

# AUSTRALIAN BATTERY RECYCLING INITIATIVE

Who we are and what we do



# Our members



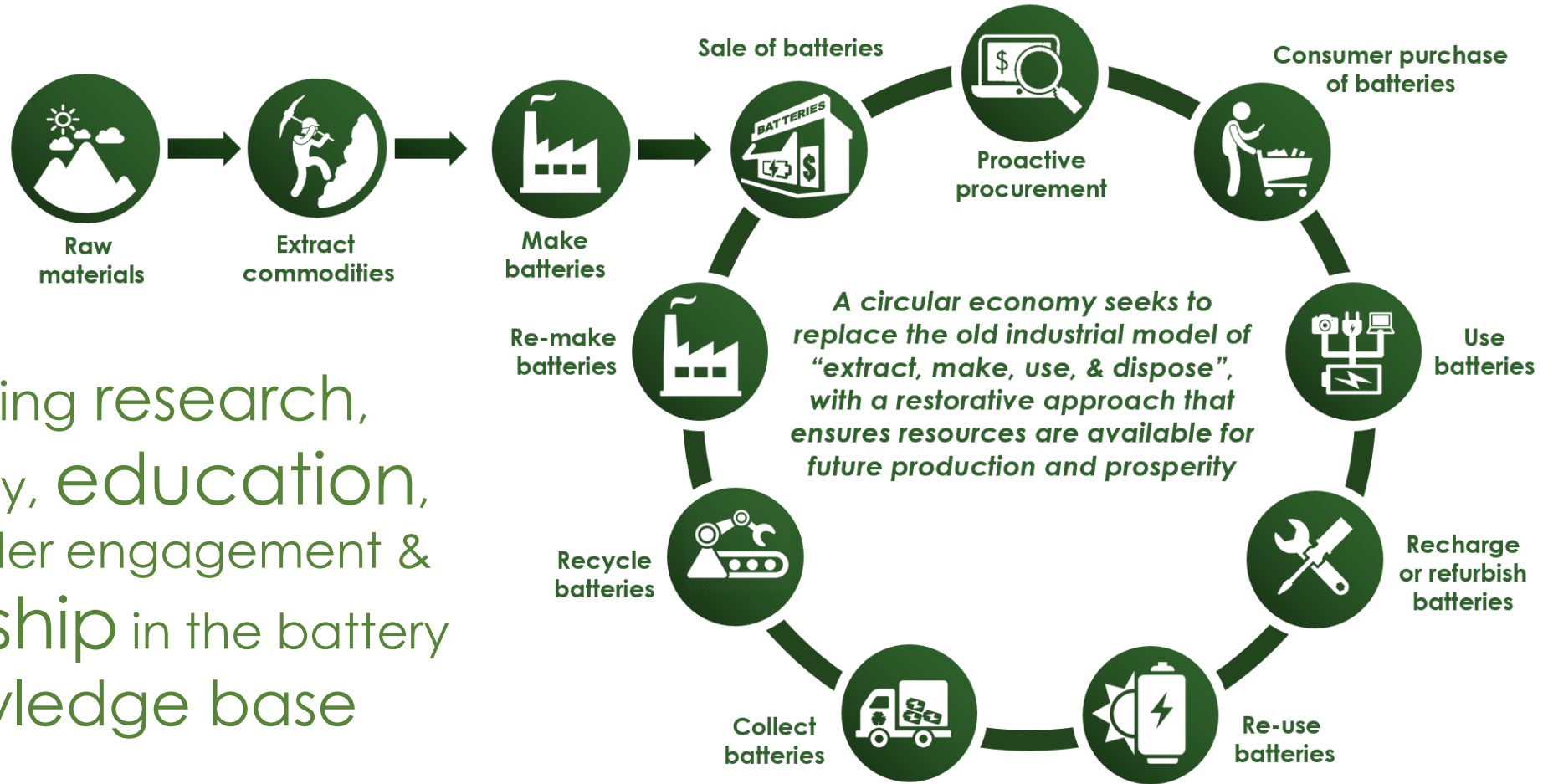
Close the Loop



OCEAN BATTERIES AUSTRALIA



# ABRI vision is to facilitate a circular economy



Providing research, advocacy, education, stakeholder engagement & leadership in the battery knowledge base

ABRI is the first point of call for information on battery stewardship & recycling



## Batteries by the numbers

✓ We recycle 90% of lead acid batteries

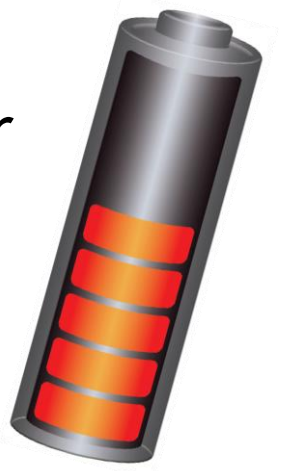
Lead acid batteries provide a stellar example of a circular economy



