



Stewardship and Lifestyle Choices:

Thinking about replacing your television set?

Consider the following as you choose what you buy

As of November 2008

- EPA revised the Energy Star television specifications to raise the bar on efficiency requirements to cover *all* modes of operation.
- An Energy Star qualified television is now 30% more efficient than non-qualified products in all modes of operation (standby and active).

Prior to November 2008

- Federal standards (Energy Star) measured only a television set's "standby mode," when the TV is idle, even though "active mode" accounts for 80 to 95 percent of its annual energy use;
- A television that earned the government's Energy Star rating for its efficiency in standby mode might draw more power in active mode than another model that didn't earn the label; and
- Nearly 100 percent of televisions on the market earned Energy Star stickers.

Energy Use

In general,

- rear projection uses the least amount of energy,
- followed by LCDs,
- then plasmas.

For a list of energy efficient televisions go to "Energy Efficient TVs: The NRDC Listings" at <http://www.simplesteps.org/home-garden/energy/efficient-tvs>

CNET's "The Chart: Review of HDTV power consumption compared" provides a detailed listing of rear projection, LCD and plasma television sets. Go to <http://reviews.cnet.com/green-tech/tv-consumption-chart/?tag=contentMain;contentBody>

To find out the energy efficiency rating of a television set, click on the item.

"The most-efficient HDTVs also earn our "power saver" badge. Here are the qualifications:

A TV must be a current model that was measured by CNET's reviews team to have a default picture mode that uses 0.2 watt per square inch or less and its overall wattage must be among the upper-third of TVs we've tested with an energy rating of Good, all while achieving a brightness level higher than 40 footlamberts.

Since we created the award in April 2009, most of the LCD TVs we've reviewed have qualified . . . ***None of the plasma TVs we've reviewed since that date qualify.***

Why What Each of Us Chooses Matters

- The price of big-screen high-definition TVs is coming down. More and more people will soon be able to afford them.
- Bigger screens aren't the only culprits for TV's growing energy draw. The nation's move to high-definition TV, or HDTV, requires sets to deliver more picture clarity, which draws more power.
- If we do not choose to buy energy efficient television sets, we will lock-in power consumption at higher levels - people keep a TV five to 15 years.
- There are about 275 million TVs currently in use in the U.S., consuming over 50 billion kWh of energy each year – or 4 percent of all households' electricity use. This is enough electricity to power all the homes in the state of New York for an entire year.
- Taking the energy efficiency of a new TV into consideration is smart, because today's TVs and all the connected components like DVRs (Digital Video Recorders), DVD players, and speakers can add nearly \$200 to your energy bill annually.
- Americans are watching some 16 percent more TV than in the 1980s - if DVD and video-game viewing is included.
- Using the best available technology could reduce this new generation of big-screen TV "active mode" consumption by at least 25 percent, saving 10 billion kilowatt-hours per year.
- In addition to chopping residential electric bills by \$1 billion, using the best available technology would prevent 7 million extra tons of carbon dioxide from entering the atmosphere.

From: <http://www.csmonitor.com/2005/0616/p13s02-stct.htm> "As TVs grow, so do electric bills;"
<http://www.nrdc.org/air/energy/energyeff/tv.pdf> "Televisions: Active Mode Energy Use and Opportunities for Energy Savings;"
GreenTech Media Newsletter "How Much Energy Does It Take To Watch TV," 11/11/2007
http://www.energystar.gov/index.cfm?fuseaction=find_a_product.showProductGroup&pgw_code=TV
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<http://reviews.cnet.com/green-tech/tv-power-test/?tag=greenGuideBodyColumn.2>