

# Rebates to cut price of \$60 LED bulb

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This product image provided by Philips shows a state-of-the-art LED light bulb. The bulb is the most energy-efficient yet, lasts about 20 years and is supposed to give off a pleasing, natural-looking light. But what separates it from the pack most is the price tag: \$60. (AP Photo/Philips)

(AP) -- How much would you pay for an amazing, state-of-the-art light bulb? Shoppers will be asking themselves that very question at Home Depot and other outlets starting Sunday - Earth Day - when the bulb that won a \$10 million government contest goes on sale.

The bulb is the most energy-efficient yet, lasts about 20 years and is supposed to give off a pleasing, natural-looking light. But what separates it from the pack most is the price: \$60.

That price reflects the cost of the components, especially the top-notch

chips, or diodes, that give off the light, and is the price commercial customers will pay. But the manufacturer, Netherlands-based Philips, is discounting it right away to \$50 for consumers, and working on deals with electric utilities to discount it even further, by as much as \$20 to \$30.

This means the bulb will cost anywhere from \$20 to \$60, depending on where it's found. Online, consumers will be paying \$50 for each bulb, because utilities don't subsidize online sales.

Congress launched the L Prize contest in 2007, with the goal of creating a bulb to replace the standard, energy-wasting "incandescent" 60-watt bulb. The requirements were rigorous, and Philips was the only entrant. Its bulb was declared the winner last year, after a year and a half of testing. The contest stipulated that the winning bulb be sold for \$22 in its first year on the market.

In that context, the \$60 price tag has raised some eyebrows. Ed Crawford, the head of Philips' U.S. lighting division, said it was always part of the plan to have utility rebates bring the price down to the \$22 range.

Utilities already offer rebates on energy-saving products such as compact-fluorescent bulbs, or CFLs. In return for efforts to curb energy use, regulators allow utilities to raise their rates. The discounts are invisible to consumers - the utilities pay the stores directly.

For \$25, or even \$35, the bulb looks like a good investment compared to an incandescent bulb. It uses only 10 watts of power, meaning saves about \$8 per year in electricity if it's used four hours a day. It's expected to last at least 30,000 hours, or 30 times longer than an incandescent. At four hours per day, that's 20 years.

But the Philips bulb is not only up against \$1 incandescent bulbs. CFL are nearly as energy efficient. They use about 15 watts for 60 watts worth of light. They're much cheaper too, typically costing around \$5. The Philips bulb looks odd too -the light-emitting surfaces are yellow when the bulb isn't lit, yet shine white when it is.

The Philips bulb has some advantages over a CFL: It lasts three times longer and gives off a more natural-looking light. It doesn't contain the toxic mercury vapor inside CFLs, which creates a minor hazard when they break.

Philips has been selling a cheaper, less efficient version of the L Prize bulb since 2010, and Crawford says it's done well - LEDs now account for about 20 percent of Philips' U.S. lighting sales, up from nearly zero three years ago.

Crawford credits the L Prize with pushing the company to focus research efforts on LED bulbs. The finished product may be expensive, but the technology the company developed for the prize submission has already been used successfully in its cheaper AmbientLED lights.

"It's the question we always receive: 'Well gee, wouldn't the technology have developed this way without the L Prize?' I think it absolutely would have. The real question is: 'How quickly would it have happened?'" Crawford said.

The company is three to five years ahead of where it would have been without the goading of the prize, he said.

The race is now on to produce LED bulbs that produce 100 watts worth of light. The incandescent equivalents are no longer made or imported, victims of a federal ban that kicked in at the beginning of the year. They're now starting to disappear from store shelves. Squeezing enough

LEDs into a bulb-sized space to produce that much light is a big technical challenge - LEDs generate heat, which destroys them over time unless they're well-cooled.

Incandescent bulbs of 40 watts and above will be banned in 2014.

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