

Home electricity use in US falling to 2001 levels

December 30 2013, by Jonathan Fahey



This combination of Associated Press file photos shows, left, a Cingular "Fast Forward" cradle and Motorola mobile phone in New York on Tuesday Nov. 4, 2003, and an Apple ultracompact USB Power Adapter, on Friday, Sept. 19, 2008, in New York. The average amount of electricity consumed by U.S. homes in 2013 is on track to fall for the third year in a row, to its lowest level since 2001. While we are using more devices, more efficient phone and computer chargers are part of what has changed since the last time power consumption was so low. (AP Photo/File)



The average amount of electricity consumed in U.S. homes has fallen to levels last seen more than a decade ago, back when the smartest device in people's pockets was a Palm pilot and anyone talking about a tablet was probably an archaeologist or a preacher.

Because of more energy-efficient housing, appliances and gadgets, power usage is on track to decline in 2013 for the third year in a row, to its lowest point since 2001, even though our lives are more electrified.

Here's a look at what has changed since the last time consumption was so low.

BETTER HOMES

In the early 2000s, as energy prices rose, more states adopted or toughened building codes to force builders to better seal homes so heat or air-conditioned air doesn't seep out so fast. That means newer homes waste less energy.

Also, insulated windows and other building technologies have dropped in price, making retrofits of existing homes more affordable. In the wake of the financial crisis, billions of dollars in Recovery Act funding was directed toward home-efficiency programs.

BETTER GADGETS

Big appliances such as refrigerators and air conditioners have gotten more efficient thanks to federal energy standards that get stricter ever few years as technology evolves.

A typical room <u>air conditioner</u>—one of the biggest power hogs in the home—uses 20 percent less <u>electricity</u> per hour of full operation than it did in 2001, according to the Association of Home Appliance



Manufacturers.



This combination of Associated Press file photos shows, top, Switch75 light LED bulbs in clear and frosted, on Tuesday, Nov. 8, 2011 in New York and a 100-watt incandescent light bulb at Royal Lighting in Los Angeles on Jan. 21, 2011. LEDs use 70 percent to 80 percent less power than incandescent light bulbs. According to the Energy Department, widespread use of LED bulbs could save the output of the equivalent of 44 large power plants by 2027. (AP Photo/File)

Central air conditioners, refrigerators, dishwashers, water heaters, washing machines and dryers also have gotten more efficient.



Other devices are using less juice, too. Some 40-inch (1-meter) LED televisions bought today use 80 percent less power than the cathode ray tube televisions of the past. Some use just \$8 worth of electricity over a year when used five hours a day—less than a 60-watt incandescent bulb would use.

Those <u>incandescent light bulbs</u> are being replaced with <u>compact</u> <u>fluorescent bulbs</u> and LEDs that use 70 to 80 percent less power. According to the Energy Department, widespread use of LED bulbs could save output equivalent to that of 44 large power plants by 2027.

The move to mobile also is helping. Desktop computers with big CRT monitors are being replaced with laptops, tablet computers and smart phones, and these mobile devices are specifically designed to sip power to prolong battery life.

It costs \$1.36 to power an iPad for a year, compared with \$28.21 for a desktop computer, according to the Electric Power Research Institute.

ON THE OTHER HAND...

We are using more devices, and that is offsetting what would otherwise be a more dramatic reduction in power consumption.





This combination of Associated Press file photos shows, top, a house in Duluth, Minn., with triple-paned, south-facing windows that draw heat from the sun, and bottom an undated photo provided by Lowe's shows weatherstripping being applied to a window. Since the early 2000s more states have adopted or toughened building codes to force builders to better seal homes so heat or air-conditioned air doesn't seep out so fast. (AP Photo/File)

DVRs spin at all hours of the day, often under more than one television in a home. Game consoles are getting more sophisticated to process better graphics and connect with other players, and therefore use more power.

More homes have central air conditioners instead of window units. They



are more efficient, but people use them more often.

Still, Jennifer Amman, the buildings program director at the American Council for an Energy-Efficient Economy, says she is encouraged.



In this combination of Associated Press file photos, a man, top, looks at the back of a Sony's 4K XBR LED television in Las Vegas, on Monday, Jan. 7, 2013. and bottom, a man ooks at a CRT television in Redwood City, Calif., on Wednesday, Oct. 18, 2006. Some 40-inch LED televisions bought in 2013 use 80 percent less power than the cathode ray tube televisions of the past. Some use just \$8 worth of electricity over a year when used five hours a day. (AP Photo/File)



"It's great to see this movement, to see the shift in the national numbers," she says. "I expect we'll see greater improvement over time. There is so much more that can be done."

The Energy Department predicts average residential electricity use per customer will fall again in 2014, by 1 percent.

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