

# Green Technology Mandates Are Bad for Consumers and the Environment

Brief Analysis No. 749

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July 13, 2011

*Recent government promotion of “energy efficient” consumer products has increased sales of various household appliances, such as washing machines and toilets, and light bulbs. These products have been touted as environmentally friendly.*



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The purchase prices of these products are higher than those replaced, but the government claims they cost less over time because they consume less resources. Under ideal conditions, these claims may be true. However, the performance of these products is often subpar, reducing energy savings or environmental benefits. They also have other drawbacks, including safety hazards.

**Dimming the Future.** The 2007 Energy Independence and Security Act effectively banned the sale of incandescent light bulbs, starting with 100-watt bulbs in 2012 and progressing to a ban on 40-watt bulbs in 2014. The alternative for most households will be compact fluorescent lights (CFLs).

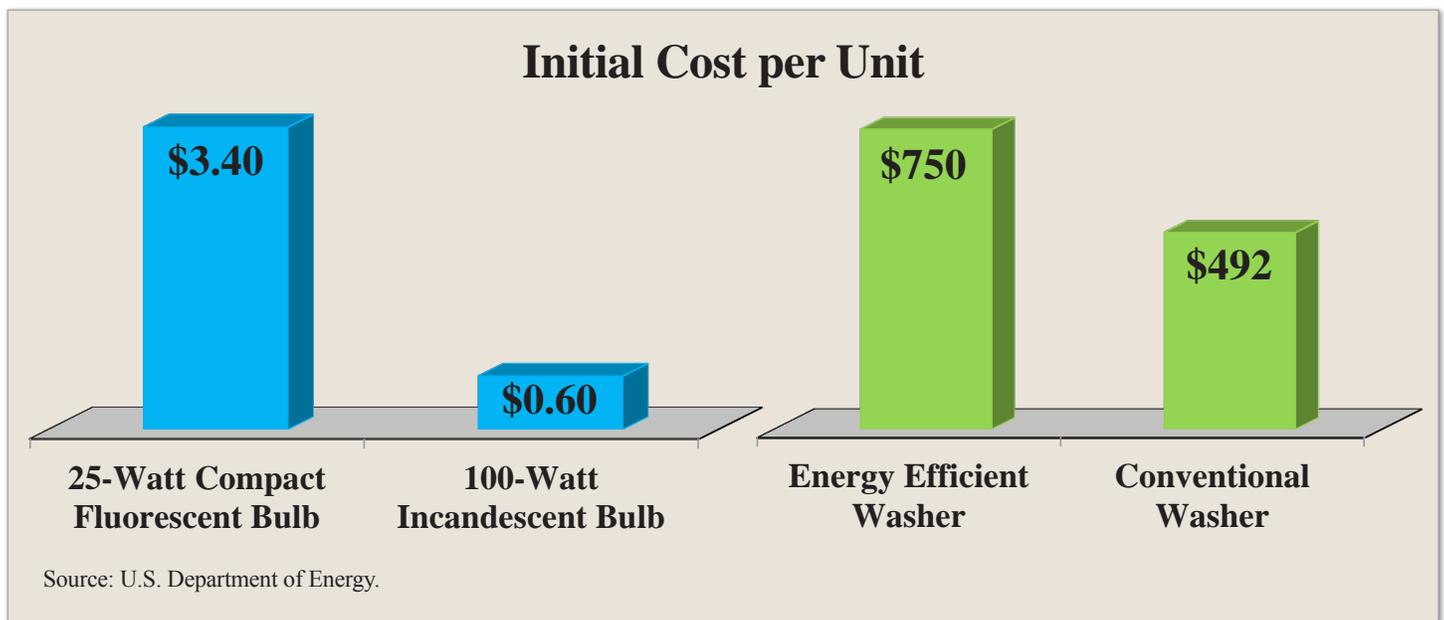
Unfortunately, CFLs contain mercury — a potentially serious hazard to consumers if the bulb is broken. The federal government encourages consumers to dispose of burnt out bulbs properly to prevent the release of mercury. However, absent widespread awareness of the risk and easy access to the specialized recycling facilities necessary to dispose of CFLs safely, most CFLs are thrown in the trash and carted off to landfills, increasing the potential for toxic exposure.

CFL bulbs have also exploded spontaneously while in use, sometimes resulting in fires. In 2010, New York fire investigators concluded that a CFL bulb that exploded caused a home fire. In early 2011 Tennessee officials concluded that a malfunctioning CFL started a fire that killed a man in a rehabilitation center.

In addition to the safety risk, a CFL bulb can cost six to 10 times as much as an incandescent [see the figure]. The energy benefit of CFLs is that they use less electricity to produce the same amount of light. For example, a 13-watt CFL produces the same amount of light as a 60-watt incandescent bulb. Under ideal conditions, according to the federal government’s Energy Star program, a CFL bulb could save \$40 in electricity and replacement costs over its four-and-a-half year life, compared to an incandescent bulb. However, because laboratory conditions rarely match typical use, consumers rarely save that much. Consider:

- CFLs must be left on for at least 15 minutes at a time and used continuously for several hours a day to achieve their full energy savings, according to the U.S. Environmental Protection Agency.
- CFLs can take up to three minutes to reach full brightness when turned on, say manufacturers, initially providing as little as 50 percent of their rated output.

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■ CFLs used for only a few minutes at a time, such as in closets and bathrooms, burn out as fast as incandescent bulbs, according to the U.S. Department of Energy.

### Green Washing Our Clothes.

The savings from federally mandated energy efficiency standards for household appliances, such as washing machines and refrigerators, are often overstated. The Cato Institute found that U.S. energy efficiency standards will cost consumers up to \$56 billion through 2050, excluding the government's costs.

Energy-saving washing machines, for example, can initially cost twice as much as the machines they replace [see the figure], but it is argued that they pay for themselves with lower utility bills. These "green" washers use up to 70 percent less water, but optimal results require a specially formulated detergent, which can be more expensive. Traditional detergent creates too many suds, making the clothes more difficult to rinse. The washer senses the suds and increases the amount of

water used to finish rinsing the clothes, offsetting the water saved.

Even under the best conditions, the benefits are drastically overstated. According to *Forbes*, it could take an average of nine years to recover through energy savings the high price of an energy-efficient washing machine. Because the average lifespan of a machine is 12 years, by the time the consumer realizes savings, it is nearly time to buy a replacement.

**Low-Flow Toilets.** The federal government has gradually reduced the amount of water per toilet flush since the 1992 Energy Water and Conservation Act, replacing the traditional 3.5 gallon per flush (gpf) toilets with 1.6 gpf toilets.

Consumers noticed problems immediately. Low-flow toilets often became stopped up or required multiple flushes, meaning water savings literally went down the drain. The new toilets were also prone to malfunction. Consumers were so unhappy with their new "efficient" toilets that a thriving black market in high-volume toilets emerged.

Some local governments concerned about water use also offered rebates for government-approved toilets. San Francisco's low-flow push resulted in sludge backing up the sewage system due to a lack of water flow. The stench became so bad in popular tourist areas that the city spent more than \$100 million to solve the problem. The city recently announced that it is spending an additional \$14 million on highly concentrated bleach to treat the stench and disinfect the water before it is dumped into San Francisco Bay. Ironically, the bleach is toxic and could harm the bay.

**Conclusion.** The federal government should cease interfering with consumer choices for household goods and appliances. Subsidies and mandates for politically preferred green goods increase costs to consumers without commensurate environmental benefits.

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