



# Energy Efficiency: Residential Lighting Options

Compared to incandescent lights, compact fluorescent light bulbs (CFL) last 6 to 10 times longer and use 75% less energy. According to the EPA, if every American home replaced just one light bulb with one ENERGY STAR qualified bulb, we would save:

- Enough energy to light 3 million homes for a year
- \$600 million in annual energy costs
- Prevent the greenhouse gas equivalent to the emissions from more than 800,000 automobiles

## “I get it. CFLs save energy. But are these bulbs as great as everyone says?”

### Common reasons for reduced lifespan:

- Discount manufacturers - avoid them.
- Heat. CFLs placed in fixtures and sockets with low airflow(i.e. canned fixtures) will become too hot. Make sure to use CFLs specifically designed for recessed lighting.
- Areas with moisture or drastic temperature changes. CFL bulbs are rated differently for temperatures, typically between -20°F and 20°F. If using bulbs outside, look for cold temperature ratings.
- CFLs on dimmer switches. Specially designed dimmable CFL bulbs exist so check prior to installation.
- Frequent on/off operation may reduce the lifespan of the bulb. However, a CFL rated for 10,000 hours that is on for increments less than 15 minutes will still last 6,000 hours or more.

### “How much mercury is really in a CFL? “

- Burning fossil fuels for electricity is the main source of mercury pollution in the U.S.
- CFL bulbs contain between less than 1.5mg to 4mg of mercury but require 75% less energy.
- Net benefit to the environment: In five years, a coal-fired power plant will emit 10mg of mercury as a result of producing the electricity needed to run an incandescent bulb compared to only 2.4mg of mercury to run a CFL.
- New CFLs are being designed to contain significantly reduced amounts of mercury and/or are manufactured with an alloy of mercury that alleviates mercury contamination concerns.

### “What do I do with a bulb that breaks or burns out?”

-If a bulb breaks, clear the room for 15 minutes. Then sweep (don't vacuum) and place the broken pieces in a sealable plastic bag. The following places accept burned or broken CFLs:

**Anchorage/Matanuska-Susitna Borough:** Home Depot stores, Total Reclaim, Chugach Electric Association, Anchorage and Mat-Su landfills

