

Annual Report

2020



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Introduction

The Australian Mobile Telecommunications Association (AMTA) manages MobileMuster on behalf of its members. Members of the program include all the major handset manufacturers Alcatel, Apple, HMD Global (Nokia), HTC, Huawei, Google, Motorola, Oppo, Samsung, vivo Mobile, ZTE and network operators Optus, Telstra and TPG Telecom.¹

AMTA's vision is to promote an environmentally sustainable, socially and economically responsible and successful mobile telecommunications industry in Australia. The MobileMuster program has four fundamental objectives:

- **Environmental:** keeping mobiles out of landfill and optimising resource recovery
- **Social:** creating awareness and educating the community on mobile phone recycling
- **Policy:** enabling our members to deliver a sound product stewardship scheme
- **Economic:** deliver an effective, equitable and sustainable program for its members.

The Australian mobile industry has voluntarily worked together over the last 22 years to take action to reduce the impact of mobile products on the environment and prioritise the communities' health and safety, through our commitment to product stewardship via MobileMuster.

This audited annual report supports the commitment of industry to provide accountability and transparency of the accredited MobileMuster program, ensuring that its performance continues to align with the objects of the Product Stewardship Act 2011. The report contains updated key performance indicators, including an accessibility target, following reaccreditation of MobileMuster in 2019 for a further five years.

In October 2019 MobileMuster celebrated 21 years of positively impacting the environment. The celebration was attended the Hon MP Trevor Evans, Assistant Minister for Waste Reduction and Environmental Management, Spyro Kalos Head of MobileMuster, Jane van Beelen, AMTA Chair and Telstra's Executive Director of Regulatory Affairs, Chris Althaus CEO AMTA and the Hon MP Matt Kean, NSW Minister for Energy and Environment.

¹ Vodafone Hutchison Australia changed its name to TPG Telecom Limited on Monday 29 June 2020. The new TPG Telecom will be a house of brands featuring Vodafone, TPG, iiNet, Lebara, AAPT and Internode.

Foreword

Chris Althaus CEO AMTA



The mobile industry recognises product stewardship as a key part of a broader environmental responsibility agenda that also includes climate change which is a defining challenge for our generation. In Australia, the mobile industry is one of many sectors focussed on addressing environmental responsibilities and challenges. Our industry is committed to reducing carbon emissions and contributing significantly to carbon emission reduction opportunities in other industries through mobile connectivity.

A recent report produced by the GSMA and the Carbon Trust calculated that the use of mobile technology powered global emissions reductions of around 2,135 million tonnes CO₂ emissions in 2018 – almost ten times greater than the global carbon footprint of the mobile industry itself.²

Latest generation (4G/5G) mobile technologies, networks, applications and services are powering Industry 4.0 agendas and sustainable economic growth while also enabling reduction of emissions across multiple industry sectors. These mobile technologies will be crucial to global aspirations to reaching a net zero carbon economy. For example, personal smartphone usage is enabling emissions reductions through increased functionality of devices that enable energy efficient behaviours such as remote home heating/cooling control as part of increasingly 'smart' homes and communities.

5G mobile technology is expected to offer faster speeds and much reduced latency, in addition to longer battery life for devices, larger data transfer capabilities and the ability to connect billions of things. 5G is also expected to generate a smaller environmental footprint than the current technologies because it will be more directional and efficient, resulting in less energy and power being wasted.³

Whilst mobile technologies have the potential to help reduce carbon emissions it does come with its own environmental impacts. Electronic waste (e-waste) is the fastest growing waste stream in the world and small IT, which includes mobile technology, accounts for 9% of electronic waste production in 2020.⁴

The mobile industry is committed to a progressive product stewardship agenda including enhancement of our e-waste management through initiatives like MobileMuster which over the last twenty years has established a sustainable and robust program to reduce waste, increase recycling and ensure the recovery of valuable materials from our products – we look forward to continuing on this journey.

² The Enablement Effect: The impact of mobile communications technologies on carbon emission reductions' is produced by the GSMA and the Carbon Trust.

