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EcoConsumer

The big picture: how those fancy new TV sets affect the environment

By Tom Watson

Special to The Seattle Times



With the recent wave of TV innovations — high-definition, plasma, big screens and all the rest — the picture on your television may be sharper than ever.

But what about the environmental picture? Let's tune in to the best ways to go green when you buy a new TV or get rid of an old one.

Dealing with the deadline

Analog TV signals — the traditional means of television transmission — are on their deathbed. The federal government has set Feb. 17, 2009, as the final date for broadcasting of analog TV signals.

But contrary to popular belief, this does not mean people will have to get rid of their old TVs (set up to receive analog signals) and buy new TVs. For cable and satellite subscribers, the service provider will have a method to convert the digital signal for an analog-signal TV, possibly for a small fee.

If you don't use cable or satellite for an analog TV, you will need to buy a set-top box to convert the signal. These should be available in early 2008, probably costing \$50 to \$70 each. The federal government will provide a subsidy of \$40 per box, or up to \$80 per household.

The average American home contains 2.7 televisions, says Nielsen Media Research. By continuing to use old analog sets and delaying the purchase of new TVs, you can save money — and avoid adding to the immediate glut of old televisions.

Federal Digital-TV Transition Program:

www.ntia.doc.gov/dtvcoupon

Energy Star:

www.energystar.gov

Take It Back Network: www.takeitbacknetwork

.org

Big-screen, high-definition TVs have revolutionized the viewing experience. But today's super-size TVs have a dirty little secret: They're energy hogs.

If you compare watts per square inch of screen size, many new TVs — especially the rear-projection and liquid crystal display (LCD) models — use less energy than the old-fashioned cathode ray tube (CRT) sets. But that energy efficiency gets canceled out when your TV has a screen as big as a picture window.

Today's TVs commonly consume 150 to 300 watts, with some exceeding 400 watts. For a plasma TV with a 50-inch screen, the average cost of electricity can exceed \$100 a year,

according to the CNET consumer technology Web site.

How to reduce TV energy consumption

All these gargantuan, power-hungry TVs contribute to global warming. To find the most energy-efficient models, ask your retailer for help, or search the Internet (for "energy-saving TVs," for example). The Energy Star program lists TVs that consume minimal "standby power," which TVs use even when turned off.

You can reduce TV-energy consumption by using the power-saver mode, and turning down the backlight on an LCD TV (see instructions for guidance).

It seems obvious, but turn the TV off when no one's watching. The average U.S. household has the TV on for more than eight hours a day, says Nielsen.

And consider how many televisions your home really needs. New waterproof TVs are even showing up in bathrooms, but I hope that trend gets flushed away before it goes mainstream.

Changing the toxics picture

The old standard CRT televisions contain a stew of toxics, including several pounds of lead.

For the new types of TVs, with their 21st-century technology, the jury is still out regarding overall toxicity. But some TV-makers have begun to reduce certain toxics, partly due to stricter European environmental regulations.

LCD TVs contain mercury in the bulbs in their backlights, however, and the plastic in many TVs still contains questionable flame retardants.

Recycling makeover

People in King, Snohomish and Kitsap counties are not allowed to place TVs in the garbage. Because of the high cost of processing TVs for recycling, you may pay \$30 or more to recycle an old TV. That will change on Jan. 1, 2009, under a groundbreaking state law. It requires electronics manufacturers to provide recycling options for televisions, computers and computer monitors to residents and small businesses at no charge.

Manufacturers will likely embed the recycling costs in the purchase price, as they do in Europe. In effect, the purchaser will buy the future recycling service along with the TV.

Under the existing system, local governments absorb various costs related to the recycling and disposal of TVs and other electronics. Those costs get distributed among all garbage ratepayers, instead of just the purchasers, which isn't really fair.

In the meantime, when you need to recycle a TV, the Take It Back Network lists electronics recyclers that have signed a pledge to handle the equipment responsibly.

The EcoConsumer column aims to help readers balance consuming and conserving. Tom Watson is project manager for King County's Recycling and Environmental Services. Reach him at tom.watson@metrokc.gov or 206-296-4481. Watch for more EcoConsumer resources from King County at www.KCecoconsumer.com.

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