



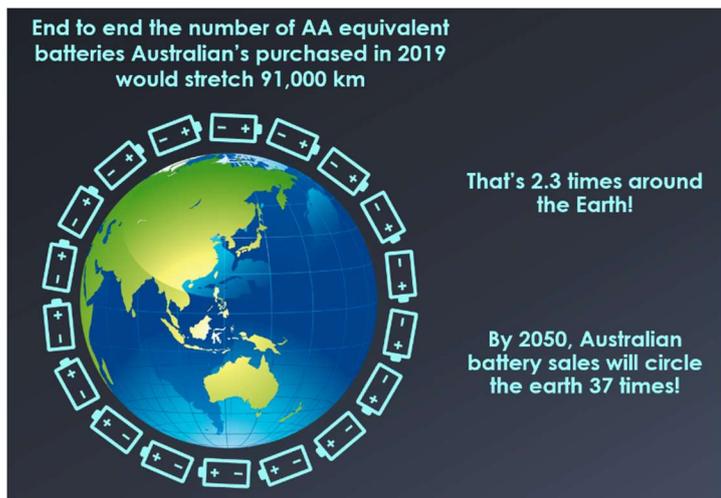
## Creating a battery stewardship scheme for Australia

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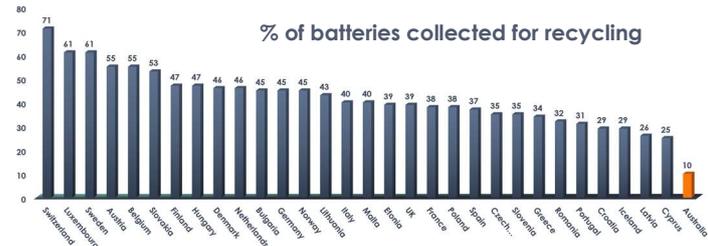
### How many batteries do Australians buy in a year?

Australians rely on batteries to power our every increasing array of mobile devices!



### What happens to batteries in Australia today?

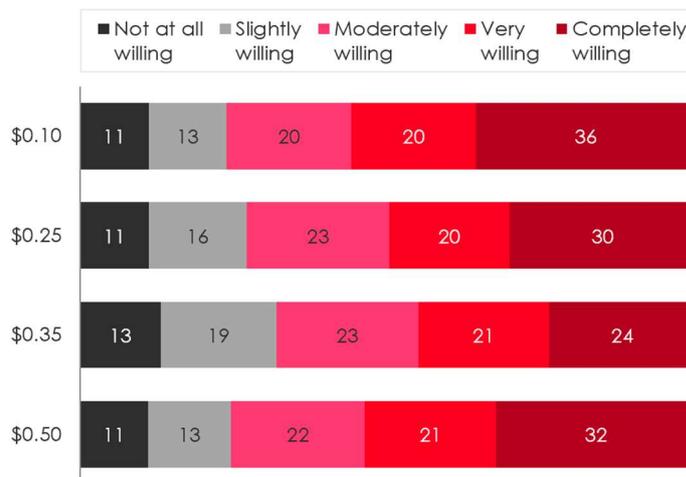
In Australia, most of our batteries end up in landfill. Our recycling rate for batteries other than used lead acid batteries is exceedingly low. Only 10% of household batteries are recycled in Australia, well below international best practice as can be seen from the graph.



Recycling batteries is challenging and expensive because in Australia we have a small population and a very large land mass. Product stewardship is essential to ensure that the cost of recycling is built into the price of the product and the industry can thrive and become safe and sustainable.

### Australians want to recycle batteries

Most Australians don't mind paying a little more for batteries to cover the cost of recycling. In fact, only about 10% of Australians wouldn't pay extra as shown in the finds of a study conducted by Planet Ark and Pollinate. Respondents were asked "How willing would you be to pay an extra [\$0.10, \$0.25, \$0.35, or \$0.50] to cover the battery's recycling?"