³ ITU (2019) Turning digital technology innovation into climate action GSMA, What is e-waste Infographic. May 2020 gsma.com/mobilefordevelopment/wp-content/uploads/2020/05/Clean_Tech_Infographic_WEB.pdf

⁴ GSMA, What is e-waste Infographic. May 2020 gsma.com/mobilefordevelopment/wp-content/uploads/2020/05/Clean_Tech_Infographic_WEB.pdf

Spyro Kalos Head of MobileMuster



This year has certainly been challenging for all of us. Last summer's bushfires brought home to us the effects of climate change firsthand, with many communities still recovering. Like all organisations, we have had to adapt our operations due to the impacts of COVID-19. The welfare of our staff, customers and suppliers continues to be our main priority. The fact that MobileMuster is a voluntary scheme has worked to our advantage by allowing us to be agile and flexible to meet the needs of our stakeholders.

With more people staying home, we adjusted our operations and updated our messaging to continue to make recycling accessible to those looking to make a difference by promoting our free post-back option. It has been a successful year for the program collecting and recycling 84.7 tonnes of mobile phones and accessories.

Product stewardship is an environmental management strategy that means whoever designs, produces, sells, or uses a product takes responsibility for minimising the product's environmental impact throughout all stages of the product's life cycle, including end of life management. Our members' commitment to this responsibility is demonstrated by the high participation rate across the industry in the MobileMuster program which includes all the major handset manufacturers and network providers in Australia.

MobileMuster is a leader in product stewardship, and we continue to look at how we can have a greater impact. For us it is not just about collecting and recycling mobile phones, but also about the impact we can have in relation to overcoming the barriers to recycling, encouraging more reuse, and understanding how repair is something more and more of us are turning to.

In recent years technology has rapidly converged as we are doing more with a single mobile device. As the program continues to evolve and adapt to meet these changes, we can be sure that the program is in the best shape to actively encourage consumers to responsibly dispose of their unused technology. This can be done by extending the life through reuse, or ultimately recycling it with MobileMuster for the best environmental outcome.

Our focus for the coming year is to work with our stakeholders to play our part in helping with the economic recovery. We are also working towards our operations being carbon neutral and contributing to a reduction in greenhouse emissions. We want to make recycling the norm by helping our industry and consumers reduce their environmental impact. MobileMuster aims to provide a better and healthier world for future generations.

Our performance

AMTA is regularly monitoring the impact of COVID-19 on the program's operations. Whilst current restrictions may have meant recycling is not an immediate priority for everyone, MobileMuster has been impressed to see some Australians taking the opportunity of being at home to get more involved. As people spend more time cleaning out their workspaces some have diligently sorted out their old mobile phones and are looking to recycle through the program.

Since the start of the pandemic MobileMuster has seen a number of our collection partners close and a drop in collections from workplaces, council partners, and retailers as our community followed health advice to stay home. The program believes it is important to maintain the momentum on recycling and continue our education and awareness program during this time to support the community to recycle whilst following health advice.

In response the program promoted MobileMuster's free mailing label which gives residents the opportunity to recycle safely from home. Whilst this collection method will not replace the volume of product collected through our drop off network, it does highlight how a voluntary scheme can easily pivot and adapt to provide continuity to the recycling service offered by MobileMuster.

The program envisages that COVID-19 will cause ongoing disruptions to our collection network and may have an impact on future collections.