In 2012-13, an estimated **400 million**  
handheld batteries, weighing **17,500 tonnes**,  
were sold into the Australian market

14,700 tonnes reached their end-of-life that year

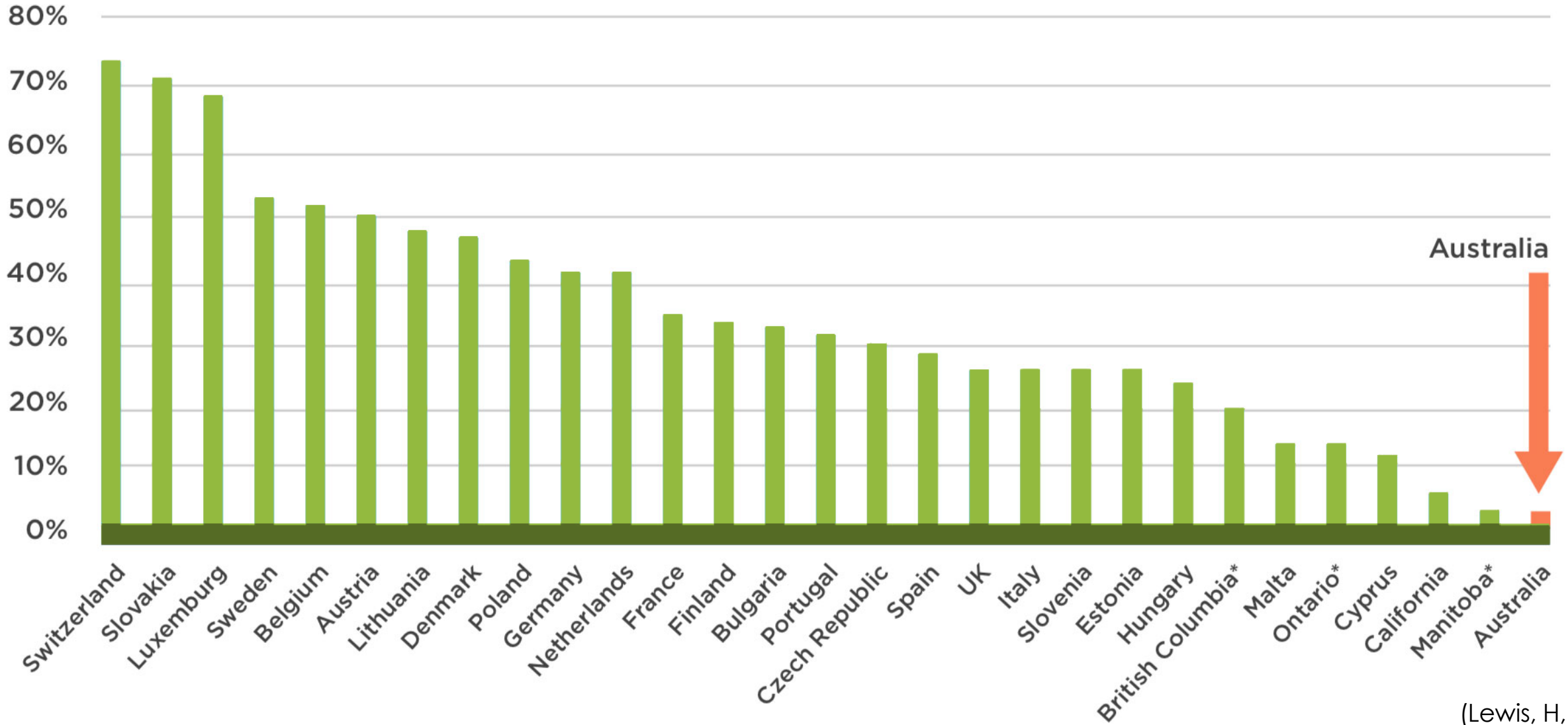
We only recycled 2.7 % of them



(SRU, 2014)



# Collection rate in Australia is one of the lowest in the world



(Lewis, H, 2016)

# BATTERIES ARE A RAPIDLY EXPANDING WASTE STREAM

By 2036 we will be wasting 136,000 tonnes of handheld batteries annually



136,000 tonnes is about the weight of the opera house



ABRI and our members are leading the way

By creating sustainable battery stewardship solutions  
for all battery chemistries



# Our objectives



Advance circular economy models for batteries



Facilitate the national battery stewardship scheme



Facilitate effective & harmonized government policy



Foster international dialogue & sharing of best practice



Effective secretariat governance & operations



Sustain & grow ABRI membership



Educate & promote battery recycling



Provide leadership in the battery knowledge base



# Leading the knowledge base



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## USED LEAD ACID BATTERY RECYCLING

### Packaging Guidelines for Used Lead Acid Batteries

**MAINTENANCE-FREE HI-POW 75Ah - 12V**

## CONSUMER GUIDE TO RESPONSIBLE RECYCLING OF BATTERY STORAGE SYSTEMS

### STEPS TO SAFE HANDLING, COLLECTION, STORAGE, AND PROCESSING OF BATTERIES AT END OF LIFE

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**CLEAN ENERGY COUNCIL**

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## HANDHELD BATTERIES

### Guidelines for Offices

Why recycle batteries?

