



# Energy-efficient lighting at home



## Reduce your costs with ENERGY STAR® qualified bulbs.

The cost of lighting your home makes up a large portion of your electric bill. You can reduce your home's lighting energy costs significantly by selecting ENERGY STAR® qualified light bulbs.

### Long-term vs. short-term costs

When deciding which bulbs to purchase, it's important to look at both the long- and short-term costs. As you can see in the table\* to the lower-right, the true cost of a light bulb can be more accurately measured over its lifetime than by a pricetag on the box.

This table compares the energy usage and lifespan of incandescent light bulbs, ENERGY STAR® qualified CFL bulbs and LED bulbs:

### Select the best bulb

Technology continues to improve, and the marketplace is shifting toward better alternatives to conventional incandescent light bulbs. Compact fluorescent lights, or CFLs, last six to 10 times longer and use 70%-75% less energy than incandescent bulbs, while light emitting diode, or LED, bulbs last 15-20 times longer than incandescents and use 85%-90% less energy. Both CFLs and LEDs are designed to save with longer lifespans and lower energy consumption. They come in a variety of styles, depending on the bulb's intended use.

Though LEDs are more efficient and offer the largest energy savings,

each type of bulb has its pros and cons. For example, though prices continue to go down as technology improves, LEDs can still cost more to purchase than CFLs. However, CFLs can be more difficult to dispose of since they contain low levels of mercury and require special disposal accommodations.

While the initial cost of an incandescent bulb is low, it is expensive to operate. Only about 10% of the energy used produces light. The other 90% turns into heat, which can raise your home's temperature. By using efficient ENERGY STAR® qualified lighting, you not only save money on your lighting, but also help reduce your summer cooling costs.

|   | Incandescent bulbs | CFL bulbs           | LED bulbs           |
|---|--------------------|---------------------|---------------------|
| <b>Bulb life (in hours)</b>               | <b>1,200 hours</b> | <b>10,000 hours</b> | <b>25,000 hours</b> |
| <b>Typical life (in years)</b>            | <b>1 year</b>      | <b>6-10 years</b>   | <b>15-20 years</b>  |
| <b>Energy use</b>                         | <b>60W</b>         | <b>13W</b>          | <b>9W</b>           |
| <b>Electricity used over 25,000 hours</b> | <b>1,500 kWh</b>   | <b>325 kWh</b>      | <b>225 kWh</b>      |

\*From [www.energystar.gov](http://www.energystar.gov) and [www.energy.gov](http://www.energy.gov).

## Lighting tips

- Turn off lights when not in use.
- Use “task” lighting wherever possible and focus the light right where it’s needed.
- Replace the five lights in your home that are most frequently used the longest periods with ENERGY STAR® qualified lighting for the most effective energy costs. These may be bulbs in your kitchen, living room, dining room or bedrooms.
- Never install a bulb with a wattage that exceeds the maximum indicated on the lighting fixture’s label.
- CFLs perform best in open fixtures that allow airflow such as table/floor lamps, wall sconces and pendants.
- ENERGY STAR® certified bulbs provide the same brightness (lumens) with less energy (watts).
- Most CFLs cannot be used with dimmers.
- LEDs can be used with dimmers, but the box will note if that specific bulb can or cannot.
- “Energy Miser” type incandescent bulbs, which use 5%-13% less energy than traditional bulbs, can also be used in areas with dimmers.
- Use linear, tube type, fluorescent light fixtures in kitchens, work areas, garages and basements.
- Use CFL floodlights, metal halide or high-pressure sodium lights for outdoor lighting.
- Install occupancy sensors, timers or motion sensors in areas where lighting is left on when unoccupied but should be turned off.
- LEDs are excellent for most if not all applications in your home. They are especially good for “accent” lighting, as they can be made substantially smaller than other options.



## LOCAL CFL DISPOSAL

CFLs should **not** be disposed of in regular household garbage due to the small amount of mercury they contain.

Residents of Lincoln-Lancaster County can bring CFLs to a household hazardous waste collection. For a schedule, call the Lincoln-Lancaster County Health Department at **402.441.8021** or visit the Recycling page on [Lincoln.ne.gov](http://Lincoln.ne.gov).

For cleanup guidelines for broken CFLs, visit [EnergyStar.gov](http://EnergyStar.gov) and search “broken CFL.”

LES supports energy conservation because energy efficiency reduces the need to generate higher-priced power and helps keep rates lower for all customers.

If you'd like to learn more about energy efficiency, go to [LES.com/save-energy](http://LES.com/save-energy).

