

Residential:

Why should I use compact fluorescent lamps (CFLs)?

Efficient: CFLs are four times more efficient and last up to 10 times longer than incandescent. A 22 watt CFL has about the same light output as a 100 watt incandescent. CFLs use 50 - 80% less energy than incandescent.

Less Expensive: Although initially more expensive, you save money in the long run because CFLs use 1/3 the electricity and last up to 10 times as long as incandescent. A single 18 watt CFL used in place of a 75 watt incandescent will save about 570 kWh over its lifetime. At 8 cents per kWh, that equates to a \$45 savings.

Reduces Air and Water Pollution: Replacing a single incandescent bulb with a CFL will keep a half-ton of CO₂ out of the atmosphere over the life of the bulb. If everyone in the U.S. used energy-efficient lighting, we could retire 90 average size power plants. Saving electricity reduces CO₂ emissions, sulfur oxide and high-level nuclear waste.

High-Quality Light: Newer CFLs give a warm, inviting light instead of the "cool white" light of older fluorescents. They use rare earth phosphors for excellent color and warmth. New electronically ballasted CFLs don't flicker or hum.

Versatile: CFLs can be applied nearly anywhere that incandescent lights are used. Energy-efficient CFLs can be used in recessed fixtures, table lamps, track lighting, ceiling fixtures and porchlights. 3-way CFLs are also now available for lamps with 3-way settings. Dimmable CFLs are also available for lights using a dimmer switch.

Source: http://eartheasy.com/live_energyeff_lighting.htm#1c

I heard CFLs have Mercury. How do I learn More about Mercury and CFLs?

1. Using CFLs (and other fluorescent bulbs) reduces the amount of mercury released into the environment
 - a. Mercury is found in many rocks including coal. When coal is burned at a utility power plant to produce electricity, mercury is released into the environment.
 - b. In the U.S., burning coal at power plants results in about half of all mercury emissions from man-made sources (*source*: Section 2.6 of the [2011 National Emissions Inventory, version 1 \(November 2013\) of the Technical Support Document \(PDF\)](#)).
 - c. Using energy-efficient CFLs reduces demand for power, which in turn reduces the amount of coal burned by power plants and the amount of mercury emitted when coal is burned.
2. CFLs contain very small amounts of mercury
 - a. Mercury, an essential part of CFLs, allows a bulb to be an efficient light source.
 - b. On average, CFLs contain about four milligrams of mercury sealed within the glass tubing. By comparison, older thermometers contain about 500 milligrams of mercury – an amount equal to the mercury in over 100 CFLs.
 - c. Manufacturers of fluorescent lighting products are working to reduce the amount of mercury content in CFLs.
 - d. No mercury is released when the bulbs are intact (i.e., not broken) or in use, but CFLs can release mercury vapor when broken.

Source: <http://www2.epa.gov/cfl/what-are-connections-between-mercury-and-cfls>

How and Where Can I Recycle CFLs?

You can always look for options by visiting: search.Earth911.com. As of 2014, here are the locations the City is aware of:

- 1) Recycling Collection Sites:
 - Environmental Recycling Group
527 East Woodlawn Circle, PO Box 167
Bowling Green, Ohio 43402
(800) 284-9107
- 2) Local retailer:
 - Lowe's (13.2 miles)
1831 N Clinton Street
Defiance, Ohio 43512
(419) 782-9000
 - Home Depot (24.9 miles)
1169 S Main Street
Bowling Green, Ohio 43402
(419) 353-3731
- 3) Mail-in services
 - Chemwise, Inc.
316 E Sandusky St
Findlay, Ohio 45840

Source: <http://www2.epa.gov/cfl/recycling-and-disposal-after-cfl-burns-out#whererecycle>

Should I dispose of CFLs in my garbage?

Residential consumers are not forced by the Ohio EPA to recycle bulbs. If you chose to dispose of bulbs, the EPA recommends you place the bulb in two (2) sealed plastic bags and put it into your outside trash. Do not dispose of in an incinerator.

My CFL burned out before the packaging stated it should. How do I get a refund or replacement? I don't have the original packaging or receipt.

If your ENERGY STAR qualified CFL product burns out before it should, look at the CFL base to find the manufacturer's name. Visit the manufacturer's web site to find the customer service contact information to inquire about a refund or replacement. We can also help you track down the manufacturer's contact information. Manufacturers producing ENERGY STAR qualified CFLs are required to offer at least a 2-year limited warranty (covering manufacturer defects) for residential applications. In the future, save your receipts to document the date of purchase.

In addition, the ENERGY STAR program monitors all CFL early failures. Please bring product failures to our attention by e-mailing us at: cfl@energystar.gov, be sure to include the manufacturer's name and product model number

Source: <http://energystar.supportportal.com/ics/support/KBAnswer.asp?questionID=19712>

Businesses:

The EPA regulates how a business must handle fluorescent bulbs. If you are business I would recommend you read:

<http://www.epa.gov/wastes/hazard/wastetypes/universal/lamps/lamp-recycling2-09.pdf>

The closest waste collection site that takes fluorescent bulbs is:

- Environmental Recycling Group
527 East Woodlawn Circle, PO Box 167
Bowling Green, Ohio 43402
(800) 284-9107

How do I handle clean up for a broken florescent bulb?

Before Cleanup

Have people and pets leave the room.

Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.

Shut off the central forced air heating/air-conditioning system, if you have one.

Collect materials needed to clean up broken bulb:

- 1) stiff paper or cardboard
- 2) sticky tape
- 3) damp paper towels or disposable wet wipes (for hard surfaces)
- 4) a glass jar with a metal lid or a sealable plastic bag

During Cleanup

DO NOT VACUUM. Vacuuming is not recommended unless broken glass remains after all other cleanup steps have been taken. Vacuuming could spread mercury-containing powder or mercury vapor.

Be thorough in collecting broken glass and visible powder. Scoop up glass fragments and powder using stiff paper or cardboard. Use sticky tape, such as duct tape, to pick up any remaining small glass fragments and powder. Place the used tape in the glass jar or plastic bag. See the detailed cleanup instructions for more information, and for differences in cleaning up hard surfaces versus carpeting or rugs.

Place cleanup materials in a sealable container.

After Cleanup

Promptly place all bulb debris and cleanup materials, including vacuum cleaner bags, outdoors in a trash container or protected area until materials can be disposed of. Avoid leaving any bulb fragments or cleanup materials indoors.

Next, check with your local government about disposal requirements in your area, because some localities require fluorescent bulbs (broken or unbroken) be taken to a local recycling center. If there is no such requirement in your area, you can dispose of the materials with your household trash.

If practical, continue to air out the room where the bulb was broken and leave the heating/air conditioning system shut off for several hours.

If you have further questions, please call your local poison control center at 1-800-222-1222.

Why is it important to clean up a broken CFL properly?

CFLs and other fluorescent light bulbs contain a small amount of mercury sealed within the glass tubing. When a fluorescent bulb breaks in your home, some of this mercury is released as mercury vapor. To minimize exposure to mercury vapor, EPA recommends that residents follow the cleanup and disposal steps described on this page.

Source: <http://www2.epa.gov/cfl/cleaning-broken-cfl>

