



A Light Among the Nations Compact Fluorescent Light FAQ Sheet



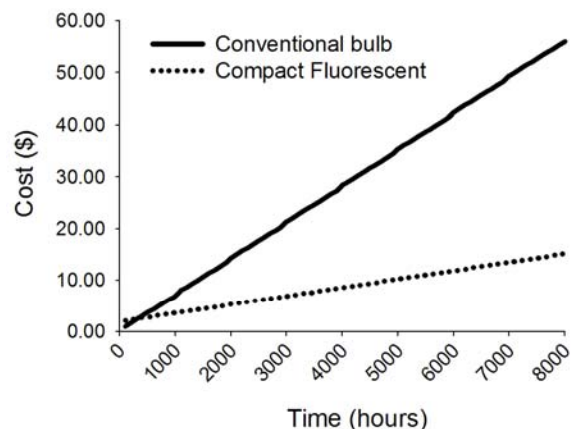
Replacing conventional incandescent light bulbs with Compact Fluorescent Lights (CFLs) leads to lower energy use, savings on your electric bills and reducing energy demand and pollution. This is why virtually every private energy service provider, government agency and environmental organization recommends the use of CFLs. Many of our members and friends, however, have raised some good questions regarding the environmental impact of these bulbs. Below are our responses. Please feel free to continue to address your questions to us.

EXPENSE

Q: Compact Fluorescent Light Bulbs are more expensive than regular bulbs. Why should I switch?

A: The cost of a CFL bulb purchased through COEJL is from \$2.00 to \$2.50 depending on brightness. While this is indeed more expensive than a conventional bulb, the CFL bulb uses approximately one quarter of the energy of a conventional bulb and lasts 8 times longer. Due to these savings, your bulb will pay for itself in energy savings within 2 to 3 months (based on 5-hour /day use and average electricity cost) and save at least \$25 over the course of its life. Note that the more expensive energy is, the sooner your CFL bulb will pay for itself! If that's not good enough, many electric service providers will give you a rebate for every CFL bulb you buy. Check with your service provider!

**Comparative Expense
Conventional versus Compact Fluorescent Bulbs***



* Based on the following:

Conventional Bulb	CFL Bulb
60 W	15 W
1000 hour lifetime	8000 hour lifetime
\$0.40 bulb cost	\$2.00 bulb cost

Cost of electricity - \$0.11 kWh
(US Average - DOE, 2006)

*** For the fun of it: Visit the U.S. Department of Energy's Energy Efficiency and Renewable Energy Website and calculate your potential savings! Go to http://www.eere.energy.gov/femp/procurement/ee_fluorescent_lamps_calc.cfm and input your conventional bulbs wattage and cost, your CFL wattage and cost, the number of hours you use your bulb, and the cost of electricity and the calculator will give you the number of months in which your new bulb will pay for itself in energy savings! ***

WARMING UP (The bulbs, not the planet...)

Q: A few years ago we tried CFL bulbs and didn't like the light they gave off. Further, they took a couple seconds to light up. Is this still the case with these bulbs?

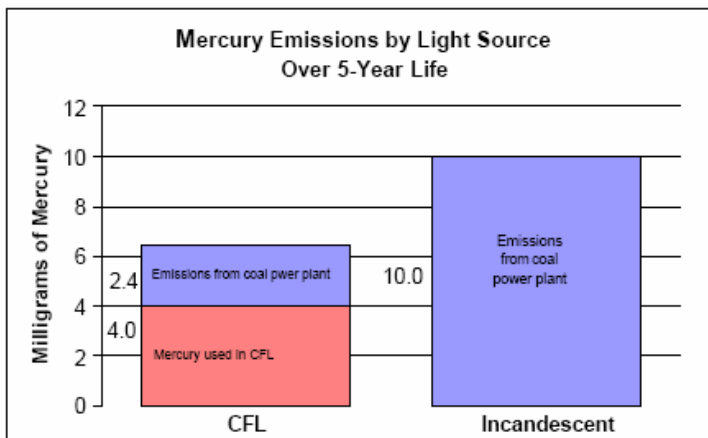
A: The bulbs have improved, though in cold weather they may take up to a minute to reach full brightness. While we recommend using CFLs in the entire house/synagogue, you may begin by replacing bulbs in lights generally left burning for long periods of time, including night-lights, outdoor lights and basements.

