



: E-waste



ecoSOLUTIONS

E-waste

Background

Close your eyes and picture a landfill. Do you see piles of rubbish bags, used nappies, tonnes of rotting food with seagulls flying above? Hidden in the landfill is also one type of waste in that might be the most polluting of all!

Electronics!

Electronics are things like televisions, cell phones, and computers. Anything that uses electricity and has some type of circuit board (see photo 1) is electronic. The circuit board controls the electricity and data in the electronic item.



New electronics are always being invented and made to replace old ones. Old technology that has been replaced or doesn't work anymore is called "obsolete".

Waste is another word for rubbish, when electronics are broken, old or unusable they are called E-waste.

E-waste is the fastest growing type of waste made in developed countries like New Zealand because lots of people own electronic devices and buy new ones quite often.

Making electronics uses a lot of resources from the earth. Resources such as metals, oil and chemicals have to be mined and collected then made into parts or used in the factory.

Many of the metals and other stuff inside e-waste are very precious and rare (hard to find) so it is important to recycle them so we have enough in the future to make new electronics. There is even gold and silver inside most electronics!



Also, some of the chemicals and metals inside electronics are very toxic to the environment and animals, including humans, so it is very important we never let e-waste get out in nature, or even be buried in a landfill where the toxic sludge from it could escape.

Mining and making many of the different products used in electronics also creates a lot of pollution which can get in the water, land and air; so if we can recycle and reuse our electronics we don't have to mine, or make as many new materials.

Electronics that you don't want anymore can be recycled. When e-waste is recycled it is sent away to special recycling centres where they can get the resources back out of the electronics and make them into new things. This is a much better than throwing e-waste in the landfill where it will pollute the environment and we will lose all the precious resources that went into making it.

Your local recycling centre where you can take cans, bottles, cardboard and garden waste will also have a place where you can drop off old electronics, and batteries for recycling. It might cost a little bit, but it is worth it to keep toxic e-waste out of landfills!

Most e-waste is not recycled in New Zealand, people are still throwing it in the rubbish bin so you can help by spreading the word to your family and friends about how they can recycle all of their unwanted electronics instead.

Open some of the links below to learn more!

Suggested reading and resources

Dave Hakken. Story hopper. <http://story-hopper.com/movie/a-free-trip>

E-waste education. <http://www.ewaste-education.org/>

The story of stuff. The story of electronics. <http://www.storyofelectronics.org/>

References

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http://www.wasteauthority.wa.gov.au/media/files/wws/what_is_waste_chapter.pdf

Kim, S., & Paulos, E. (2011). Practices in the creative reuse of e-waste. Retrieved on 17 May 2016 from:

http://www.cs.cmu.edu/~sk1/papers/ewaste_chi_camera_ready.pdf

Nelson Environment Centre (2010). Waste not. A waste education kit for schools. Retrieved on 7 May 2016 from: <http://www.nec.org.nz/wp-content/uploads/2014/05/WasteNot-2010.pdf>