



**Product
Stewardship
Centre of
Excellence**

**CASE
STUDY**



MobileMuster

In this case study, we profile MobileMuster, an industry-led voluntary product stewardship scheme accredited by the federal government and managed by the Australian Mobile Telecommunication Association (AMTA). We explore the MobileMuster recycling process, how it addresses mobile phone waste, the benefits of government accreditation, and solutions to address the challenge of consumer awareness.

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Product Stewardship in Action with



INTRODUCTION

In this case study, we focus on MobileMuster. Founded in 1998, MobileMuster is an industry-led voluntary product stewardship scheme accredited by the federal government and managed by the Australian Mobile Telecommunications Association (AMTA).¹ It is also Australia's first carbon neutral product stewardship scheme, having achieved certification under the Climate Active program.²

MobileMuster is guided by the following key objectives:

- **Environmental:** Reduce landfill and CO₂ emissions by optimising resource recovery
- **Social:** Garner awareness by informing the community about the program
- **Policy:** Enable members to deliver a product stewardship scheme
- **Economic:** Deliver an efficient, equitable and sustainable program for its members.³

Members of MobileMuster, include the handset manufacturers Alcatel, Apple, HMD Global, HTC, Huawei, Google, Motorola, Oppo, Samsung, Vigo Mobile Australia and ZTE; network carriers Belong Mobile, Optus, Telstra, TPG, Telecom; and accessory manufacturers and distributors Cellnet Australia and Force Technology. Members of the scheme voluntarily fund the promotion, collection and recycling of mobile phones, their batteries, chargers, accessories, mobile modems and smart watches.

THE 101 ON MOBILE PHONE WASTE

In Australia, it has been estimated there are more phones than people.⁴ Independent research conducted by IPSOS, on behalf of AMTA, indicates that we are holding onto our

mobile phones for longer than ever before. Australians are slower to upgrade their devices, which means mobile phones are being used for longer by the same owner. The research indicates that the average mobile phone replacement cycle has reached 30 months in Australia, with roughly 62% of Australians choosing to keep an extra mobile phone around 'just in case'.⁵

The consumption and storage of mobile phones products has created a significant challenge with respect to e-waste, which is increasing at rate three times faster than general waste in Australia.⁶ Recovering materials that go into making a phone – such as glass, aluminium, small amounts of precious metals including gold and silver, steel, plastic, and paper – helps to reduce the demand for raw material production and associated CO₂ emissions.

THE MOBILEMUSTER RECYCLING PROCESS

The MobileMuster recycling process starts by collecting unwanted phones, including their batteries and their accessories being either dropped off at one of their 3000 nationwide collection points or mailed back free of charge.⁷ Phones are shipped to the closest recycling facility (either in Sydney or Melbourne) to be sorted and dismantled by hand, that also supports local job creation.

Through MobileMuster recycling processes, over 95% of materials are recovered, and the recovered resources can then be used in the manufacturing of new products. MobileMuster is contributing to a circular system that saves energy, reduces landfill waste and CO₂ emissions, while also conserving raw materials. This is beneficial as several materials that make-up a phone are non-renewable resources that are finite given known stocks. For instance, circuit boards are smelted at high temperatures to separate and recover precious metals like gold and silver.

ACCREDITED PRODUCT STEWARDSHIP

MobileMuster is also accredited under the Recycling and Waste Reduction Act 2020.⁸ The Australian Government “accredits arrangements that effectively manage the negative environmental impacts of products throughout their life”.⁹

According to the Department of Agriculture, Water and Environment (DAWE):

*“Accreditation enables industry led product stewardship arrangements to demonstrate to businesses and consumers that the arrangement has the Australian Government’s stamp of approval. This provides confidence that the arrangement’s environmental and human health outcomes have been verified and will contribute to Australia’s recycling and waste reduction objectives.”*¹⁰

There are several benefits of accreditation including the use of the Australian Government product stewardship logo that communicates to the public that an arrangement:

- Is Australian Government accredited;
- Achieves sustainable outcomes;
- Aligns with circular economy principles; and
- Has high industry support.¹¹

Additional benefits of accreditation include: a competitive advantage because the public knows that an industry has worked to reduce the negative impacts from its products. It also provides an additional means of demonstrating sustainability claims when competing in government procurement activities.

