



# Strive for 75% Fact Sheet Electronic Scrap

*Over 3.2 million tons of e-scrap is buried in  
U.S. landfills each year!*



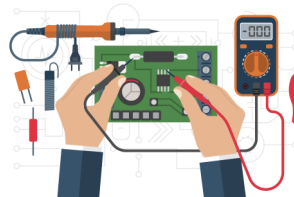
## The Growing Challenge of E-Scrap in Landfills

- Electronics contain hazardous components such as lead, mercury, cadmium, beryllium, and flame retardants that do not belong in a sanitary landfill; yet EPA estimates that only 20% of the e-scrap generated is recycled.
- Precious metals such as gold and copper are wasted. When these metals are mined, the energy and expense is greater than reclaiming the metals from e-scrap.
- De-manufacturing and recycling of electronics is labor intensive. ISRI (Institute of Scrap Recycling Industries) reports 45,000 full time employees in the U.S electronics recycling industry, which also infuses \$20.6 billion into the economy. Jobs and economic opportunities are lost when e-scrap is landfilled.

## Designed to Dump

Software upgrades make laptops rapidly obsolete and a simple battery change for a cell phone is often impossible. Marketing influences consumers to think one must possess the latest and greatest device. As a result the U.S. is second only to China in e-scrap generation; a staggering 13.8 pounds of electronics per person each year. Worldwide, 49.2 million tons of e-waste was generated in 2016, an increase of 8% from 2014. This number is expected to increase to an additional 17% by 2021.<sup>1</sup>

Electronics comprised 1.2% of wastes disposed in Missouri landfills, according to a waste composition study completed in 2017 by the Missouri Department of Natural Resources.



## Missouri Right to Repair Act

Missouri's Right to Repair Act requires manufacturers to provide owners and independent repair shops with access to service information, diagnostic tools, and affordable replacement parts. This simple idea is opposed by companies who want to be the sole source to fix electronics, tractors and appliances, setting high prices for parts and services. This results in purchase of new devices over repair, increasing the e-scrap problem. Learn more information at:

**[www.missourirepair.org](http://www.missourirepair.org)**



## Extended Producer Responsibility

The burden of end-of-life management of electronics should be shared by those producing electronics. Nationally, voluntary stewardship is preferred, leaving states to deal with the growing problem of e-scrap. For this reason MORA has been working for several years to pass a landfill ban on electronics, and establishing a fee structure assessed upon the equipment manufacturers of electronic devices. This fee will help to build infrastructure in the areas of Missouri where there are no electronic recycling processors or collectors and to assist with education.

<sup>1</sup> United Nations University, International Telecommunications Union, and International Solid Waste Association, 2017



MORA provides value by connecting people, offering industry insights, and influencing policy to support our economy and businesses in extracting the highest and best use of materials at end of life.

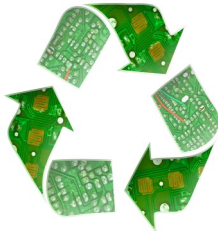
Join and support MORA in leading the State to 75% Waste Diversion!

Details and additional E-Scrap resources at [www.mora.org](http://www.mora.org)



Your one stop shop to find electronic recycling events and recyclers near you that comply with Missouri e-cycling standards.

[www.dnr.mo.gov/ecyclemo](http://www.dnr.mo.gov/ecyclemo)



## Reduce and Reuse E-Scrap

- Resist the need for the slightly, better upgrade. Consider one multiple function device versus extra gadgets.
- Preserve what you have to extend their life. Avoid over-charging the battery, purchase a case and keep devices clean.
- Consider repair over replacement. For example a cracked smartphone screen repair may run~ \$100 versus \$400-\$500 for a new phone.
- Utilize older T.V.'s for games.
- Investigate if a charity could use your device to extend its useful life for someone who otherwise could not afford it.

When purchasing new electronics, choose environmentally friendly versions. Look for the EPA Energy Star label or Electronic Product Environmental Assessment Tool (EPEAT) certification. EPEAT standards include design to ease end-of-life management in addition to being energy efficient, using less hazardous components, and reducing packaging.

## Recycle E-Scrap

When reuse is not an option, electronics should be recycled through a responsible company. It is important to note that businesses, schools and not-for-profit entities are prohibited by Missouri Hazardous Waste Law to landfill hazardous electronic components such as computer monitors, televisions, circuit boards and other electronics that contain heavy metals.

When choosing an electronic recycler, there are two national certifications to look for, R2 and e-Stewards. These certifications require third-party verification to assure proper data destruction, proper management of materials, and proper measures to assure the health and safety of the workers who are taking electronic components apart for refurbishing or recycling.

Certifications do not negate the need for due diligence, by consumers. Questions to ask include (1) what does the organization do with the equipment? (2) do they refurbish it?(3) do they dismantle it? (4) are components bundled for recycling or are they sent to a landfill? (5) do they offer secure data destruction?



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