We recycled



+



+



=

84.7
tonnes

mobile phone
components

Recycling



**Diversion
from landfill**

98%

**Recycling
rate**

98%

**Industry
participation**

Manufacturers

92%

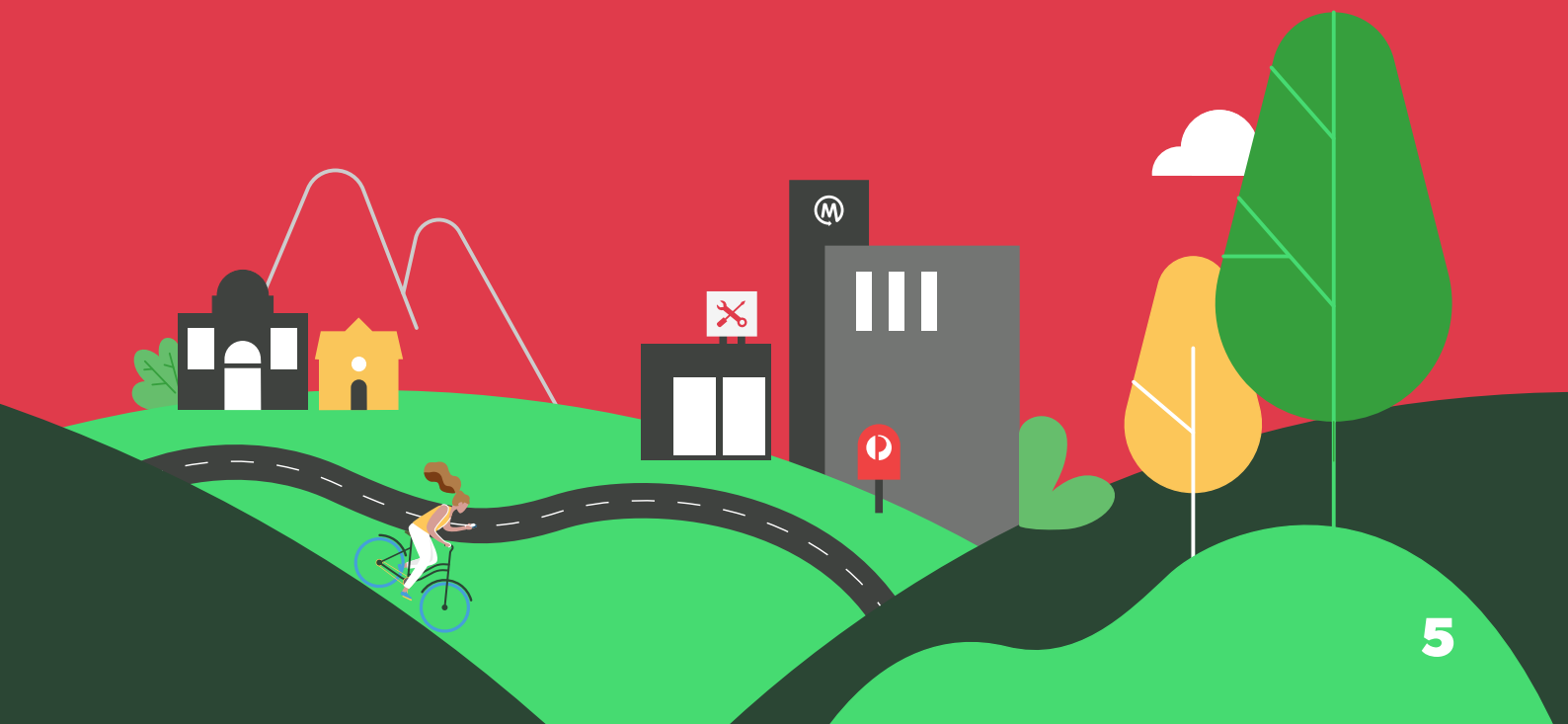
Carriers

95%

**Our collection
network**

3,500
**public drop
off points**

96%
**live within 10km
of a drop off point**



Consumer behaviour

The success of any product stewardship program depends on effective and ongoing community engagement. A good community education campaign is essential to raise awareness and maximise behaviour change and participation. The program continues to invest in a solid marketing and communications plan throughout the year. Independent market research conducted by AMTA highlighted that awareness remains strong with 70% of Australians aware of mobile phone recycling.⁵

Each year the program runs a major awareness campaign to drive engagement and to get more of us recycling. The Use It or Recycle It campaign that ran in March asked Australians to think about what they are doing with their old mobile phones and encouraged them to either reuse them if they still worked or recycle them with MobileMuster when they reached the end of their useful life.

