFL has about the same light output as a 100-watt incandescent, and uses 50-80% less energy.

**CFL**  
Total cost of lamp + energy = **\$49.60**

Cost of energy over lamp life \$40.60

Cost of 1 bulb \$9.00

**Incandescent**  
Total cost of lamp + energy = **\$104.05**

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

Cost of energy for 1 bulb \$9.85

Cost of 1 bulb \$0.50

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.