



The safe disposal of mobile phones

AN OLD OR UNUSED MOBILE PHONE, NOW WHAT?

Mobile phone technology is developing at a rapid rate. The estimated total number of mobile phones in New Zealand households is 3.8 million. On average, handsets are now being replaced every 18 months. Old ones are being stored away in drawers for spare or given to a friend or relative. A survey of households revealed that 25 percent of mobile phones in households are no longer in use.¹

Mobile phones contain a number of heavy metals which are toxic, such as cadmium, lead, beryllium and antimony. Using a handset is harmless until it is thrown into the landfill or illegally dumped. As the handset and battery degrade, they could release heavy metals into the soil and groundwater.

A nickel cadmium rechargeable battery in a mobile phone is particularly hazardous because of the high toxicity of the cadmium most contain. For information on the safe use and disposal of batteries see: www.mfe.govt.nz/issues/waste/special/index.html

However, over 90 percent of the materials in mobile phones can be recycled and recovered and used to make new products. Several useful resources come from your unwanted mobile phone:

- Mobile phone chargers can be recycled to recover copper.
- Mobile phone handsets can be recycled to recover the plastics.
- Circuit boards inside mobile phone handsets can be recycled to recover precious metals such as gold, silver and other materials like copper, lead and zinc.

- Accessory devices, including the headsets, power packs and clips can also be recycled to recover the plastic.
- The rechargeable batteries are recycled for their nickel, iron, cadmium, lead and cobalt.

Handset manufacturers are designing new phones to be more lightweight and use fewer and more environmentally friendly materials by phasing out the use of toxic substances such as lead and cadmium. Manufacturers are also increasingly designing to maximise recyclability.

HOW SHOULD MOBILE PHONES BE DISPOSED OF SAFELY?

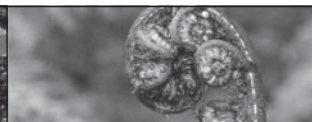
Bring them out of storage! While it is okay to keep your old mobile phones tucked away in a drawer at home, especially if they are still working, it's important that you do not let them end up in the bin when you have a clean out.

Telecom and Vodafone, the two major suppliers of mobile phone networks, now have collection schemes in place. You can return your mobiles and accessories for reuse or recycling through either network provider's mobile recycling programme.

Some of the phones are refurbished for reuse in developing countries. Any devices which cannot be refurbished due to damage or age are stripped of component parts for reuse and then recycled to become new products like traffic cones, bin liners, buckets, or copper pipes.

Both companies recycle handsets from any manufacturer and network provider.

¹ Electrical and Electronic Equipment Survey: A Quantitative Report. January 2006. Ministry for the Environment www.mfe.govt.nz/publications/waste/eee-survey-report-jan06/index.html



So collect up your old mobile phones, batteries and accessories and choose one of the following collection schemes:

Vodafone collection scheme

If you've got old mobiles or accessories, like batteries and chargers, that weigh **less than 25kg** you can drop them in to any Vodafone, Bond and Bond or Noel Leeming store or send FREEPOST to: *Freepost 180417, Vodafone Handset Recycling Programme, Private Bag 92222, Auckland*. For a list of Vodafone retail stores see: www.vodafone.co.nz/outlets

Alternatively, if you work in a corporate environment, government department or school and your organisation has a large supply of unused mobile phones, you can contact Vodafone by emailing recycling.nz@vodafone.com. They will advise you on how to run a mobile recycling drive. Vodafone will arrange delivery and pick-up of a recycle bin as well as all the material you need to promote it.

Vodafone have partnered with Enable Community to provide their mobile phone recycling programme. Enable Community is a not for profit organisation working to provide access to communications to those that would otherwise find it unaffordable, through the collection and re-use of mobile phones.

All of the mobiles and accessories collected are tested, and if still functional, are sent to organisations in developing countries, where they are refurbished and distributed to help people set up their own businesses. Any mobiles and accessories that cannot be re-used are recycled by an accredited mobile recycling facility.

Telecom collection scheme

Telecom was the first company in New Zealand to recycle mobile phones. Their recycling programme also includes chargers, modems and fixed line phones and associated accessories. Telecom retail stores and partner outlets will accept all phones and accessories either for refurbishment or recycling in accordance with international regulations.

For a list of Telecom retail stores see:

www.telecom.co.nz/stores

Telecom ship all collected electronic waste to Allied Electronic Recovery Worldwide (AER) in California for refurbishment or recycling.

THREE THINGS TO REMEMBER BEFORE YOU RECYCLE YOUR MOBILE PHONE:

- Ensure your mobile is disconnected.
- Clear the phone's memory of contacts and other stored information. If you've got any questions about how to transfer information from your old mobile to a new one, ask your network provider or check your user guide.
- Remove your phone's SIM card, if it has one. If you need assistance removing your SIM card, contact your network provider.

WHAT ELSE CAN YOU DO?

- Think before upgrading your phone – do you really need a new phone?
- Ask friends or family if they need a mobile phone for their personal use – reusing phones is the next best alternative to recycling.
- Tell friends and family to hand-in their unwanted mobile phones to Telecom or Vodafone.
- When buying a new mobile phone ask the following questions:
 - What battery type does the handset have? Whenever possible select a handset that has a nickel-metal hydride or lithium-ion battery as these are less harmful to the environment.
 - Check the environmental credentials of the phone you want to buy. The New Zealand Environmental Choice scheme does not yet cover mobile phones, but there are other sources of information (such as those listed below) that can help you make an informed decision. Many handset manufacturers will have product information available to consumers that includes the environmental attributes of the product, such as Nokia.



USEFUL LINKS

Telecom, for information on their recycling scheme.

www.telecom.co.nz/content/0,3900,203941-203113,00.html

Vodafone, for information on their recycling scheme.

www.vodafone.co.nz/recycling

Enable Community. A not for profit organisation working to provide access to communications to those that would otherwise find it unaffordable.

www.enablecommunity.org.nz

Environmental Choice New Zealand. The New Zealand Ecolabelling Trust is a voluntary, multiple specifications based environmental labelling programme, which operates to international standards and principles.

Initiated and endorsed by the New Zealand Government, Environmental Choice provides a credible and independent guide for consumers who want to purchase products that are better for the environment.

www.enviro-choice.org.nz

The Global Ecolabelling Network (GEN) is a non-profit association of third-party, environmental performance labelling organisations founded in 1994 to improve, promote, and develop the 'ecolabelling' of products and services. It has a comprehensive list of products with eco-labels. For mobile phones, (product code 1710) ecolabels have been assigned from Blue Angel (Germany), Environmental Label (Korea), Green Mark (Taiwan), TCO (Sweden) and the Thai Green Label (Thailand). www.globalecolabelling.net

TCO, a Swedish company, test a number of mobile phones at regular intervals and provide advice and information about the quality and environmental performance of a range of products used in offices, among them mobile phones. www.tcodevelopment.com

Nokia has a resource called Eco Declaration that provides basic information on the environmental attributes of the product covering energy consumption, material use, packaging and disassembly and recycling.

www.nokia.com/A4126721

If you have any further comments about this information sheet please email E-waste@mfe.govt.nz

Thank you to Telecom and Vodafone for their assistance in compiling this information sheet.