The campaign was supported with outdoor, radio, digital, letter box and in-store advertising which reached over 14 million Australians. Just over one in four Australians, 26% of the population, were able to recall the campaign. According to research conducted by Planet Ark, the program is one of the most recognised and used recycling programs in Australia.⁶

Breaking down the barriers

Throughout the year MobileMuster continues to run targeted education campaigns to help tackle the barriers to recycling and get more people engaged.

- Spring cleaning campaign in September with our charity partner, the Salvos Stores, to incentivise consumers to recycle and help those in need in our communities.
- Data management education campaign targeting those concerned with the data on their mobile phones and help get their devices ready for recycling. The campaign was supported with retail activations across six major shopping centres in Sydney and Melbourne. Consumers were able to watch demonstrations of our dismantling process and seek help with removing the data from their devices.
- Our recycling from home campaign was launched late March as COVID-19 restrictions came into effect and the community was encouraged to stay at home. People could request a reply-paid label through the MobileMuster website or via Facebook which was then posted out to them. All they had to do was package up everything that needed to be recycled and drop it off in an AusPost box.

⁵ AMTA (2020), Insights into mobile phone use, reuse and recycling.

⁶ Planet Ark and Pollinate (March 2020), The Pulse.



RECYCLE
IT

MOBILE
PHONE
RECYCLING
IT'S EASY!

USE IT OR
RECYCLE IT.
EASY!

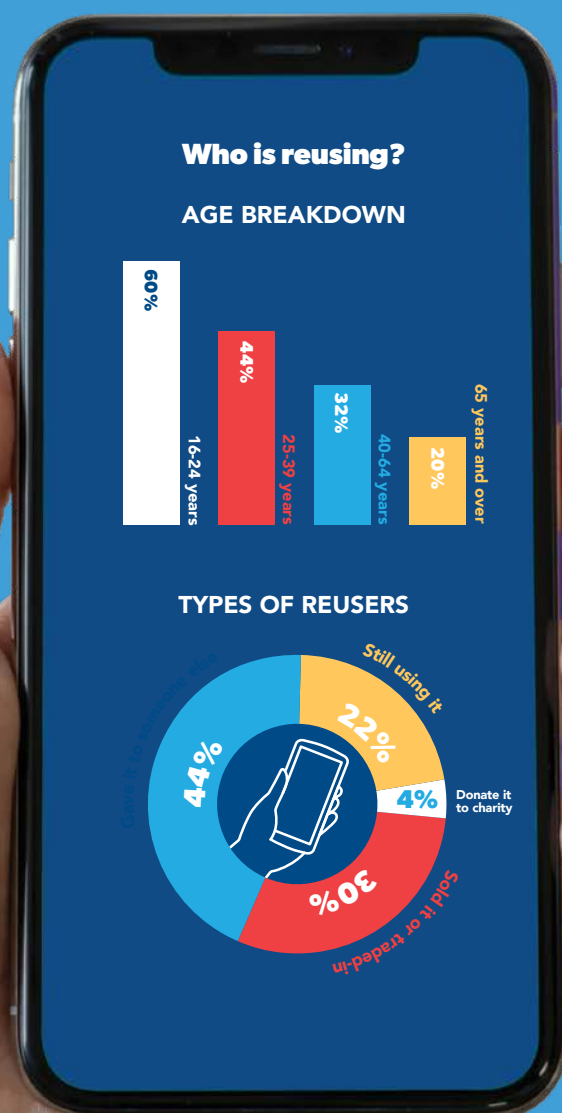
Find your nearest drop off point mobilemuster.com.au

 mobile
muster

Reuse and repair

Extending the life of a product is an important part of the circular economy and helps reduce their environmental impact. The mobile industry helps Australians to extend the life of their phone through repair, reuse and trade-in programs. MobileMuster provides consumers with information about repair services provided by the handset manufacturers, network carriers and authorised service providers.

Around 38% of Australians have repaired a mobile phone. Repair has continued to increase over the last couple of years and our market research insights predict that repair will continue to grow with younger Australians driving this trend.⁷ Research shows that 60% those in the 16-24 age group having used repair services.



