



Electronics Recycling

Electronic waste (or e-waste) is a significant waste issue in Australia. The volume of e-waste is growing three times faster than other waste streams. E-waste is the most searched material on Planet Ark's [RecyclingNearYou](#) website.

E-waste comes in many forms including:

- Computers and computer accessories such as printers, scanners, keyboards, mice and monitors
- Televisions
- Mobile phones
- Batteries
- Photocopiers
- Faxes
- Printer cartridges
- Whitegoods
- DVD/CD players
- Video and audio tapes
- Digital cameras
- Game consoles
- Power tools
- Alarm clocks
- Portable radios



Layne Beachley recycling cartridges

Why recycle e-waste?

E-waste contains non-renewable resources such as plastic and precious metals including gold, silver, platinum, nickel, zinc, aluminium and copper. Recycling these materials save new electronics being made from virgin non-renewable resources. Toxic materials like lead, mercury, phosphorus can leak into groundwater, contaminate the soil, and enter the food chain in unsealed landfill sites.

Almost 99% of **computer** components (metal, glass and plastic) can be recycled. Older **TVs**, containing cathode ray tubes, contain up to 4 kg of lead and other materials hazardous to the environment if not recycled responsibly.

More than 96% materials found **mobile phones** are recovered when recycled by [MobileMuster](#). There are around 23 million phones unused in homes around Australia, five million of these are broken. [MobileMuster](#) has collected over 11.9 million mobile handsets and batteries and saved over 1,0618 tonnes of greenhouse gas emissions since it began in 1999.

Over 3.4 litres of oil are needed to make just one new laser **printer cartridge**. Recycling saves water, energy and reduces greenhouse gas emissions. Since 2003, the '[Cartridges 4 Planet Ark](#)' program has recycled over 36 million cartridges, preventing well over a 100,000 tonnes of greenhouse gas emissions.



Mobile Muster collection box

Recycling can avoid expensive landfill fees for heavy items such as **whitegoods**, and reduce energy bills from old, inefficient appliances.

Reducing and recycling e-waste

Considerations before replacing or recycling electronics:

- Do you need to replace it or could you live without it?
- Could it be re-used by friends, family or a local charity?
- Check out our Reuse Information Hub at RecyclingNearYou.com.au.

Some electronic items have widely available, free recycling options:

- ['Cartridges 4 Planet Ark'](#) recycles printer **cartridges**
- [MobileMuster](#) recycles **mobile phones**, their batteries and accessories
- [The National Television and Computer Recycling Scheme](#) provides free drop off locations like [TechCollect](#)
- [Aldi supermarkets and Battery World](#) outlets recycle used **household batteries**.
- Search RecyclingNearYou.com.au or call 1300 733 712 for local and council recycling
- For commercial e-waste, find your nearest recycler on BusinessRecycling.com.au.



TechCollect recycling e-waste

What happens to the e-waste?

E-waste collected for recycling is generally dismantled manually. Individual materials such as cabling, circuit boards, glass, metals and plastics are recovered, and then processed for use as raw materials in new products.

- **Computers and accessories** can be refurbished then made available to lower-income communities. For recycling, a manual dismantling process is undertaken. The individual materials such as printed circuit boards, cabling, glass and plastics are recovered and then processed so that they can be used as raw materials to produce new products.
- Cathode ray tube glass from **televisions** can be recycled into new television and computer monitors.
- **Mobile phones** are disassembled into their component parts and the data destroyed. The different components are then transported to local and overseas recyclers for processing. The materials can be used to manufacture new products like new batteries and plastic shipping pallets.
- **Whitegoods** have any hazardous materials such as gases, chemicals or heavy metals removed. They are then crushed and shredded for recycling.
- Other items like **power tools** have cadmium-containing batteries that in some cases can be returned to battery manufacturers to create a fully closed loop recycling system.

Find out more...

- [National Television and Computer Recycling Scheme](#)
- ['Cartridges 4 Planet Ark'](#)
- [MobileMuster](#)
- [BusinessRecycling](#)