

Advertisement

The world's slimmest smartphone

HOUSE QUIET. EGG. MORE ▶

BOY
Exclusiv
verizon



Powered by

Momentum builds for 'revolution' to recycle electronic waste

Posted 7/30/2006 6:34 PM ET

By [Elizabeth Armstrong Moore](#), [The Christian Science Monitor](#)

PORTLAND, ORE — On a recent sunny Saturday near the banks of the Willamette River, teenagers gathered on a warehouse loading dock called the "smash zone." Before a crowd of cheering onlookers, they took baseball bats to their old computer printers and fax machines, breaking them into hundreds of pieces before the remnants were swept into a giant recycling bin. Welcome to Geek Fair 2006.

Inside, hundreds of technology aficionados — some in business suits, others in Pink Floyd T-shirts or sporting a Mohawk — competed in video games, tried to "dunk the geek" into a pool of cold water, or just lingered beneath a giant poster of the Linux penguin, the icon of open-source software. Ultimately, however, Geek Fair 2006 confirmed the success of Free Geek, a small computer recycling outfit located in a downtown warehouse. The five-year-old company has drawn accolades across the world for its ability to motivate large numbers of Portlanders to donate, recycle, and reuse old electronics.

Now it seems electronic waste recycling, or "e-cycling," is catching on nationwide. More grass-roots non-profits are springing up, dedicated to tackling the waste problem caused by discarded electronics. A growing consumer awareness of the lasting environmental impact of "e-waste" — more than 250 million personal computers and 100 million cellphones are tossed aside each year in the United States — has prompted some states to pass legislation banning certain toxic materials from landfills. And a number of domestic manufacturers now offer e-cycling programs to their customers as an additional selling point.

"In the last several years ... we discovered that this was an issue that resonated with many consumers," says Ted Smith, senior strategist for the Silicon Valley Toxics Association. "More and more people realized that they didn't know what to do with the old electronic gear that was building up in their homes."

Growing concern over where e-waste actually ends up is prompting many consumers to find better solutions than just leaving outdated computers on the curb. In its first five years alone, Free Geek salvaged more than 760 tons of electronics that would have otherwise littered landfills. Today, some credit the group's aggressive, multipronged approach as the inspiration behind a burgeoning e-cycling revolution across the U.S.

"It's been interesting, the amount of attention we get for what we're doing," says Oso Martin, founder of the non-profit, whose volunteers build computers out of donated parts for use by low-income families as far away as South Africa. "When we started in 2000, there was no model on how to take care of e-waste. We were the first to see that you can solve both problems right there — digital divide and e-waste."

Simply producing the next best gadget is no longer satisfying environmentally aware consumers, manufacturers are discovering. More consumers are just as interested in how to handle the wake of outmoded electronics as they are the wave of the future.

As a result, dozens of other non-profits have begun their own programs for discarded electronics, and in recent months

manufacturers such as Apple, Intel, and HP have come on board with their recycling programs. In September, Dell will offer its customers the country's first totally free recycling program.

"We have a broad commitment to environmental responsibility and have set goals about educating customers; this is absolutely a move in the direction of doing the responsible thing," says Dell spokesman Bryant Hilton.

With most existing recycling programs, including Dell's, customers must buy a new computer to recycle the old one free of charge. Dell's new program, rolling out in September, allows any Dell owner to recycle for free — even the shipping from their home to a recycler is free. The program was a fairly easy transition for Dell, as they have been required by law to provide totally free recycling in Europe for several years.

Indeed, the U.S. still lags far behind Europe in its commitment to e-cycling. The European Union enacted legislation in 2002 requiring manufacturers to pay the entire cost of recycling the electronic equipment they produce, from telephones and toasters to stereos and laptops — an approach known as the "producer responsibility model."

However, there are signs that legislative movement to manage e-waste will continue to percolate at the state level in the U.S. California places the cost of recycling in the hands of consumers — known as the "advance recovery fee." A half dozen other states, including Massachusetts, Minnesota, New Hampshire, and Maine, have gone so far as to ban certain items such as computer monitors, televisions, and cathode ray tubes from landfills. In Washington State, the nation's most aggressive e-cycling statute was signed into law in March, requiring that by 2009 manufacturers be responsible for both collecting and recycling their products.

But today, the voluntary efforts of modest, grass-roots groups like Free Geek in Portland continue to lead the way.

"Dell's move really is a big deal, a big breakthrough, but it's also a small step," says Mr. Smith. "What is the percentage of equipment manufacturers take back compared to what they sell? Even when you add in recycling through other vendors, the highest number I've seen is 10%. So 90% is not being recycled."

The environmental impact is enormous. Computers alone contain more than 100 chemicals, including lead, cadmium, barium, and mercury. Even if computers make it to a domestic recycler, laws about handling components of electronic waste, such as mercury, are far stricter in the U.S. than in the Southeast Asian countries where much of the waste ends up.

"The issue with mercury is what do they do with it after they extract it," says Mary Blakeslee, senior deputy and mercury expert at the Environmental Council of the States in Washington, DC. "There is no technology to destroy mercury. That's the key issue — the storage of this stuff, and making sure it's managed in a way that doesn't create more mining, which is the global economics portion."

Meanwhile, as the technology behind such devices as laptops, cellphones, and MP3 players continues to advance at an accelerated pace, the life cycles of these gadgets shortens because they break or newer models are introduced. A National Safety Council report put the average life span of a PC in 2005 at two years, compared to 4-1/2 years in 1992. The average consumer goes through cellphones even faster — about every 18 months, according to Tim Mohin, director of sustainable development at Intel, which has launched its own e-cycling efforts with educational and recycling programs.

"There are so many computer illiterate people out there who have lots of money," says Clayton Kern, an environmental biology major at Unity College in Unity, Maine, who makes it a habit to pick up and recycle computers left on the curb. "If some small, easily fixable thing breaks on their two-year-old computer, they just chuck it and get a new one."

In the end, he reasons, regardless of whether manufacturers bear the burden of funding the recycling of e-waste they introduce, the success of e-cycling depends on consumers to exercise restraint in how quickly they go through their electronics — and in how they choose to dispose of them.

Copyright 2006, The Christian Science Monitor

Find this article at:

http://www.usatoday.com/tech/news/technovations/2006-07-30-ecycling-oregon_x.htm?POE=TECISVA