

Energy Efficient Lighting

Compact Fluorescent Light Bulbs (CFL)

KEA wants you to use electricity efficiently. Energy efficient lighting is a good first step in making your home or workplace as efficient as possible.

Incandescent versus Fluorescent?



An incandescent bulb creates light by converting electricity into heat. Just as your stovetop glows red when it's turned on, the heated metal coils inside the bulb glow with visible light. However, the purpose of a light bulb is to create light, not heat! Incandescent light bulbs are considered inefficient because only 10% of the electricity used by the bulb is converted into visible light.

Fluorescent light bulbs work differently. Instead of using electricity to heat metal coils, these light bulbs use electricity to excite gaseous atoms. By producing much less wasted heat, fluorescent light bulbs are able to convert more electric energy into visible light. For every electric watt, a fluorescent bulb creates 50 to 100 lumens of light, which is 4 to 6 times more efficient than the incandescent bulb. That's why a 13 watt CFL can make as much light as a 60 watt incandescent bulb.



What should I do with a fluorescent bulb when it burns out?

All fluorescent light bulbs, including CFLs and the tube lights commonly used in office buildings, contain a small amount of mercury. Mercury is a hazardous substance. Many other household items contain hazardous substances, such as batteries, thermostat switches, and paint thinner. All of these items need to be disposed of properly. Following these guidelines will help ensure the health and safety of our community.

Do not throw fluorescent bulbs away in your household garbage or in the dumpster.

You can drop off your household hazardous waste at the Kodiak landfill during hours of operation (10 am – 4 pm). Threshold Recycling also accepts expired fluorescent light tubes for safe recycling at a cost of \$1.50 per pound, but they do not accept CFL's.

As part of the community-wide Clean up Day, the Kodiak Island Borough holds a household hazardous waste collection event every year on the first Saturday in May. This is a great time to bring in and safely dispose all of your household hazardous waste, including burnt out fluorescent light bulbs.

If a fluorescent bulb happens to break, ***do not vacuum the broken bulb.*** Instead, clean the area with sticky tape to remove small glass fragments and powder. Wear gloves, and wipe the area with a damp paper towel. All materials that came in contact with the broken bulb should be sealed in a plastic bag or glass canning jar, and taken to the Kodiak landfill as hazardous waste.