

# A Bright Way to Conserve: Compact Fluorescent Bulbs

If every person in America replaced just one incandescent light bulb with a compact fluorescent lamp (CFL), we would have enough energy to light more than 3 million homes for a year and prevent greenhouse gases equivalent to the emissions of more than 800,000 cars!

An average household dedicates 11 percent of its energy budget to lighting. New lighting technologies can reduce your lighting bill up to 75 percent when you use CFLs. They can cost 3 to 10 times more than incandescent bulbs, but will last 6 to 15 times longer.

CFLs work like standard fluorescent lamps. They consist of two parts: a gas-filled tube and a magnetic or electronic ballast. The gas

in the tube glows with an ultra-violet light when electricity from the ballast flows through it.

This excites a white phosphor coating on the inside of the tube and emits a visible light throughout the surface of the tube.

CFLs with magnetic ballasts flicker slightly when they start. Magnetic ballasts are heavier than electronic ballast, which may make them too heavy for some fixtures.

Electronic ballasts are more expensive, but light up immediately even in low temperatures. These ballasts are more efficient than



magnetic ballasts.

How to choose the right light:

- CFLs perform best in open fixtures that allow airflow, like table and floor lamps.

- For recessed fixtures, it is better to use a reflector CFL than a spiral. The reflector CFL will distribute the light better to your work area.

- If your fixture has a dimmer or three-way switch, look for CFLs specifically made for that function.

- Use CFLs to replace incandescent bulbs with the equivalent wattage.

- Check the lumen rating to find the right CFL. The higher the lumen rating, the greater the light output. ■

## Light Output Equivalency

### Incandescent Light Bulbs

Watts

40

60

75

100

150

### Minimum Light Output

Lumens

450

800

1100

1600

2600

### Qualified CFL Bulbs

Watts

9-13

13-15

18-25

23-30

30-52

## Tips On Saving Money and Energy While Cooling Your Home

According to the U.S. Department of Energy, heating and cooling your home uses more energy and costs you more than any other system in your home. An estimated 45 percent of your utility bill goes to heating and cooling.

It's also important to consider that heating and cooling systems in the United States collectively emit 150 million tons of carbon dioxide into the atmosphere each year.

This summer, why not take some steps to curb your cooling costs and energy usage? Klickitat PUD offers the following tips:

- Be sure air-conditioning units are properly sized for the rooms they cool. Central air-conditioning systems should be sized by professionals.

- Set your thermostat as high as comfortably possible in the summer.

- Do not set your thermostat to an abnormally low temperature in an attempt to quickly cool your home. This will not work, and could result in excessive cooling and unnecessary expense.

- Use interior fans in conjunction with window air-conditioning units to effectively spread the

cooled air.

- Avoid placing lamps or TV sets near thermostats. This could result in inaccurate temperature readings and excessive cooling.

- Plant trees or shrubs to shade air-conditioning units, but be careful not to block the airflow.

In addition to the major steps you can take to cool your home more efficiently—like purchasing Energy Star-approved air-conditioners—there are countless low- or no-cost things you can do.

For more information, visit [www.energy.gov](http://www.energy.gov). ■