

Rating Your Toaster's Lifetime Costs

Labels that show what it costs to run common household appliances may change the way we shop.

By Eric Niiler | Tue Nov 1, 2011 02:01 PM ET

When shopping for appliances, it's easy to compare prices, but what about the cost to actually run a toaster, coffee maker or blender? A new testing service aims to do just that.

The technology allows consumers to see what appliances are energy savers and which are energy wasters. Some appliances may cost more, for example, at the register, but actually use less energy over their lifespan.

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"You can see how much it cost to run a product not just buy it," said John Jabara, president of Savenia Labs, a Bethesda, Md., firm that launched its service last month. "People have never known that some coffee makers cost \$500 to run and some cost \$30 to run."

Jabara says the company's testing goes beyond the U.S. EPA's "Energy Star" ratings for large appliances such as refrigerators and television sets. Savenia Labs tests coffee makers, microwave ovens, toasters and other common household items that don't make it onto the EPA's list.

Jabara buys products himself and sends them for testing to the University of Maryland's Center for Advanced Life Cycle Engineering. Savenia is selling its subscription service to hardware and appliance stores and is currently available in the Bethesda/ Silver Spring area in the Maryland suburbs of Washington, DC. The company plans to go national by next year.

Jabara's startup firm does market research on each appliance, surveying consumers about how many cups of coffee they make a day or week, for example, and then taking that information into the University of Maryland lab. There, engineers put the appliances through tests for everything from corrosion and insulation, to thermal heat loss and electrical failure.

"We want to help companies improve the reliability and internal investment for all kinds of electronic products," said Diganta Das, a research scientist at the UMD Center. "The point is not that in every single item you need to worry about electricity use because it varies so much," Das said. "I make five pots of coffee a day, versus some people only make one pot a week. But without making an informed calculation, we do not know the answer."

Jabara said that one top of the line coffee maker he tested was tagged at \$500 of lifetime energy costs. The coffee maker has a standby mode that kept water hot at all times. He suggests that consumers combine the product's pricetag with its lifetime energy bill for a more accurate measure of how much each appliance costs.

On average, an American household spends \$100 per year to power devices while they are off or in standby mode, causing more than 100 billion kilowatt hours and \$10 billion in annual energy



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costs, according to the U.S. Department of Energy.

Jabara's energy sticker also includes the item's carbon footprint, or how many tons of carbon dioxide it requires to run over its lifetime. That data is specific to each store's zip code, since consumers in Maryland use a different mix of power sources than those in California or Texas, for example.

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The federal government also tests appliances for energy, but is focused on larger appliances such as washing machines and air conditioners, according to John Cymbalsky, DOE supervisor of appliance standards program.

Cymbalsky recently found that digital cable boxes were among a home's biggest "energy vampires" sucking up to 40 watts of power whether or not the TV set was turned on. Cymbalsky says any appliance, like the cable box, with a standby mode is likely to be a big energy hog.

To figure out his own energy use, Cymbalsky walked around his house with a watt-meter.

"Anything that uses energy is fair game to look at," he said.
