

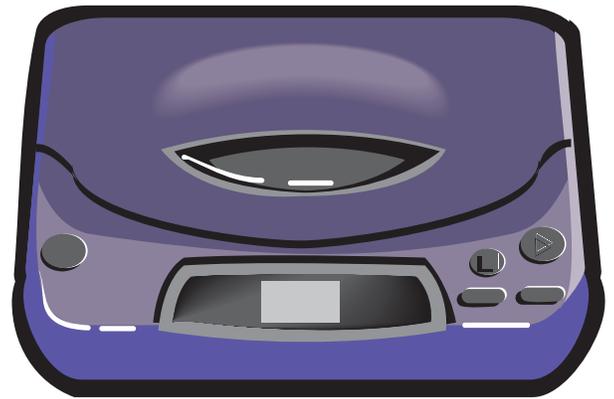
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Consumer eCycling in Oklahoma

Introduction . . .

In the past decade, technological advances in electronic data management and communications have spurred economic growth and improved people's lives in countless ways. However, our growing dependence on electronic products, both at home and in the workplace, has given rise to a new environmental challenge: electronics waste. Research completed in Europe shows that electronics waste is growing at three times the rate of other municipal wastes due to the fact it is

the world's largest and fastest growing manufacturing industry. Computers in particular are widely seen as instruments for future progress and as tools to achieve sustainability. To comply with best management ideals electronics waste should be prevented and old electronics should be reused and recycled, thus creating the eCycling business.



The Problems . . .

Older television picture tubes and computer monitors can contain an average of four pounds of lead. In addition to lead, toxic substances such as chromium, cadmium, mercury, beryllium, nickel and zinc are found in electronics. Mercury from electronics has been cited as a leading source of the mercury found in

municipal waste. Brominated flame retardants are commonly added to plastics used in electronics. If improperly handled, these toxic materials can be released into the environment through incinerator ash or landfill leachate.

Electronics are made with valuable materials that should not be thrown away. In 1998, over 112 million pounds of materials were recovered from end-of-life electronics, including steel, glass, and plastic, as well as precious metals. Reusing and recycling the raw materials from end-of-life electronics conserves natural resources and avoids the air and water pollution, as well as greenhouse gas emissions, that are caused by manufacturing new products.



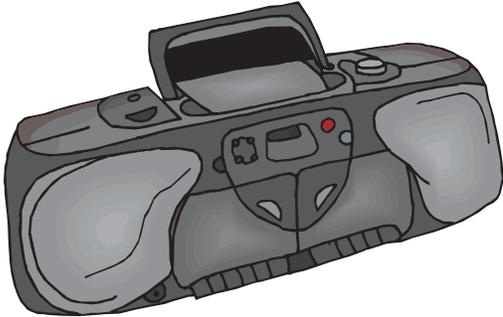
The Solutions . . .

Preventing waste in the first place is generally preferable to any waste management option, including recycling. Benefits of eCycling unwanted operational electronics for reuse extends the lives of valuable products and keeps them out of the waste stream for a longer period of time. Safely recycling outdated electronics can promote the safe management of hazardous components. Reuse, in addition to being an environmentally preferable alternative, also benefits society. By donating your used electronics, you allow schools, nonprofits, and lower-income families to obtain equipment they could not otherwise afford.

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You can help support Oklahoma eCycling efforts . . .

- Refurbish, fix or upgrade your equipment and continue using it.
- Donate your old electronics to a local charity for reuse.
- Drop off your old electronics at a local electronics/computer recycling event. Contact your city's solid waste office to see if



plans for a collection are underway. (Currently, only Tulsa, Oklahoma City, and Stillwater have periodic collections.)

- Drop off your old electronics at a local electronics recycling retail collection program if one exists in your area. (Find a list of Oklahoma electronics recyclers online at: www.DEQ.state.ok.us/LPDnew/recyclers/computerrecyclers)
- If your computer manufacturer is part of the "Take-It-Back" effort to reuse and recycle computers, contact that company for instructions.

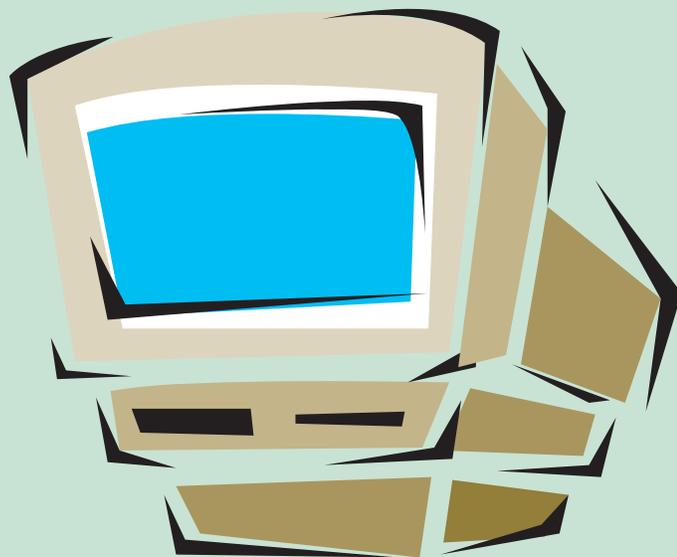
Purchasing Tips . . .

