

Incandescent bulb “ban”?

- **The light bulb standard does not ban incandescent bulbs**, or require fluorescent bulbs; it merely requires bulbs to meet a basic level of energy efficiency.
 - **New advanced incandescent bulbs meet the standards.**
 - These bulbs give light that is indistinguishable from the old incandescents, and have the same shape. They are fully dimmable, and they contain no mercury. They are available from every major manufacturer (Philips, Sylvania, and General Electric).
 - The cheapest ones cost \$1.49 each, but the 30% electricity savings will pay back the extra cost in months.
 - Traditional incandescent bulbs will still be available for certain specialty applications.
 - E.g. heat lamps, appliance lights, aquarium bulbs, candelabra, decorative tinted and colored lights.

Innovation and choice

- **The light bulb standard has spurred innovation in lighting and given consumers more choices.** There are now new options like advanced incandescent bulbs and LEDs (light-emitting diodes) in addition to compact fluorescent bulbs (CFLs).
 - The advanced incandescent technologies have been around for decades, but no one used them to make energy-efficient bulbs for the United States until the standard was enacted because they were not sure there would be a market.
 - While LEDs are very expensive for home use right now, the manufacturers are investing heavily and expect costs to come down fast. Flat screen TVs cost thousands of dollars when first sold.
- Repeal of the standard would harm manufacturers, who have invested in better products because of the standard. Repeal of the federal standard would also leave a patchwork of different state standards, creating problems for manufacturers and distributors.

Savings

- **The efficient lights required by the light bulb standard will save more than \$10 billion each year.** Other savings include:¹
 - the amount of electricity generated by more than 30 large power plants, or roughly the same as total electricity use of Indiana,
 - global warming pollution of 14 million cars and light trucks (about 70 million tons of carbon dioxide (CO₂) per year).
- Repeal of the standard would cost a typical family more than \$100 each year, a kind of energy tax on the American people.
- About 90% of the energy used by traditional incandescent bulbs is wasted as heat (or 97% if you include energy losses at the power plant).
- Lighting the average American home for a year causes pollution of about 3 pounds of nitrogen oxides, 9 pounds of sulfur dioxide, and a whopping 2,392 pounds of carbon dioxide.²

Jobs

- **The light bulb standard is creating jobs in the United States** because the R&D and high-tech manufacture are done here, while most of the manufacture of cheap incandescent bulbs moved away years ago.

¹ American Council for an Energy-Efficient Economy estimates 102 billion kWh savings, worth \$12 billion, after second round of standards (to take effect in 2020). This is equivalent to typical output of 34 500 MW coal plants.

² Alliance to Save Energy calculations based on data from EPA eGRID (2007) and Energy Information Administration.

- Many of the new advanced incandescent bulbs are made in the US or use components made in the US.
 - Sylvania assembles its advanced “Super Saver” incandescent in St. Mary’s, Pennsylvania including parts from Wellsboro, PA. These facilities were retooled from producing traditional incandescents to producing modern advanced ones.
 - Philips Lighting manufactures the halogen element for some of its advanced incandescents in Bath, New York and also uses some glass made in the US. Philips never manufactured a traditional light bulb in the US.
 - More broadly, Philips employs 7,500 in the United States (including the largest linear fluorescent tube factory in the world in Salina, KS). GE just invested \$60 million in an Ohio plant to manufacture linear fluorescent tubes, and doubled workforce at that site.
- Companies are also hiring for R&D and manufacture of LED lights.
 - CREE has added more than 800 new jobs since 2009 in LED lighting in North Carolina.
 - Philips employs over 700 and hired more than 100 people in 2010 in its LED facility in San Jose, California.
 - Lighting Sciences Group employs 650 people in Florida making LED light bulbs.

Mercury and health

- The light bulb standard does not require fluorescent bulbs. Advanced incandescents, as well as LEDs, do not contain mercury and meet the standard.
- **CFLs reduce overall mercury exposure.** While CFLs do contain a very small amount of mercury, the EPA estimates that ten times as much mercury will be emitted by the power plants that make the extra electricity needed for an inefficient incandescent bulb than would escape from a CFL in a landfill.
 - Power plants are responsible for more than half of the 103 metric tons of mercury emissions in the United States each year. Even if every CFL sold each year were dumped, they would only release 0.1% (0.12 metric tons).³
- CFLs are not a major risk in the home either. You receive more mercury exposure from eating a can of albacore tuna than you could get from being near a broken CFL (unless you eat the bulb).⁴
 - Mercury thermometers contain more than 100 times as much mercury as a CFL (500 mg).⁵

Public opinion and support

- **Two-thirds of Americans support the lighting standard** (61% call it a good law and 31% call it a bad law), and five-sixths (84%) are satisfied or very satisfied with the alternative bulbs, according to a USA Today/Gallup poll (February 2011).
- The standard was jointly proposed by manufacturers and efficiency advocates, supported by consumer groups and states, and included in the Energy Independence and Security Act of 2007, signed by President George W. Bush.

What does the standard do?

- The standard requires that regular light bulbs use less energy; it is a technology-neutral performance standard.
 - As of January 1, 2012, light bulbs as bright as a 100 watt traditional incandescent bulb can use no more than 72 watts of electricity.
 - As of January 1, 2013 applies to 75 watt bulbs (no more than 53 watts). As of January 1, 2014 applies to 60 watt bulbs (43 watts) and 40 watt bulbs (29 watts).
 - Additional savings start in 2020.
- Also, starting July 2011 light bulbs must include a clearer label on energy use and brightness.

³ Energy Star fact sheet at http://www.energystar.gov/ia/partners/promotions/change_light/downloads/Fact_Sheet_Mercury.pdf.

⁴ Robert Clear, Francis Rubinstein and Jack Howells. “Dangerous Mercury in CFLs? One Big Fish Story.” *Lighting Design and Application*. August 2009. <http://www.lamprecycle.org/public/images/docs/LD+A%20August%202009.pdf>.

⁵ NRDC, Shedding New Light on the U.S. Energy Efficiency Standards for Everyday Lightbulbs, <http://www.nrdc.org/energy/energyefficientlightbulbs/files/SheddingNewLightFS.pdf>.