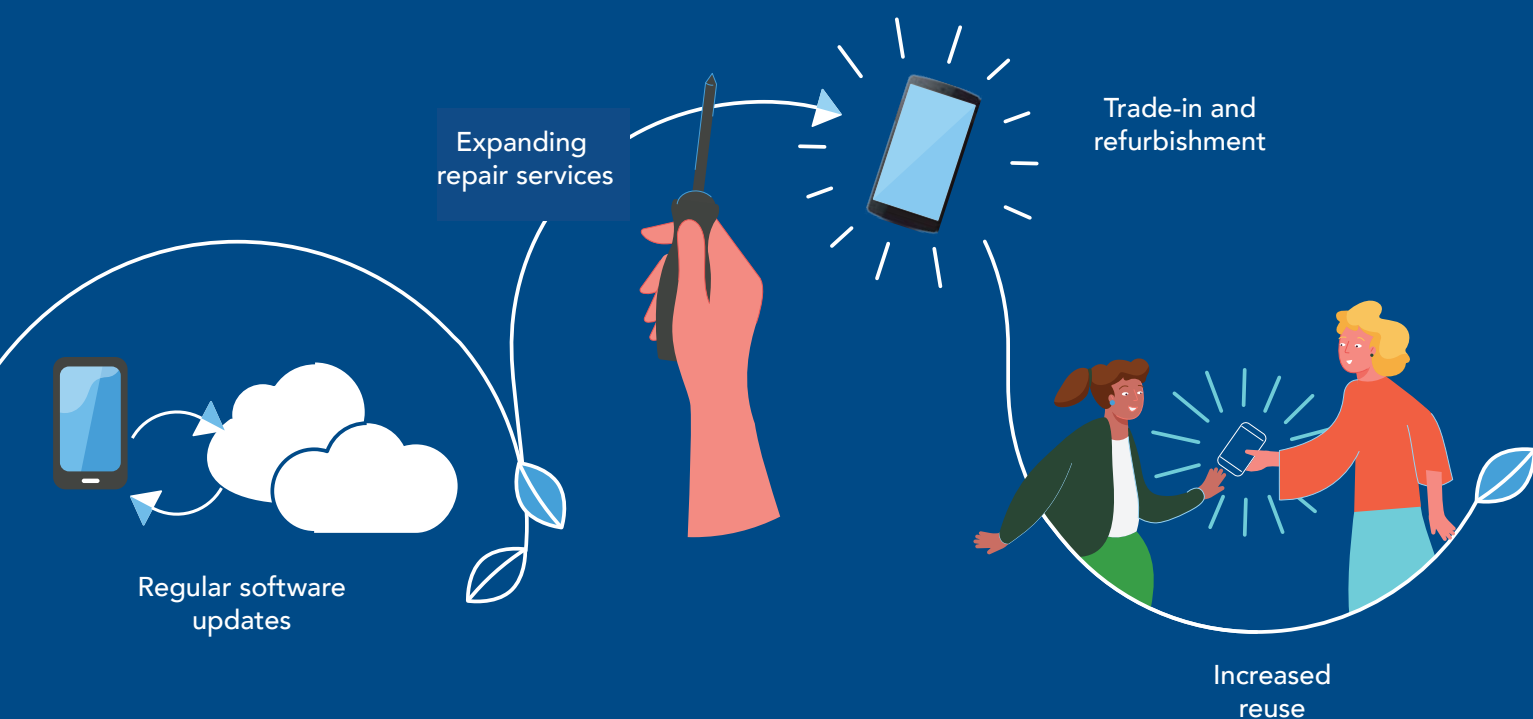
Improved energy efficiency

⁷ AMTA (2020) Insights into mobile phone use, reuse and recycling.

The industry encourages consumers to use genuine replacement parts when repairing their devices. Counterfeit and third-party parts may fail to work correctly, can be dangerous or compromise the quality of the device. Our advice to consumers is to ask questions and make sure that repairs are being performed by trained technicians using genuine parts. MobileMuster actively works with service centres and repair shops to ensure that any mobiles and components that cannot be reused are recycled the right way.

Several of the program's members offer trade-in programs. Australians can contact their network provider or manufacturer to see if their phone is eligible and find out how much credit they could get for their old phone. MobileMuster has developed resources to help consumers safely back-up and transfer data and then reset their mobile phone so that it can be traded-in or reused.

