KUNI Radio Series "Unplugged"
Show #5: Compact Fluorescent Bulb Options

From the Center for Energy & Environmental Education at the University of Northern Iowa, this is Pat Higby with a series of programs on KUNI to help you save energy.

The total lifetime cost of buying and powering a compact fluorescent light bulb, or CFL, is $4.50 for the bulb plus $20 for the energy, or $24.50. For an incandescent bulb the costs are $2.50 for the bulbs (you need ten of them to match the life-time of the CFL) and $80 for the energy, or $82.50. It's because of these tremendous savings that CFLs are becoming so popular.

You'll want to optimize your savings by putting CFLs where lights are on the longest. A CFL used for an average of 4 hours a day will have a lifetime of about 4 years. So, for convenience, it's a good idea to put them in hard to reach fixtures since you'll have to change them less often.

CFLs, like ordinary fluorescent bulbs, are operated by a ballast. Each ballast has a preset number of times it will work, so don't put CFLs in areas where they will be switched on frequently for short periods of time, because you won't get the long life that results in savings. CFLs are most efficient where they operate for two hours or more, so they will save you less if you use them in a closet, for instance. At school, it's best to leave the lights on for the short time between classes, but if a room is unused for an hour or more, turn off the lights.

Manufacturers have developed several types of CFLs for special applications. You can purchase CFLs for dimmable or 3-way lamps, enclosed fixtures, and recessed can lights. Be sure to check the package, because regular CFLs will not work in these fixtures. There are even globe CFLs for your bathroom vanity!

Fluorescent bulbs are not as bright in a cold environment. CFLs can be used outdoors, but they are a little dimmer when the temperature drops. At extremely low temperatures the bulbs may be slow to start. Again, check the package to choose a suitable bulb.

In addition to saving energy and money with CFLs you are helping the environment. For each incandescent bulb you replace with a CFL, you prevent 500 pounds of greenhouse gasses from entering the atmosphere, the equivalent of 350 pounds of coal being burned. So the next time you need to buy light bulbs, stock up on CFLs. They will cost a little more, but in the long run they are worth it!

I'm Pat Higby, Energy Educator at the Center for Energy and Environmental Education at the University of Northern Iowa.