



E-Waste Not

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Cell phones, TVs and other electronics break or become obsolete at an ever-accelerating pace. And we've got the landfills to prove it. According to a U.S. Environmental Protection Agency (EPA) spokesperson, "In 2007, discarded TVs, computers, peripherals (including printers, scanners, faxes), mice, keyboards and cell phones totaled about 2.25 million tons." And that number is on a steady climb.

The Toxins Inside

These electronics contain substances that pose serious health risks once they're loosed on the environment, specifically heavy metals and chemicals. Lead, one heavy metal, is found in "almost every electrical product" according to Sarah Westervelt, e-Stewardship Policy Director at [Basel Action Network](#). She adds that a lead portion "the size of a pinhead can cause brain damage in children." Mercury, contained in LCD screens, has extensive neurotoxic effects. Cadmium can cause fever and respiratory illness.

Polybrominated diphenyl ethers (PBDEs) are odorless, tasteless chemicals found in many electronics that accumulate in the environment and in the human body. PBDEs' long-term effects may include neurotoxicity, thyroid disease and possible mental and physical impairments in young children

And electronic waste in landfills poses a long-term risk that such substances "could leach into groundwater, ecosystems, and vegetation," and further harm animals and humans, according to John Shegerian, Chairman and CEO of [Electronic Recyclers International ERI](#).

Recycling Rises

Recycling electronics yields valuable materials that don't need to be mined, saves energy and creates jobs. The EPA reports that one million cell phones translate to "35,274 pounds of copper, 772 pounds of silver, 75 pounds of gold, and 33 pounds of palladium." Meanwhile, "Recycling one million laptops saves the energy equivalent to the electricity used by 3,657 U.S. homes in a year." Yet currently the U.S. properly recycles only 15% to 20% of e-waste, with "80% being shipped off our shores or [left] in landfills," says Shegerian.

With e-waste's steady climb, states are increasing standards. In late 2004, when ERI began operations, only three states had e-waste laws. Now, 25 do, Shegerian says. Montgomery County, Maryland, began an e-waste recycling program in 2000, recycling 10 tons a month, a number that has swelled to 150 tons currently, according to Peter Karasik, who manages the program.

Overseas Issues

E-waste recycled to the wrong source ends up auctioned off overseas, where it is stripped for valuable parts with dangerous wastes left untreated. “Plenty of companies who take e-waste for free or pose as recyclers will turn around and sell to the highest bidder,” Westervelt explains. This often means it goes to countries without sufficient environmental protection. Leftover waste may be burned in open-air containers, dispersing hazardous chemicals. The problem is complicated by the fact that the U.S. has not ratified the Basel Convention (basel.int), an international agreement that would restrict the export of e-wastes.

What to Do With E-Waste

A number of good options exist for proper disposal of e-waste, of which the most rigorous is [e-Stewards](#). There, you can locate a recycler certified to abide by global standards.

The [EPA Responsible Recycling](#) (R2) program is the other major certifier of e-waste. However, says Westervelt “it does not ban e-waste from going to foreign countries.” Mark Buckley, vice president of environmental affairs for Staples, characterizes R2 as “a quality standard,” but one with “a few potential gaps in what’s allowed for export.”

Another option is to visit [1800recycling.com](#) or to call 1-800-recycling. Either will supply a local recycler, and the service covers all types of recycling, from glass to household to automotive. Although these recyclers are screened, however, they do not necessarily meet either e-Stewards or R2 standards.

Staples and Best Buy also take electronic waste. Any Staples will take “just about any piece of electronics with the exception of televisions,” says Buckley, and its recyclers are e-Stewards certified. Best Buy also recycles e-waste and has its own set of standards.

If you do recycle responsibly, you can rest easy during the coming holiday season and beyond as you enjoy your new high-tech goods (or curse how quickly your old ones broke).

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