- When you purchase a new computer or electronic device, ask if the company has a program to recycle your old item. (Due primarily to pressure from the business sector, Dell, Compaq, Gateway, Micron and Hewlett-Packard currently have Take-It-Back or leasing programs.)
- Be sure your computer is Energy Star rated for maximum energy efficiency.
- Look for electronics that contain fewer toxics, are designed for easy upgrading, and use recycled materials and minimal packaging.

Workplace electronics programs (for larger numbers of unwanted equipment)

- National Cristina Foundation (NCF): <http://www.cristina.org/> (NCF assists people with disabilities, students at risk and economically disadvantaged persons the opportunity, through training, to lead more independent and productive lives)
- Operation Homelink: <http://www.operationhomelink.org/> (computers provided for families of deployed service men and women to assist communication)
- ElectronicsXchange: <http://www.electronicexchange.org/> (a non-profit clearinghouse and repository for businesses and government agencies looking for information regarding electronics equipment recycling and recovery)
- Non-profit Recycling and Reuse Network: <http://www.recycles.org> (RRN has been recycling older computers from across America since 1994, providing low or no-cost computers, computer instruction, and technical services to organizations and individuals in need.)
- Electronics Industrial Alliance lists more options: <http://www.eiae.org/links/donation.cfm>

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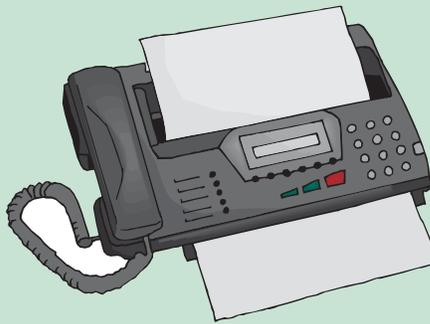
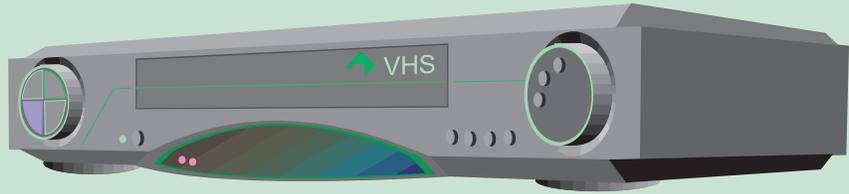
Additional resources . . .

- EPA's eCycling Campaign: www.plugintoecycling.org. (Seeks to increase the national electronics recycling/reuse rate to 35% and foster a life-cycle approach to product stewardship)
- Rechargeable Battery Recycling Corporation: www.rbrc.org (To recycle rechargeable batteries from electronic equipment and cell phones) 1-800-8-battery
- National Electronic Product Stewardship Initiative (NEPSI): <http://eerc.ra.utk.edu/clean/nepsi/> (Brought stakeholders together to develop solutions to the issue of electronic products management)

What products are considered consumer electronics?

- televisions
- computer CPUs
- computer monitors
- audio/stereo equipment
- VCRs
- DVD players

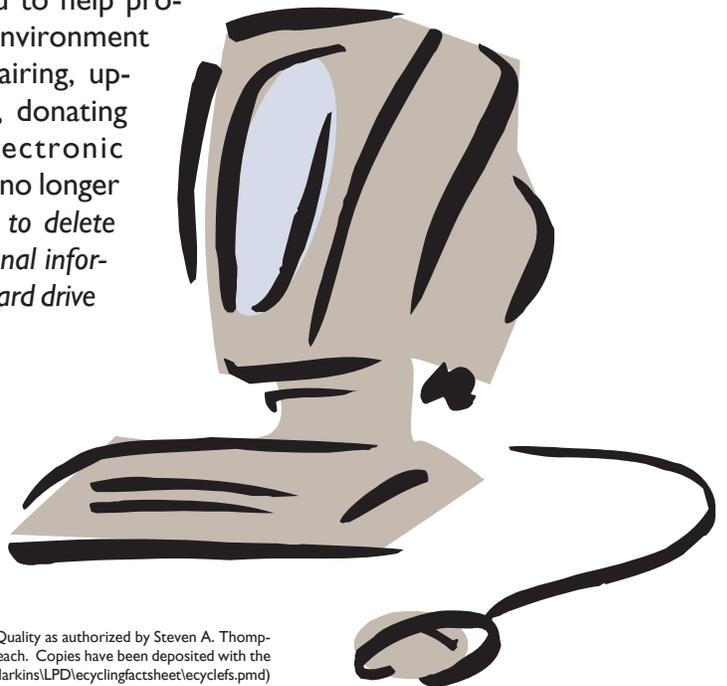
- camcorders
- telephones
- cellular phones
- fax machines
- copy machines
- wireless devices
- video game consoles