The bulbs that you will be receiving through the campaign are "flicker-free" and offer a warm, white light.

MERCURY

Q: What about the mercury contained in CFLs?

A: The greatest source of mercury in the environment comes from coal-fired power plants that provide the energy to light both types of bulbs. Because conventional bulbs use 4 times the amount of energy as CFLs, they are responsible for an equivalent higher demand for energy and consequent mercury emissions. In fact, according to the US Environmental Protection Agency, over five years, conventional bulb use yields 10 mg of mercury, as opposed to 6.4 mg produced through the use of a CFL bulb (4 mg in the bulb and 2.4 mg at the power plant; EPA, 2002). When properly disposed, the mercury in CFL bulbs can be contained, unlike mercury released in power plant emissions. This is not to say that we should not address the presence of mercury in CFLs and issues of proper disposal, but that even considering its mercury content, CFLs remain a much cleaner alternative than conventional bulbs. If the bulb is disposed properly, mercury is never released into the environment unless the bulb breaks. If it breaks in your home or synagogue, ventilate the room and sweep the fragments into the garbage (do not vacuum the remains or touch the glass).



Data from US EPA (2002); Chart taken from the website of the National Electrical Manufacturers Organization (www.nema.org).

The bulbs you will be receiving through the campaign are low-mercury.

DISPOSAL

Q: So what should I do with old bulbs?

A: Although CFL bulbs are relatively new, many city and county recycling programs have already begun to include CFLs in their recycling efforts. New York City, for instance, collects CFLs at waste drop off sites located in each borough (www.nyc.gov/html/nycwasteless/html/at_home/special_waste.shtml). Likewise, the City of Los Angeles has five “S.A.F.E. Centers” for the collection of special waste that should not be deposited in the trash (www.lacitysan.org/solid_resources/special/hhw/safe_centers/index.htm). We recommend checking with your local recycling program or hazardous waste disposal service (who also collect paints, household cleaners, batteries and other items) to see if they will accept them. If your city/county does not, place used bulbs in a sealed plastic bag and place them in the trash as you would a conventional bulb.

CLEAN-UP

Q: What if a bulb breaks?

A: If a bulb breaks in your home, mercury will be released. Open windows to increase ventilation, which will allow the mercury to disperse. Then, without touching the broken shards, sweep the remains and place them into the garbage. The glass from the bulb can be discarded with the regular trash.

PACKAGING

Q: What about the terrible plastic package that the bulbs come in?

A: We at COEJL hate the plastic “blister pack” wrapping as well, and are doing our best to engage in some consumer activism to get our suppliers to consider changing their package design. In fact, Sylvania is now phasing out “blister packs” and replacing them with cardboard. We have “inside information” that GE will soon be following suit.

The bulbs for the campaign will be packaged individually, some in plastic and some in cardboard.



GIVE IT A TRY...

Q: Is it worth doing this if I’m not going to replace all my bulbs?

A: Yes! Even changing a single bulb (how about that one that burns 24/7 in the basement?) will save you money and reduce energy demand and pollution emissions. So, change a bulb. And you can replace most of your bulbs if you prefer – our provider, bulbs.com stocks a wide range of CFL for nearly every type of fixture.

CONCLUSIONS

As a relatively new technology, CFLs pose new environmental challenges. We at COEJL will continue to address issues of mercury and packaging. Nonetheless, even considering these challenges, the environmental and economic balance sheet greatly favors the use of CFLs. Please join the “Light Among the Nations” campaign for a cleaner environment. We welcome all comments regarding the CFL campaign.

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