Mobile Phone Recycling

AMTA Recycled Record Volumes of Mobile Phones
ACME is a member of the Mobile Phone Industry Recycling Program.

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The Mobile Phone Industry Recycling Program is entering a new phase to encourage more consumers to consider recycling their old mobile telephones.

The mobile phone industry's recycling program, which started full-scale operation four years ago, has collected for recycling record numbers of handsets, batteries and accessories. Over the past four months to the end of October, the program has collected 30.8 tonnes.

This takes the total tonnage to 280 tonnes since the program started in late 2000. The Australian Mobile Telecommunications Association (AMTA), which administers the program on behalf of the industry, expects it is on track to reach a total of 300 tonnes by the end of this year.

The recycling program is free to consumers and is funded by a levy on handset sales, which is paid by participating handset manufacturers and carriers.

Despite the record collections, the industry wants to do better to ensure that the environment is protected. The mobile phone sector is an industry leader in recycling and aims to increase its efforts

To take the next step to increase recycling, the program is going to undertake in-depth research into consumer attitudes and behaviour to ensure that the program continues to meet the needs of consumers and to encourage them to dispose of their old mobiles in a safe and environmentally-friendly manner.

One of the challenges for the program as it embarks on its next growth phase is to make consumers more aware of the importance of disposing of their old mobiles safely. Instead of placing their disused mobiles in one of the 1600 recycling bins in retail stores or the bins in government and corporate offices across Australia, some consumers tuck them away in the bottom drawer.

Although this poses no threat to the environment, AMTA is keen to increase consumer awareness of the importance of disposing of their old handset safely when time comes to get rid of their mobile phones to ensure that potentially toxic substances are not dumped in landfills.

When the consumer research survey is completed it will help the industry to better understand consumer awareness levels and consumer issues. It will be used to inform and develop a marketing campaign with the aim of increasing collections.

The recycling scheme is fully-funded. Unlike some of the other re-use schemes around the world, AMTA's recycling program is not reliant on funding from the resale of refurbished handsets or parts.

AMTA is a not-for-profit organisation and it adjusts the levies on manufacturers and carriers to ensure that at all times there is sufficient funding to undertake all recycling.

Over the past four years, the industry has invested $3.5 million in awareness and promotion of the Mobile Phone Industry Recycling Program. The industry is fully committed and resourced to make a difference. It will not rest until it increases its recycling rates and solid steps are being taken to achieve that objective.

The facts are that 280 tonnes of mobile phones, batteries and accessories have been collected for recycling by the industry, saving the environment from potential damage. This equates to 1.1 million batteries and 435,000 handsets having been collected.

The mobile telephone industry's recycling program had made a real difference to the environment. It has prevented 94 tonnes of batteries, including 43 tonnes of batteries containing cadmium, being dumped in landfill.

Our recycling program has allowed the disposal of non-recoverable parts in the least environmentally damaging way.

Melbourne-based MRI (specialists in waste management including office and telecommunications equipment) are engaged by AMTA to collect mobile phones, batteries and accessories and are currently collecting from more than 1600 participating stores throughout Australia.

Batteries are sent to France where Societe Nouvelle D'Affinage Des Métaux (SNAM) currently manages the specialist bath smelting procedure that is the basis of the recycling process for nickel cadmium and nickel metal hydride batteries.

The batteries are ground into small pieces and fed into a special furnace, which is able to process the material at rates of up to 170kg an hour. The batteries are then burned at 1200 degrees Celsius, which consumes the plastic and allows the various metals to be collected and cooled.

Marketable products from the recycling process include:

- Nickel - used in the production of stainless steel;
- Cadmium - a component used in new batteries;
- Small amounts of gold and copper.

This recycling process is efficient, has high productivity and provides a breakdown of chemical compounds. It is suitable for all phones and batteries, including the newer Lithium Ion and Nickel-Metal Hydride types. The recycling process is also successful in preventing the reformation of environmentally damaging compounds such as dioxins and furans in the exhaust gas stream.

Not all materials are recyclable. No recycling program in the world can claim 100% of materials can be recycled.

For instance, the mobile phone accessories that are processed go through a proceedure known as shredding. The materials are broken up and the metals are recovered. The plastic that is shredded in the process can not be recycled.

The non-recyclable, non-toxic material that can't be recycled has been placed in landfill because its environmental impact is minimal. This accords with best recycling practice.

The industry is always looking to improve its scheme and further reduce the amount of end-of-life product in landfill. MRI recently stopped placing the non-recyclable plastic in landfill and started storing it because it has a contract for a new use with a world-leading technology in Australia.

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