DID YOU KNOW? EPA's eCycling campaign reports that:

- Nearly 250 million computers will become obsolete in the next five years.
- This year (2005), people are expected to discard 130 million mobile phones generating 65,000 tons of used electronics containing lead and brominated flame retardants.
- Manufacturing one desktop computer requires fossil fuels and chemicals that amount to at least nine times the weight of the computer.

The Oklahoma Department of Environmental Quality would like to encourage you to help protect our state's environment by *voluntarily* repairing, upgrading, reselling, donating or recycling electronic products you can no longer use. *(Don't forget to delete any sensitive personal information from your hard drive first!)*



OKLAHOMA ELECTRONICS RECYCLING AND REUSE OPTIONS (Please call recyclers first to confirm acceptance of your equipment. This is a partial list. Please see additional recyclers on the DEQ web site in the recycling section.)

Recycler	Phone	Items Accepted	Fee	Hours	Resell?
Bethesda Boys Ranch/o Don Singleton 3311 S. 127 E. Place Tulsa, OK 74146 www.tcs.org/refurb.htm	(918) 622-3417	Call for details. Mention you are calling for the Boys Ranch Computers that are at least a 486 or one that ran Windows 95 or above as well as working printers, scanners, and monitors	No	During the day for the Bethesda Boys Ranch or anytime if dropping off at Mr. Singleton's house	Donate to schools, church, and Most anything computers
Budget Computers 1601 N. Hwy. 66, Suite 8 Catoosa, OK 74015	(918) 266-8897		Not usually	M-F: 3:00pm-7:00pm	Resell as parts
Cellular Savers 10816 N. Utica Drive Oklahoma City, OK 73120	(877) 752-9733	Cell phones for cash, pagers, pocket PCs, personal computers, and laptops	No	Call for appointment to pick up	No
Harvest Squared Jim Walenciak P.O. Box 2816 Broken Arrow, OK 74013 www.harvestsquared.com	(918) 402-3726	Any hardware	No	Call for appointment to pick up	Resell as parts
Hitech Assets 304 N. Meridian, Suite 9 Oklahoma City, OK 73107 www.hitech-assets.com	(405) 604-4872	Phones, printers, computers, monitors and more; Pick-up multiple systems for businesses	No	M-F: 8:00am-5:00pm	Yes
J.L. Burge 501 N. Redbud, Suite H Broken Arrow, OK 74012	(918) 455-0657	Most anything	\$8.50 fee for monitors	M-Sun: 8:00am-6:00pm	Yes
Laser Works 11507 E. 58th St. Tulsa, OK 74146	(918) 622-1007	Printers only	No	M-F: 8:00am-5:00pm	Donates to schools
AMBUcs Corner of Ponca and E. Main in alley, Norman, OK 73069 www.soonerambucs.org	(405) 360-1521 Call for details.	Computers, working color monitors, accessories (mouse and keyboards), working printers (no lasers), no Apple computers please	No	Sat: 9:00am-Noon	Call for more details
Natural Evolution, Inc. 5719 E. 13th St. Tulsa, OK 74112	(918) 836-2995	Most any electronics except for old TVs	No	M-F: 8:30am-5:00pm	Both
Nowland, Mel 2904 Pineridge Rd. Oklahoma City, OK 73120	(405) 752-4241	Most any IBM computer related items	No	Anytime, call first	Donates to schools or disabled
Oikos Asset Recovery (OARS) 522 S. Sheridan Tulsa, OK 74112	(918) 834-6900	Most anything computer	Varies	M-F: 10:00am-6:00pm; Sat. 10:00am-4:30pm	Both
Oklahoma Electronics Salvage 1000 N. Miller Oklahoma City, OK 73107	(405) 232-0211	Most anything, preferably not printers	No	M-F: 9:00am-4:00pm	Sometimes
Staples Find a store www.staples-locator.com/		Cell phones (Also accepts spent ink jet and laser cartridges for recycling)	No	Call your nearest store	Donates to non-profits
Recycle America 5519 NW 4th St Oklahoma City, OK 73127	(405) 948-1771	Computers and monitors only	45 cents per pound	M-F: 8:00am-4:00pm	No