- Batteries are part of our daily lives, but they have a limited life span, so it is important to dispose of them responsibly.
- Batteries can be a risk to human health and the environment if disposed inappropriately.
- Batteries contain materials that can be recycled into new products, reducing the burden on the natural environment.

**Preventing the risk of fire**

**FIRE SAFETY WARNING**  
Batteries have a low but real risk of igniting if they are not fully discharged and/or if terminals short circuit. Short-circuiting may occur if the terminals touch other terminals or metal objects such as keys.

The two most important steps to preventing fire is to avoid damaging batteries and protect the terminals. Taping battery terminals with clear sticky tape or duct tape will protect them from short-circuiting. Whether you have one battery or a few, one layer of clear tape is all it takes to be protective.

**Preventing risks of button cell batteries**

It's important to protect children visiting offices and workplaces. For the reason, it is important to be aware of the special risks posed by button cell batteries.

**CHILD SAFETY WARNING**  
Button batteries can be extremely hazardous to children if swallowed or inserted into the body.

Button cell batteries present very serious risk to children and adults if swallowed or ingested. Button batteries can get stuck in the oesophagus and cause internal burns which can injure or result in death. For more information about button battery safety, please refer to the ABRI 'Button Cell Batteries: Guidelines for Safe and Responsible Disposal'.

**What can be recycled?**

There are three types of batteries likely to be collected in the office:

- Rechargeable batteries
- Alkaline batteries
- Rechargeable lead acid batteries

Be aware that depending on the type of battery, different collection requirements may apply - check with your recycler.

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## BUTTON CELL BATTERIES

### Guidelines for Safe and Responsible Disposal

Where are button cell batteries used?

Button cell (also called coin) batteries are widely used in electronic devices such as hearing aids, remotes, calculators, pagers, watches, mobile phones, children's toys, wall clocks, kitchen scales, lock light controls and hearing aids. In the guidelines, button batteries refers to button cell, also called coin batteries.

**Managing used button batteries**

Follow these steps & the Do's and Don'ts on the next page for safe button battery management.

- Do not leave button batteries lying around where children or vulnerable people could access them.
- Button batteries should be correctly stored in a safe place.
- Do not touch button batteries with your fingers. If you do, wash your hands with soap and water.
- Clear your button batteries off of a recycling collection point.
- There is a qualified recycler used. Start with the 'How to find a recycler' and 'Recycle' links on the right sidebar. Ask to see their credentials.

**What are the risks with button batteries?**

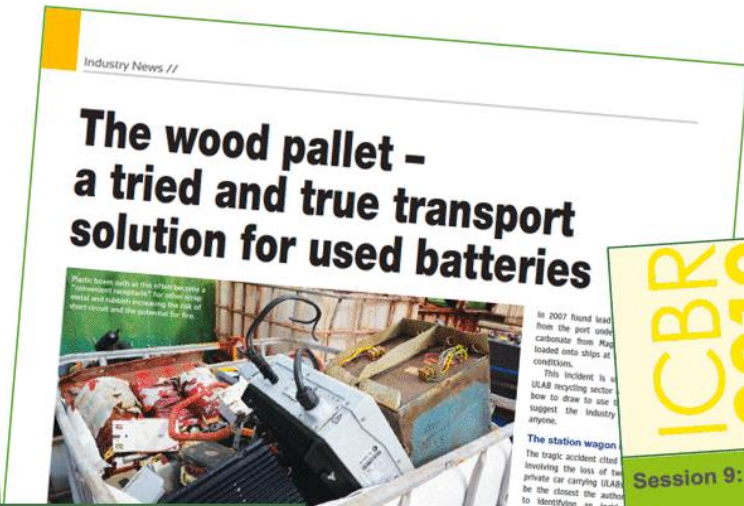
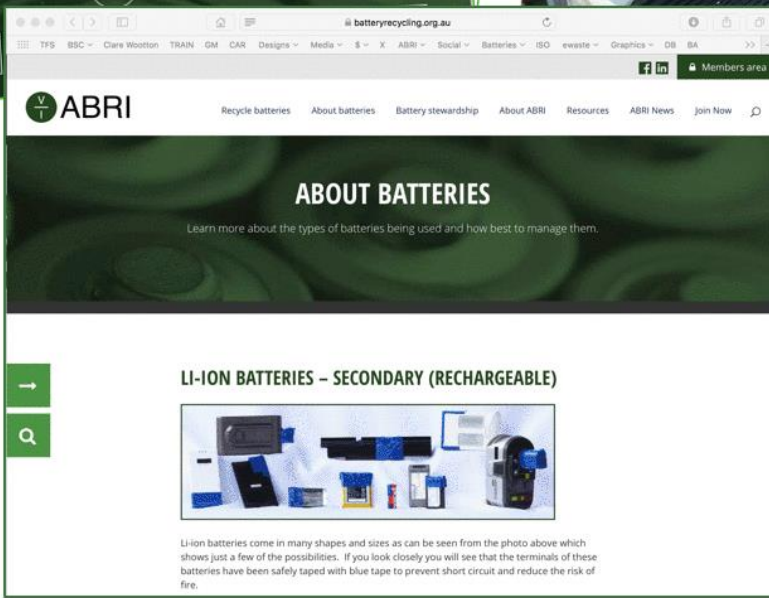
- Batteries can be hazardous to children and vulnerable adults.
- Button batteries are part of our daily lives, but they have a limited life span, so it is important to dispose of them responsibly.
- Batteries contain materials that can be recycled into new products, reducing the burden on the natural environment.

