



What Do You Do With A Dead Mouse – and Other Tales Of Electronics Recycling

By Michael F. Carmichael

June 3, 2010

What do you do with a dead mouse? You should recycle it – and almost everything else in your life that has electronic components.

Why recycle? Why not throw it out? John Shegerian, CEO and founder of Electronic Recyclers International (ERI), explains there are materials in those electronic gadgets that are hazardous to the environment. “The arsenic, lead, mercury, cadmium and beryllium that are in our electronics can leach out of landfills and get into our ground water. From there it can get into animals and eventually people and those materials are bad for the central nervous system of both.”

Shegerian, who created several Internet-based companies before turning to the recycling of electronic products, is a member of the Ernst & Young Entrepreneurial Hall of Fame. He’s an environmental activist whose interests extend beyond recycling of e-waste and he shares his green passions as an international public speaker.

But a “green” response isn’t all that Shegerian provides. “Ninety-nine-point-three percent of all electronics can be made into a glass, plastic or metal commodity that can then be sold to smelters around the world, which have an unquenchable thirst for these materials,” he says.



John Shegerian of ERI

The process is called “urban mining” and it’s picking up steam as both businesses and consumers are committing themselves to recycling not only plastic water bottles and paper products, but their outmoded computer monitors, cell phones, television sets, keyboards – and mice.

“The big players, such as Alcoa, recognize that urban mining will play a significant part in the future of metal production,” explains Shegerian, who recently spent some time with Alcoa’s new chairman Klaus Kleinfeld. “Klaus told me that his company and others call metals ‘an infinite recyclable’ – copper, gold, aluminum, all can be recycled indefinitely. Not only that, but recycling aluminum can save 95 percent of the energy required to produce it from raw ore. That’s huge!”

Metals, and there are lots of them in most electronic devices, are not the only materials that can be recycled for significant energy savings. “Plastics can be recycled for a 70 percent energy savings, compared with using the raw petrochemicals that were originally used to create them,” Shegerian continues. “Glass can save 60 percent.”

Thus, “when you take all three components – metals, glass and plastics – into account, the energy saving proposition is massive. That’s what a lot of people are starting to focus on right now.”

Shegerian is convinced that the business community in particular will respond to this message and discover what essentially can be a new revenue stream. “We’ve been doing this for five years and I feel we’re just in the top of the first inning. Electronic waste is the fastest growing solid waste stream in the world.”

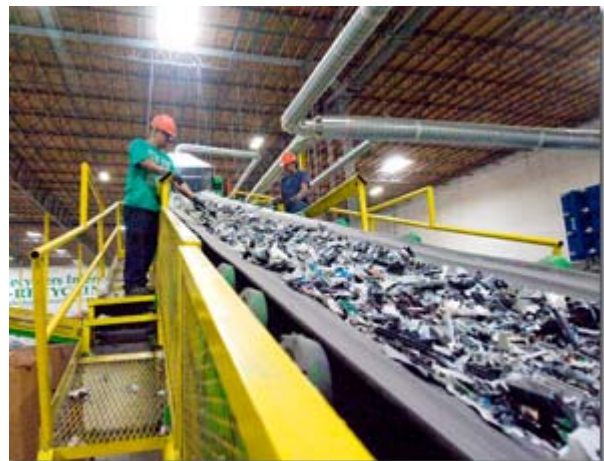
Perhaps one reason for that growth is the increasingly short useful life of much of today’s electronic equipment. “It’s a sad story, but true,” Shegerian relates. “Last Christmas I bought my family Kindles. I thought I was getting them onto the modern platform.” Then recently he and his son visited an Apple store. “We played with the iPad for about half an hour and suddenly the Kindles looked like something out of the Flintstones, compared to the iPad which is the Jetsons. In six months I was outdated – and that’s where we’re going.”

Shegerian continues, “That’s another reason we need to educate people. They don’t need to throw outdated or broken electronics away. They don’t need to leave them around the house or office – they will all get recycled and repurposed into new things.”

The word seems to be getting out that e-waste recycling can be a traffic builder for brick-and-mortar retailers. ERI partnered with Best Buy to make it the first retailer to provide an easy way for consumers to bring in old electronic items for recycling. “We started it three-and-a-half years ago and now a lot of other retailers, such as Target, are following us. You don’t even have to have purchased the items at Best Buy. This creates a different paradigm because it gets new potential customers in the store. It has a green component and it promotes shopping for a replacement item so



Electronic waste about to be recycled.



Electronics recycling can still be hands on.

much easier.”

“The more great brands like Best Buy and Target make it easier for people to recycle their electronic products,” Shegerian says with the conviction of an evangelist, “the more they’ll do it.”