THE CHALLENGE: RAISING CONSUMER AWARENESS

Despite these initiatives, consumer awareness and engagement, one of the guiding principles of MobileMuster, continues to be a challenge to both the program and the entire telecommunications sector in Australia. For example, it is estimated that 2 in 3 Australia hold onto their old phones.¹² With one in three Australians expressing data privacy concerns, the challenge then becomes how to increase consumer awareness of stewardship schemes that exists for mobile phones, as well as confidence in these services.¹³

SOLUTIONS

To address this challenge, MobileMuster recently launched a plan to increase its accessibility of mobile phone returns. For example, in addition to their current 3000 collection points, as of late 2021, every Woolworths supermarket in Australia now has a collection point for unwanted phones and batteries.¹⁴

MobileMuster has also created a new social media campaign with Professor Alan Duffy, an astrophysicist from Swinburne University. The campaign aims to reach new audiences with short, insightful videos that communicate the environmental impact of the MobileMuster program in an accessible manner.¹⁵ One such video highlights that if every old phone in Australia were recycled it saves 1,930 tonnes of CO2 emissions or the equivalent of planting 50,000 trees. This is in addition to a growing number of “how to” articles in newspapers which include discussion of the MobileMuster collection process.¹⁶

Lastly, MobileMuster is raising awareness through charitable giving initiatives. For example, funding provided to organisations such as OZHarvest, Landcare Australia, Salvos, Able Australia, and Take 3 for the Sea. These organisation not only support local charities and those in need but also aim to incentivise consumers to recycle.¹⁷

FOOTNOTES

¹ The vision of the AMTA is “to promote an environmentally sustainable, socially and economically responsible and successful mobile telecommunications industry in Australia”.

² <https://www.mobilemuster.com.au/recycling/>

³ <https://www.mobilemuster.com.au/wp-content/uploads/2020/11/AnnualReport2020.pdf>

⁴ <https://www.sbs.com.au/topics/science/earth/article/2016/02/24/comment-dont-chuck-old-mobile-phone-theres-gold-there>

⁵ <https://www.mobilemuster.com.au/wp-content/uploads/2020/09/Mobile-phone-use-reuse-and-recycling.pdf>

⁶ <https://www.theguardian.com/money/2021/feb/09/refurbished-smartphones-are-widely-available-so-should-you-buy-one>

⁷ <https://www.mobilemuster.com.au/recycling/>

⁸ MobileMuster first received accreditation from the Australian Government in 2014 under the Product Stewardship Act 2011. The most recent accreditation (received mid-2019) will be in place until 2024.

⁹ <https://www.environment.gov.au/protection/waste/product-stewardship>

¹⁰ <https://www.environment.gov.au/protection/waste/product-stewardship/product-schemes/voluntary-product-stewardship>

¹¹ <https://www.environment.gov.au/protection/waste/product-stewardship/product-schemes/voluntary-product-stewardship>

¹² <https://www.mobilemuster.com.au/wp-content/uploads/2020/09/Mobile-phone-use-reuse-and-recycling.pdf>

¹³ <https://www.mobilemuster.com.au/mobile-phone-use-reuse-and-recycling/>

¹⁴ <https://www.woolworths.com.au/shop/discover/sustainability/recycling-unit>

¹⁵ <https://7news.com.au/business/campaign-to-recycle-millions-of-old-phones-c-2261417>

¹⁶ <https://www.smh.com.au/technology/how-to-recycle-your-old-tech-20181222-p50nxb.html>

¹⁷ <https://www.mobilemuster.com.au/>

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