Research undertaken by the program shows that it's becoming more popular to give away, buy or sell second-hand mobile phones. MobileMuster is the recycling partner of a number of commercial reuse programs in Australia. These programs include Boomerang Buyback, Mazuma Mobile, Mobile Monster, Moorup and Phone Cycle.



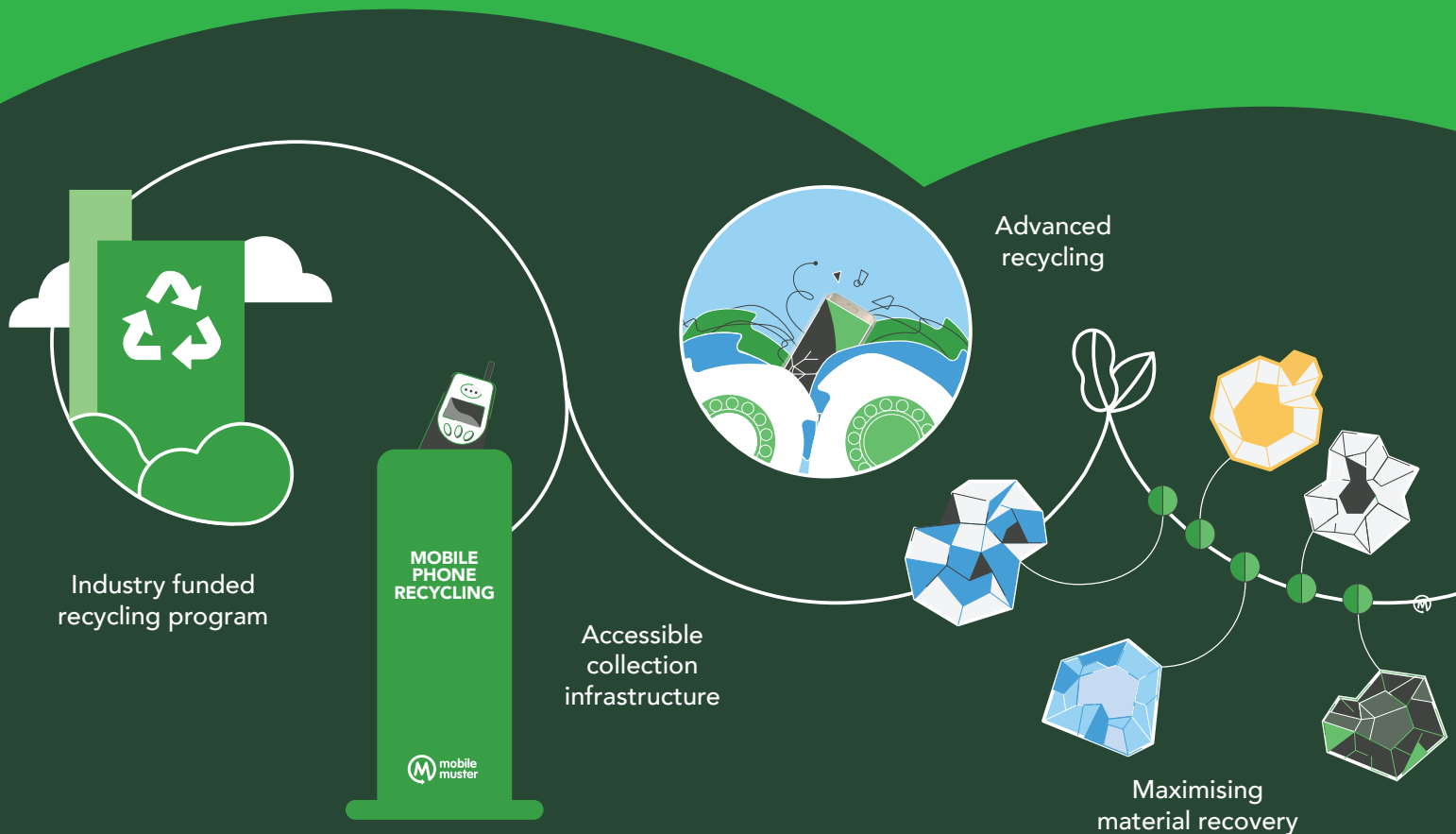
Recycling and innovation

The program continues to achieve over 95% material recovery in a mobile phone through its recycling processes. This year 84.7 tonnes of mobile phone components were recycled. In addition, the program collected and recycled 10.4 tonnes of electronic waste, 14.2 tonnes of packaging and 1.2 tonnes alkaline batteries.