### Impact of not recycling

Without a stewardship Scheme to support the development of a viable battery recycling industry, Australia is facing a number of troubling outcomes and missing out on some important opportunities.

### Batteries contain hazardous substances

Nearly all batteries are hazardous due to their toxic, flammable, or corrosive nature. The main hazard for each chemistry type is shown below.

Hazardous	Toxic	Corrosive	Flammable
<ul style="list-style-type: none"> <li>Button batteries can cause internal burns if swallowed or ingested by children or vulnerable adults</li> </ul>	<ul style="list-style-type: none"> <li>Batteries contain chemicals that are toxic to the environment</li> </ul>	<ul style="list-style-type: none"> <li>Batteries contain chemicals that are corrosive to humans, material, and the environment</li> </ul>	<ul style="list-style-type: none"> <li>Most batteries can spark fires</li> <li>Batteries with left over charge can create a fire risk</li> <li>Some batteries can self ignite if damaged or not stored properly</li> </ul>

Currently, most used batteries are either stored in homes, businesses and institutions or they are disposed of to landfill. This results in significant environmental impacts.

Battery casings eventually corrode and at that point, chemicals may leach into the soil and move into rivers, water supplies and oceans. Contamination of soil, water and air from these pollutants can result from leaching or from atmospheric pollutants released by landfill fires.



## Creating a battery stewardship scheme for Australia

### What do recycled batteries become?



In Australia a number of recyclers are expanding existing markets and creating new ones to ensure that batteries collected are properly recycled. The following provides some examples.

Batteries are being recycled by numerous companies in Australia who sort them and process them into commodities or other products.

#### Recycling outcomes for single use batteries

- Zinc & manganese can be extracted and used as an ingredient used to make fertilizer
- Metal casings can be used by local foundries to produce a wide range of metal products
- Zinc oxide can be used for a wide variety of products, e.g. paint, tyres, & medical creams
- Recovered commodities can be used to manufacture new batteries

#### Recycling outcomes for rechargeable batteries

- Metal casings are processed at local foundries producing a wide range of metal products
- Precious metals used as an input to new batteries and electronic components
- Plastics are becoming part of road base
- Recovered commodities can be used to manufacture new batteries

#### We can't afford to waste these valuable resources!

The World Bank "Minerals for Climate Action" (2020) report predicts demand for battery metals to jump by 500% by 2050. It also finds that this growth means even if recycling rates were to reach 100% there will still not be enough copper, aluminium and other metals to meet demand.

### The solution

The Battery Stewardship Council has secured funding from the federal government and industry to be launched in early 2022.

The Scheme will provide a national network of drop off options to make it convenient and easy for everyone to take their batteries for recycling.

An accreditation process is being established for each stage of the collection network to assure the recycling process is safe and verify that batteries collected under the banner of recycling are actually recycled. BSC also plans to create an education program to improve awareness of battery hazards and how to manage them.

### Authorised by the ACCC

The BSC Scheme was authorised by the Australian Competition and Consumer Commission to enable the BSC to raise funding, encourage industry engagement and cover the true cost of recycling our batteries.



### When will collections begin?

The collection network is set to be launched in January 2022. BSC is planning to create a Scheme brand and marketing program so that we can inform all Australian's about this exciting new development towards the end of this year.

### What if I import to sell Batteries in Australia?

Join us in creating this important initiative! Government is expecting action and have signaled that they will regulate if industry is not able to demonstrate significant improvements in battery collection and recycling. Find out how at our website.

### About the Battery Stewardship Council (BSC)

BSC is a not-for-profit company established in 2018 to facilitate accessible battery recycling services for consumers in metropolitan and regional areas of Australia.

### Still have questions or need more information

If you still have questions or would like further information:

[www.bsc.org.au](http://www.bsc.org.au)  
[contact@bsc.org.au](mailto:contact@bsc.org.au)