

E-WASTE RECYCLING



What Is E-Waste?

The Global E-Waste Monitor defines e-waste as "all items of electrical and electronic equipment (EEE) and its parts that have been discarded by its owner as waste without the intent of reuse."¹

EXAMPLES OF E-WASTE¹



Laptops, tablets, desktops, servers, and networking gear



Mobile phones, routers, printers, and copy machines



Refrigerators and air conditioners



Fluorescent lamps and CFLs



Washing machines, dryers, stoves, and microwaves



Televisions, toasters, calculators, radios, and GPS equipment

GENERAL E-WASTE FACTS¹

In 2014 **41.8 million tons**



(83.6 billion pounds) of e-waste were generated worldwide

With a global population of

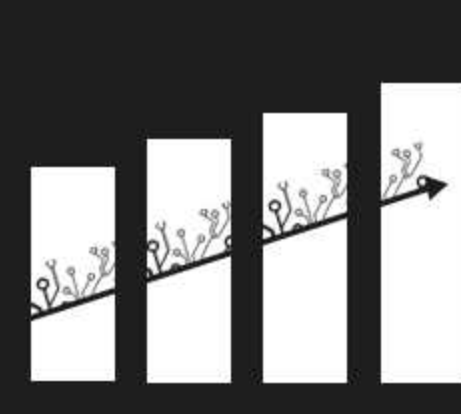
7.1 billion



that equates to 11.7 lbs of e-waste per person

E-waste

is expected to grow annually



by **4-5%**

LAPTOPS & OTHER COMPUTERS



MOBILE PHONES



It takes **500 pounds** of fossil fuels, **50 pounds** of chemicals, and **360 gallons** of water to produce a single computer and monitor.⁶

81% of a laptop's energy consumption comes from manufacturing the laptop.

Only **19%** of energy consumption is from usage during the entire life span of the laptop.²

The original owner of a laptop keeps the device for approximately **3 years**.⁴

Approximately **1.8 billion** mobile phones were purchased in 2014.³

The original owner of a mobile phone keeps the device for an average of just **24 months**.⁴

Only **3%** of the phones purchased in 2014 are expected to be recycled,

44% will be stored by the original user and roughly the same percentage will be passed on to other users,

and **4%** will end up in landfills.³

Each mobile phone contains approximately **300 mg of silver** and **30 mg of gold**.³

For every **1 million** cell phones that are recycled, **35 thousand pounds of copper**, **772 pounds of silver**, **75 pounds of gold**, and **33 pounds of palladium** can be recovered.⁵

THE PROBLEMS WITH E-WASTE

E-waste should never be thrown away. Here are four reasons why:



Data Security

Electronics of all shapes and sizes can contain personal or sensitive data that should be professionally erased. Data on smartphones are contained in lots of different places and not easily erased.⁹ Of course laptops, desktops, and servers contain data, but did you know that simply deleting files doesn't mean the information is gone?⁷ And networking gear (like routers), copiers, and scanners retain data and must be intentionally cleansed.¹¹



Environmental Concerns

Electronics contain hazardous substances like cadmium, lead, and mercury that should never be put into the trash. If these toxic compounds wind up in a landfill, they can poison the water and soil. If they are incinerated, they emit toxic gases.⁸



Conflict Minerals

Also found in electronics are gold, tantalum, tungsten, and tin. When these metals are mined in certain mines in the Democratic Republic of Congo and adjacent countries, they are part of a violent economy.⁹ To make sure these metals are reclaimed so they can be reused as conflict-free, they must be processed carefully so that their origin can be known.



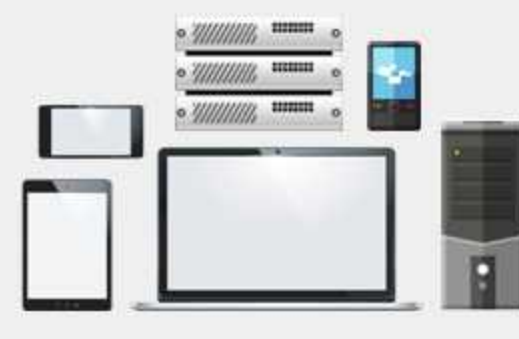
Rare Earth Elements

Much of what makes electronics work is attributable to certain kinds of minerals known as rare earth elements. The earth's supply of these minerals is dwindling.¹⁰ Extending the life of electronics through repair, resale, or donation helps to get the most out of these minerals that are used in such minuscule quantities that recovering them directly is currently impracticable.

EXTEND USEFUL LIFE WITH **ARROW VALUE RECOVERY**



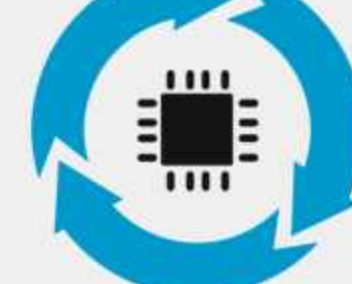
Arrow **Value Recovery** is a global professional IT asset disposition company providing IT asset recovery solutions to businesses.



Technology that is still **useful** may be **refurbished** for resale, **redeployed** within your organization, or **donated** when it is no longer needed.



If the electronic equipment as a whole cannot be reused, **Arrow Value Recovery** may be able to **recover usable parts**.



If no reuse options are available, **Arrow Value Recovery** will ensure that assets are **compliantly recycled**.

Disclaimer: The above data are compiled from industry resources and are not necessarily the positions of Arrow Value Recovery.

Sources:

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