

Recycling in the Age of Technology: TVs, Computers and Phones, Oh My!

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When we think of recycling, we're instantly programmed to think of those oh so familiar plastic containers designed for paper, plastic and glass. We all have those containers scattered around our homes. But in a time teeming with technology, our notion of recycling may need to be broadened a bit. Have you ever wondered what happens to all your old electronics when you replace them? Are the intricate inner workings of these elaborate devices destined to languish in a landfill somewhere? Electronics that aren't disposed of properly can potentially harm the environment by releasing toxic chemicals such as lead and mercury into the atmosphere.

It's a subject that the Environmental Protection Agency is taking very seriously. Last year they got together with some of the nation's top recyclers to brainstorm ways to dispose of used electronics that are both convenient for consumers and good for the environment. This up-and-coming movement has been dubbed e-cycling.



Metals and Mining

All electronics are made from materials that must be extracted from the Earth by very meticulous and costly processes. Plastics are created from petroleum. Precious metals, like gold, silver and palladium – and base metals, such as copper and steel – require mining practices that utilize an enormous amount of energy and create greenhouse gases in the process. Recycling these elements, instead of constantly mining for more, obviously offers huge ecological benefits. Matt Hale from the Environmental Protection Agency puts it this way, “For every hundred tons of electronics recycled, we estimate that’s about 60 metric tons of carbon dioxide that isn’t released. That’s about 500 cars off the road, talking in terms of energy, or 350,000 gallons of gasoline saved.”

Out With the Old

If a consumer puts an obsolete electronic into the recycling system, it’s subject to one of three outcomes: Resale – if the item is still working properly, then it will be resold as is; Refurbish – if the device needs a slight repair or an upgrade to current memory standards, it will receive that and then be resold; or Recycle – if it can’t be repaired or resold, then it will be disassembled and the individual parts sent on to recycling processing.

Bigger Benefits

Besides the obvious ecological benefits of e-cycling, it also has some other surprisingly positive points. First, many of the items are recycled back to people in need. An item that has been resold or refurbished will be available at a lower price and therefore be affordable to more people. Websites like www.mygreenelectronics.org offer individuals a chance to donate their old electronics to charities, community programs and schools that are in dire need of them.

Also, it appears that the e-cycling movement may be giving the economy a much needed boost. According to Jerry Powell, Executive Editor of E-Scrap News, most of the businesses processing obsolete electronics are small, locally-based companies, employing an average of 35 to 50 workers each. In addition, some innovative new ventures across the country are training people with disabilities and other special needs to refurbish old computers, giving them a valuable new skill set in the process.

Clearing the Confusion

Despite all the good that it can do, we still have a long way to go before recycling electronic devices becomes problem free. Many questions still remain in the minds of most consumers. Most would admit that they simply don’t even know where to begin. Although some large retailers such as Staples and Office Depot are providing in-store recycling options for consumers,

and other companies like Dell and Toshiba have online take-back policies, most people still remain unaware of these programs.

Another area of concern when recycling computers is the adequate removal of sensitive data from the hard drive, such as passwords, e-mails and credit card information. With cases of identity theft on the rise, individuals must be vigilant to protect their privacy. Simply deleting a file is not enough to ensure that personal information cannot be retrieved. Before e-cycling your computer, experts suggest either clearing your hard drive yourself by purchasing commercial disc cleaning software, or leaving the data cleansing to a professional.

In With the New

With worldwide concerns about the long-term wellbeing of our planet, we are not alone in our pursuit to find better recycling practices. This is a global movement, not a national one. Trends in Europe and Asia will surely have a positive effect on what we're doing here. A mass dedication to e-cycling should result in the manufacturing of items that are easier to disassemble, contain fewer hazardous materials, and consist of a single plastic, making them easier to recycle. Step by step, one advancement at-a-time, this movement should allow us to improve upon current practices and ensure a safe and healthy environment for future generations.

If you'd like to find out more about e-cycling, please visit www.epa.gov/plug-in for a list of helpful tips.