



Gold to Green—Recycling Electronics Is Good for the Environment and the CIO

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According to the National Safety Council, over 500 million computers, monitors, and peripherals will be discarded in the United States by the end of 2007. The Environmental Protection Agency estimates that of the over 2 million tons of electronics thrown out in 2005, only 20% were recycled. In the case of older products, that means lead, mercury, and other poisonous materials are added to landfills both in the United States and, increasingly, in developing nations where workers are exposed to these substances while retrieving precious metals such as copper and gold.

The good news is there are a broad range of companies offering services to deal with this equipment ranging from large OEMs to independent full-service operators. The better news is that they're making money at it. Many of these firms offer CIOs a value recovery service for recycling their assets that can help offset the costs of newer, more energy-efficient technology.

Computer manufacturers look to partner with CIOs

It's not news that the major computer OEMs have been recycling at an ever-increasing rate. **IBM's** Global Asset Recovery Service (GARS) has been disposing of end-of-lease assets like servers, hard drives, monitors, and more through refurbishment, resale, and recycling for over 20 years. Just a quick look at some of the major OEM programs includes the following:

- IBM has set up its Green Data Center Asset Recovery Hotline where data center owners receive guidance on how to dispose of their data center equipment and potentially get value to fund upgrades.
- **Hewlett Packard** is also marking the 20th anniversary of its recycling program, which operates in over 40 countries. In 2006, the company recovered over 187 million pounds of electronics globally. The success of its program spurred the company to set a goal of cumulatively recycling 2 billion pounds of electronics and print cartridges by the end of 2010.
- **Dell** was just a fledgling company when IBM and HP began their initiatives, but it's making up for lost time with a comprehensive program focused on IT asset recovery. Dell's programs also focus on producer responsibility and free consumer recycling. In 2006 Dell recovered more than 78 million pounds of equipment, a 93% increase over 2005 and a good start toward its goal of recovering 275 million pounds of computer equipment by 2009.

CIOs performing a technology refresh for their data centers must also figure out what to do with the old equipment. These executives, as well as several computer manufacturers, look to partners such as **SIMS**, **Waste Management**, and others to help them achieve their recycling goals. Over the summer we toured the facilities of **TechTurn**, one of the leading providers of technology recovery, refurbishing, and remarketing. Afterwards, we held discussions with its executive team to get a sense of how the market has evolved and what the future may hold for technology asset recovery services.

The environmental alphabet—reuse before recycle

TechTurn was founded in 1999 by Jeff Zeigler in response to companies approaching him to discuss what they could do with IT equipment they were replacing as a part of Y2K initiatives. As Jeff's background was in leasing, he saw an opportunity for taking back equipment and finding resale markets for it. His experience helped the company become profitable at inception, and it has since moved six times and expanded operations to keep up with demand. TechTurn's services include:

- **Value recovery**—A residual value calculator provides CIOs an immediate market valuation for their equipment.
- **Serialized asset accounting**—Using software from **Altiris**, assets can be tracked for inventory write-downs, software license recovery, and verification against original invoices.
- **Data erasure**—Data destruction is performed on all hard drives in compliance with DoD and HIPAA standards.
- **Recycling and disposal**—Assets that cannot be reused are recycled for raw materials in support of the firm's zero-landfill policy.

While TechTurn does recycle some components, its goal is to recover value from as many of the assets as possible. By extending the life of products, companies can either get reimbursed for the residual value of the products or donate them. Donations to organizations such as the National Cristina Foundation (which takes outmoded technology and makes it available to people with special needs) and other charitable organizations can be specified when the assets are taken back.

Prospecting for future growth

TechTurn currently processes more than one million electronic devices yearly, and recently received a \$50M infusion of capital from **Catterton Partners** to expand the company's business. Since our visit, TechTurn has launched several innovative programs. One new service is a private-label IT asset recovery program for value-added resellers (VARs) that can now offer their clients additional services beyond equipment sales.

A big area for growth throughout the asset recovery industry is the expansion of the types of products being taken back to include cell phones, PDAs, iPods, routers, and many other categories of electronics equipment. There's gold in that hardware and asset recovery. Companies such as TechTurn are looking to mine it to return value to the original purchasers. At the same time, TechTurn's service helps CIOs ensure a cleaner environment.

Do you have other ideas on how CIOs can help the environment? We'll give them your ideas in two weeks when we hold the annual AMR Research Executive Leadership Conference. Our keynote speaker is Senator Bill Bradley (a member of TechTurn's board of directors). Let me know what green advice you'd give to CIOs by e-mailing me at jdavies@amrresearch.com.

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