

Which bulb is right for your members?



Service Concepts

Your Touchstone Energy® Partner



How do they work?



Incandescents

Uses heat caused by an electrical current that passes through the wire (filament) to produce light.



CFLs

Uses a very small amount of mercury to “kick start” an electric current. This current reacts with the phosphor within the tubes of the bulb and emits visible light.



LEDs

Uses semiconductors in plastic diodes to emit light.

What are the benefits?

Less Efficient ←

→ More Efficient

- Inexpensive
- Does not use mercury to operate

- Uses less energy to produce the same amount of light as an incandescent
- Lasts about 2.5 times longer than incandescents
- Gives off less heat when operating
- Less expensive than LEDs

- Uses less energy to produce the same amount of light as a CFL
- Lasts about 2.5 times longer than CFLs and about 20 times longer than incandescents
- Does not use mercury to operate
- Gives off less heat when operating
- Plastic housing is more durable than CFLs or incandescents glass bulbs
- Instant full brightness
- Most bulbs are dimmable

Bulb Energy Use Comparison



Incandescents
100w



CFLs
23w



LEDs
15w

Energy **USED** per 25,000 hours*

2500 kWh / \$275

575 kWh / \$63.25

375 kWh / \$41.25

Energy **SAVED** per 25,000 hours*

1925 kWh / \$211.75

2125 kWh / \$233.75
when replacing an incandescent

200 kWh / \$21.25
when replacing a CFL

Bulbs used per 25,000 hours**

21 bulbs

2.5 bulbs

1 bulb

More expensive to use ←

→ Less expensive to use

Lighting Facts

- CFLs and LEDs produce less heat which can help save on cooling costs.
- Lumens determine the bulb's light output. Look for the bulb with the lowest wattage and highest lumens to find the most efficient bulb.
- Despite CFL's use of mercury, the bulb is safe to use in homes and buildings. The bulb does not give off mercury unless broken. The amount of mercury that escapes if a bulb breaks (less than 0.5mg) is insignificant and will not cause harm to you or the environment if properly cleaned up and recycled. Visit <http://www.lamprecycle.org/> for more information about broken CFL bulbs and recycling.

* 0.11¢ per kWh (<http://www.business.ftc.gov/documents/bus26-lighting-facts-questions-and-answers-manufacturers>)

** Based on an average incandescent lifespan of 1,200 operating hours, an average CFL lifespan of 10,000 operating hours and an average LED lifespan of 25,000 operating hours.