MobileMuster partners with TES, a global leader in electronic waste recycling, to maximize recovery rates and ensure all mobile phone components are processed in an environmentally responsible manner. Our recycling partner uses state-of-the-art equipment and processing techniques to deliver the highest recovery rates with the lowest environmental impact.

MobileMuster has set itself the ambitious goal of zero waste to landfill. During the year, it was able to move closer to that target with less than 2% of product collected ending up as non-recyclable waste.

The program is focussing its attention on exploring innovative ways to use the plastic it collects from the old mobile phone handsets and accessories. We are working on the reuse of this plastic into the production of new MobileMuster collection units designed and manufactured in Australia.





Growing the
circular economy

Partnerships

Developing positive and productive partnerships with our collection network is one of the most important aspects of managing the program. The program, through the collection network, strives to ensure mobile phone recycling is accessible to all Australians. This year the program welcomed 500 new sites, both public and non-public, who are encouraging their community to recycle. They include retailers, repair stores, schools, workplaces and community organisations. Our collection partnerships mean that 96% of the Australian population are living within 10km of a MobileMuster drop off point.

The program's retail collection network is made up of over 2,000 stores, which includes all Telstra, Optus, Vodafone and Samsung retail sites. They actively remind the community to recycle when purchasing a new phone and provide a convenient drop-off point at local shopping centres. Other key retail collection partners are Officeworks, Battery World and a growing number of independent repair stores throughout the country.

Our Top collectors

- **Essentially Mobile – Hobart, Tasmania**
- **Battery World – Coffs Harbour, New South Wales**
- **Tecworks – Blacktown, New South Wales**
- **All That Mobile – Tranmere, South Australia**
- **PTC Phone Accessories & Repairs – Thuringowa, Queensland**
- **Mobile Phone Professional Repairs – Blackwood, South Australia**
- **iMobile Store – Moorabbin, Victoria**
- **Telstra Store – Whitfords, Western Australia**
- **Mobicell – Helensvale, Queensland**
- **Telstra Store – Claremont, Western Australia**

Australia Post

MobileMuster has fostered a long-term partnership with Australia Post. Their unparalleled network into Australian communities makes it easy for people to post back their mobile phones and accessories for recycling. Residents can pick up a free satchel from their local Post Office. The satchels are made from 80% recycled content. We ensure that all the satchels received are recycled. With more people staying at home, during COVID-19, the program has seen an increase in demand for our reply-paid label, which is posted out to residents, as a simple and safe recycling option. This year we have seen:

5000

mailing label requests.

40,000

satchels distributed through a letterbox campaign.

65,000

satchels distributed to local AusPost stores around the country.



Local Government

Local government partnerships have helped the program gain an expansive geographic footprint in Australia. This year local councils contributed 5.5 tonnes of mobile phone components for recycling. The program acknowledges the hard work and dedication undertaken by local government and its staff to support mobile phone recycling within their community.

Our Top Local Government collectors

- **Australian Capital Territory – Actsmart**
- **New South Wales – Hornsby Shire Council**
- **Northern Territory – East Arnhem Regional Council**
- **Queensland – Cairns Regional Council**
- **South Australia – Adelaide Hills Council**
- **Tasmania – City of Launceston**
- **Victoria – City of Monash**
- **Western Australia – City of Stirling**

Hornsby Shire Council, located in the northern suburbs of Sydney, won the top recycler in Australia and New South Wales in 2020 for the second year in a row. The Thornleigh Community Recycling Centre in Hornsby collected over 500kg of mobile phones and accessories for recycling in the last year. The drive-thru recycling centre makes it easy for residents to recycle several household items including mobile phones.

