

Is a new laptop on your buying list for the Christmas season? Are you planning to update your smartphone, buy an LCD TV to replace your old television, or upgrade your DVD player to a Bluray compatible system? If you answered yes to any of these, you might want to spend some time considering what you will do with the electronic device you are replacing.

Electronic products have a wide variety of materials used in their construction including metals, plastics, and glass. These materials, if put into our solid waste facilities, take up to a million years to decompose (i.e. glass). The materials used to construct your electronic equipment takes energy to mine and manufacture. This means there are many reasons we should consider the decision to replace our home electronics – both from a financial aspect as well as from an environmental one.

According to the US Environmental Protection Agency (EPA), *"recycling one million laptops saves the energy equivalent to the electricity used by more than 3,500 US homes in a year. In addition, "for every million cell phones we recycle, 35 thousand pounds of copper, 772 pounds of silver, and 33 pounds of palladium can be recovered."*

There is no doubt that the rapid growth in the use of electronics in our workplace, schools, and homes has provided a lot of benefit to our society. However, there have been some negative effects to this electronic "eruption." The amount of e-waste (waste created from outdated, obsolete, or defective electronics) has grown most significantly. E-waste includes electronic, computer or technology products nearing the end of their useful life and are no longer used. Commonly discarded electronics, such as radios, cell phones, VCRs, DVD players, fax machines, monitors, printers and the like create this mass of e-waste that our society is producing. Electronic waste is one of the fastest-growing segments of our nation's waste. This has created the need for e-cycling awareness, education, and services.

E-cycling is the term used when referring to electronics recycling. This form of recycling requires more thought and planning than the traditional materials that are recycled, such as paper, plastic, and cardboard because of the variety of materials used in their production. There is a series of steps followed regarding e-cycling: Reuse, Reduce, and Recycle. The first of these steps is one you can contribute to directly while the second two steps will require that you take your electronics to an e-waste recycling center.

REUSE: Before you “toss” the old and bring in the new, consider whether the electronic can be reused. Many of our computer systems can be refurbished and tested prior to being reused in our own home. If you simply want to “get rid” of it, you can help reduce the e-waste problem by selling or donating the computer system to a business that will reconfigure the hard drive system and donate or sell the system. There are several businesses in the area that can rework a computer system to bring it back to life for your home or office. Simply look in the yellow pages under Computer (services, equipment, or repair) for this specialized service. If you are going to donate the system, make sure all your personal information is removed off the hard drive to protect your privacy.

REDUCE: An e-waste recycling center will evaluate the electronics they receive to determine if the product can be reused. If they determine that the product is beyond the “reuse” option, they will then reduce the product. This process of e-cycling reduces the defective electronics and technology products down to the parts and base materials to be used in the manufacturing of new products.

RECYCLE: As the last step to the recycling process for electronic waste, recycle falls more in to what many of us consider as traditional recycling. This process is where used electronics and technology products are recycled and used to make new consumer products or raw materials for manufacturing. It might be that the plastic is melted down and remade into new components, or the metals are recycled to make new products.

There are local options for disposing of your unusable or defective electronics. The Geary County Recycling Center will accept most electronic equipment that you wish to discard. They contract with a local company, Collective Good, which breaks down the equipment following the processes of Reduce and Reuse. If you have appliances that contain Freon, you need to take them to the Geary County Transfer Station at 1509 N. Perry. There is a \$10 fee to dispose of Freon-containing appliance.

For larger quantities of electronic waste there are a couple of regional options. Electronix Recyclers, a company that provided some of the information for this article is an e-waste recycling center in Wichita, Kansas. They will accept consumer electronics, computer technology, office equipment, telecommunication equipment, and lighting equipment and determine which step in the reuse, reduce, or recycle process is best for the equipment received. Another company in Topeka, Asset Life Cycle, has a variety of industry certifications and memberships to assure consumers that the e-waste they accept will be handled and disposed of in the appropriate way. This company, like the

one is Wichita, provides a wide variety of services related to reducing e-waste thru e-cycling.

The EPA reports the average American household uses about 24 electronic products like personal computers, mobile phones, televisions, and e-readers. With an ever increasing supply of new electronic gadgets, Americans discard more than 2 million tons of obsolete electronic products annually. Save money and resources - e-cycle this season!

The Geary County Extension office has a wide variety of information about reducing waste. Contact us at (785) 238-4161. Until next time, keep living resourcefully!