And, perhaps they’ll feel a little less guilty when buying that iPad even if they only bought a Kindle a few months earlier. They’ll know it can find a useful life elsewhere because ERI does recycle some usable products whole, without deconstructing them.

Recycling as a whole, and not just electronic products, has a way to go. Shegerian quotes figures from the Environmental Protection Agency. “The average person throws out 4.3 pounds of waste a day. Of that, 54 percent is placed in landfills, 13 percent is incinerated and 34 percent is recycled. The folks at EPA and Waste Management and other customers of ours tell me that in 10 years those numbers are supposed to flip-flop, with more than half being recycled. To make that happen we have to make recycling easy, accessible and part of America’s DNA.”

In order to make e-recycling easier for business ERI serves several functions. If a business turns to its normal waste removal source, such as Waste Management, to take care of their electronic waste then ERI serves as the subcontractor to Waste Management. “It’s a special waste so we handle that for them,” explains Shegerian. “Sometimes we handle the electronic waste directly. Sometimes we do it for a municipality. The cities of Los Angeles and Fresno are clients. We did the biggest electronic recycling event ever in the history of New York City for them. Homeland Security is a client of ours.”



Old computers, fax machines and other electronics being gathered for recycling.

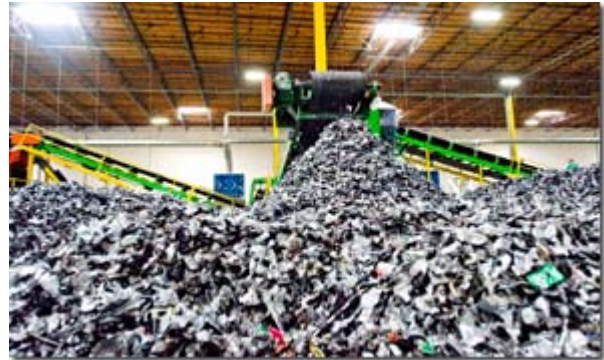
Mention of Homeland Security brings up the topic of data security. ERI is a process-driven company as attested to by its ISO 9001, ISO 14001 and R2 certifications. There is a process for ensuring data is completely destroyed – clients can get an electronic certificate, video of the entire process or view it in person. There is a further process for insuring that the recycling is handled completely in-house and that it is not sent overseas, something that is contrary to federal law.

Once materials have been processed – urban mined – they can, however, be sent overseas for further refinement. ERI recently took on the company that owns Korea’s largest copper smelter as an investment partner. LS-Nikko Copper is owned by the Koo family which also owns the appliance (and electronics) giant LG and other companies – making the family conglomerate one of the largest in Korea.

“They invested in us to protect their future feedstock in the new urban mining industry,” Shegerian

explains. “In doing so they validate the idea of urban mining as the way of the future. We get funds to expand our operations and a market for all of the recycled copper we produce.”

When Shegerian got into the e-waste recycling business only two states banned electronic wastes from landfills. Now 30 do. “There really has been a ‘green’ revolution,” he says. “Even absent a national standard requiring e-waste recycling, companies that do business in many states are coming to us and saying ‘we want to do the right thing, even if some of the states we operate in don’t require it yet.’ They tell us they want to adhere to the highest standard no matter where they are.”



Tons of e-waste enter the country's largest electronics recycling facility.

The resultant consciousness-raising on the part of large, and smaller, corporations has often resulted in the creation of the position of Chief Sustainability Officer. “That’s as important to us, from our perspective, as the CFO,” says Shegerian.

“I had the CSO of Verizon on my radio show [Green is Good, heard weekly on the Clear Channel network]. We were talking about how the sustainability movement has three basic components: people, planet and profits. The best companies have realized that there’s no shame in saying ‘we have to make a profit before we can go off and save the planet.’

“Verizon’s CSO was explaining to me how many trees he was saving as a paperless company with 220,000 employees,” Shegerian continues. “Then he shared with me how much money they were saving.”

Back at his Apple store recently Shegerian was asked if he wanted a paper receipt or to have one e-mailed to him. “E-mailing a receipt makes perfect sense to me because I then have an electronic record of it – and I lose probably half of my paper receipts anyway. Think if all of our big brands – Starbucks, Whole Foods, anywhere we go – offered us the option of not having a paper receipt, and for 98 percent of the time we don’t need one anyway, or else e-mailing us one we would like to keep for a large purchase, how many trees would we save?”

So if your mouse stops working or your cell phone needs replacing, don’t just stuff it in a drawer – drop it off at Best Buy or Target and it will be responsibly recycled.

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