

Did you know:

In year 2007/08 only 9% of the 16.8 million end of life computers and TVs were recycled. Over the next 20 years, it is estimated that if the existing situation is not changed, 652 million units will be accumulated in Australian landfills, compared to only 71 million (or 10% of end of life units) being recycled and recovered over this time. This is toxic to our landfills and a waste of valuable resources.

Source: Australian Environment Protection and Heritage Council Consultation Regulatory Impact Statement: Televisions and Computers July 2009

E-Waste Recycling



What is 'E-Waste'?

"Electronic waste" may be defined as all secondary computers, entertainment device electronics, mobile phones, and other items such as television sets and refrigerators, whether sold, donated, or discarded by their original owners. This definition includes used electronics which are destined for reuse, resale, salvage, recycling, or disposal. E-Waste could also include telephone handsets, hair dryers, microwave's, clock radios, etc. – a basic rule is; any item which utilises electricity (mains or batteries) to operate.

What happens to my E-Waste?

Once separated, a series of manual and automated processes are used to maximise the recovery rate of recyclable items in the pursuit of minimising the rate of material going to landfill.

Plastic

All plastics are sent to a recycler who uses the raw material to manufacture items such as vineyard stakes, fence posts and plastic sleepers.

Metal

Scrap metals are sent to a recycler. They are placed through a shredder before magnetic systems separate the ferrous from the non ferrous materials. The resulting product is used in the manufacture of new steel and other metal products.

Glass

Cathode Ray Tube (CRT) glass, used in computer monitors and televisions, are a major issue because they incorporate many hazardous materials. Lead is the most prevalent toxic material in CRT glass; it is poisonous to the nervous system and can remain in the human body for years. Tubes in a large CRT monitor can contain up to 4 kg of lead as well as other toxic metals such as phosphor and barium. To obtain the highest environmental outcome the glass is smelted for lead recovery.



Mercury

Mercury is commonly found within many e-waste items. Highly toxic, even in small amounts, it can cause damage to the lungs, kidneys, brain, nervous and reproductive systems. Given the opportunity to leach into water and soil, it is able to be ingested by aquatic creatures and then through the food chain into our diet. To avoid these consequences, we remove mercury containing devices such as tubes and lamps and forward these to Ecocycle's EPA approved mercury recycling plant. Here, we use technology that captures the mercury for use in dental amalgams, separates the glass for use as glass wool in home insulation and take out the phosphor powder for use in fertilizer products.

Wood

Commonly found in older televisions, stereos and speakers, wood is sent to recycling companies who either shred it for use as mulch or use innovative technology to mix it with other waste materials for use as an alternative fuel source.

Printed Circuit Boards

Circuit boards are sent to ISO 14001 (Environmental Management) accredited companies. Here they can be processed in specialised smelters to recover non renewable resources such as copper, gold, silver, palladium and other precious metals as an alloy.

Hard Drives

Hard drives are sanitised to remove all data, ready for re-use. If requested we shred the hard drives for processing into aluminium ingots. The majority of aluminium ingots are used within the automotive industry.



Questions?

Please contact Ecocycle on:

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