East Arnhem Regional Council motivated their community to recycle by partnering with MobileMuster to offer residents a small cash rebate for recycling discarded mobile phones, batteries and chargers. Managed in partnership with their cash for container program, the partnership collected over 400 mobiles along with accessories for recycling. The waste educators visited a number of communities throughout the far north-eastern corner of the Northern Territory to make it easier for their population of 10,000 people to recycle.



Matthew Kean (NSW Minister for Energy and Environment), Janelle McIntosh (Hornsby Shire Councillor), Philip Ruddock AO (Hornsby Shire Mayor), Spyro Kalos (MobileMuster) at the Thornleigh Community Recycling Centre in Hornsby.

Working with schools

MobileMuster supports an extensive education program for school students, teachers, educators, and environmental organisations. The program has invested in developing practical curriculum material and engaging supporting resources for learning. Our education program allows students to look at the impact of mobile technology and encourages schools to take action for a sustainable future. This year our education experts adapted our school and curriculum resources so they can be used by teachers and students learning from home. MobileMuster has achieved impressive results as we continue to expand our education program.

Mobile Connections Industry Award

MobileMuster's education program Mobile Connections received top honors by the Australian Geography Teachers' Association in 2019. The prestigious award recognises the currency, authenticity, innovative and cutting-edge production of the Mobile Connections program to support geographical education in Australian schools.

Mobile Connections resources allows students to look at their personal connection to mobile technology and how it influences people's choices and actions, along with the implications for society, the economy and the environment. The high school geography unit brings together comprehensive curriculum materials with immersive digital resources and accredited teacher professional development, to foster critical thinking and enable students to make decisions and take actions that contribute to creating a sustainable world.

MobileMuster worked with educational experts from the Field of Mars Environmental Education Centre to update the Mobile Connections program in 2019 to ensure the content and source materials were current and relevant. As part of this process the program has been reviewed by curriculum experts and key stakeholders ensuring it delivers quality teaching and student learning outcomes.


100

new school kits distributed


Over 3000

teachers downloaded curriculum resources



Resources reached

90,298

primary students


98,716

high school students


16,330

students engaged in National Recycling Week lessons


440

Geography teachers engaged through workshops and online professional development



"Mobile Connections takes a practical and different approach towards learning about interconnections in a real-life context. The resources are very user friendly and is supported by good pedagogical activities."

Trish Douglas, Chairperson of Australian Geographical Teachers' Association Board

Film Competition

The inaugural MobileMuster film competition invited students to create a one minute film to look at the problems associated with holding onto our old mobile phones and encouraging people to do something good with them through reuse or recycling.

We received over 90 entries from across the country, with just over 1000 students participating. Finalists were selected by an expert panel bringing together experience in film, education and environmental excellence. The films were judged on their relevancy to the theme, creativity, technical skills and ability to convey the environmental message.

The finalist short films were screened and the winners announced at the historic Cockatoo Island, Sydney Harbour in November. Students won technology prizes for their school and participated in an industry experience day at the offices of Google in Sydney.

Winning films were showcased by MobileMuster and Planet Ark during National Recycling Week. The films were great examples of how each of us can actively encourage our community to think about why we are holding onto old mobile phones and better understand the environmental benefits to either reusing or recycling them.

Teacher engagement

MobileMuster provides accredited professional learning for teachers to support the implementation of our Mobile Connections program. The course develops teacher understanding of the geography inquiry process and how it applies to the development of technology rich and sustainability focused teaching and learning. In the past year MobileMuster engaged 440 teachers through conference presentations, workshops and online professional development courses.

Our online professional development course is on-demand, so teachers can learn anytime and from anywhere. It is also accredited in each state and territory. The course has received positive feedback from teachers with a 4.4 out of 5 average course rating.

Film Competition Finalists







MobileMuster is the Government
accredited product stewardship
program of the mobile phone industry.

**An initiative of the Australian Mobile
Telecommunications Association (AMTA)**

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