**RECYCLING BATTERIES can recover up to 90% of the materials used to manufacture them**

**MORE INFORMATION**  
Poisons Hotline 13 11 26  
Emergency 000  
[www.batteryrecycling.org.au](http://www.batteryrecycling.org.au)

These guidelines are general in nature. It is recommended individuals do their own research to understand the rules governed by button batteries.

# Educating industry, government and the wider community about battery recycling, best practice, stewardship and circular economy



**ICBR 2019**



Session 9:

**Battery Materials in a Circular Economy**  
**Session Chairman: Libby Chaplin, Australian Battery Recycling Initiative (ABRI), Australia**

14.00 - 14.30

“Circular Economy perspectives for the management of batteries used in electric vehicles”  
**Pierre Gaudillat, European Commission (Joint Research Centre), Spain**

14.30 - 15.00

“Cobalt and the battery value chain”  
**Carol-Lynne Pettit, Cobalt Institute, United Kingdom**

15.00 - 15.30

“Global battery supply chain analysis and its impact on the US battery recycling initiatives”  
**Margaret K Mann, National Renewable Energy Laboratory and Jeffrey Spangenberg, Argonne National Laboratory, USA**

**Recovery of lead from the environment**  
 Rather than increasing lead poisoning, the lead acid battery recycling sector plays a significant role in reducing lead in the environment.  
 We all know that lead is toxic and so the industry is questioning that suggestion that is why lead acid battery recycling recovers more than 85,000 tonnes of lead each year, removing it from the environment and reducing the potential for lead poisoning.  
 The ULAB recycling sector has a strong track record in the health and safety areas. The move to maintenance-free batteries has also reduced the likelihood of spills.  
 Accident sites in the sector are quite low and the two incidents cited in the article in question that suggest communities and workers is unrelated to the ULABs collection and recycling industry.  
**The Esperance Port incident**  
 For those unfamiliar with the incident in Esperance, a parliamentary inquiry

**Plastic boxes have their own risks**  
 While they may have their plastic, particularly in static storage, plastic boxes do have their own risks when used to transport used batteries.  
 Most plastic boxes are transported from generators premises, where they have been progressively filled over days, weeks or months, before transport to aggregators or scrap metal dealers.  
 Boxes often become a “convenient receptacle” for other scrap metal and rubbish increasing the risk of short circuit and the potential for fire.

Daily news updated at www.bmsnews.com.au

# Showcasing member capabilities



Our value is in our membership

Members are invited to create Member Profiles to showcase their expertise & services


Available for download at the ABRI website

Member profile

Century Yuasa

**CORE BUSINESS**  
Century Yuasa is Australia's oldest and most recognised battery manufacturer with a proud heritage spanning two centuries. An affiliate of the GS Yuasa Corporation, Century has access to some of the most advanced technical and R&D resources available in the battery industry.

Century Yuasa is dedicated to caring for the environment and believe that scrap batteries should be recycled and disposed of responsibly. Their commitment to sustainability through their Used Lead Acid Battery (ULAB) program has seen Century achieve the prestigious SAI Global ISO 14001 accreditation, an international standard requiring a structured approach to environmental protection and responsibility.

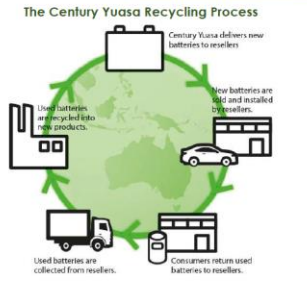


**HISTORY**  
With more than 100 years' experience, Century Yuasa is an Australian success story that has grown to become the world's leading, publicly listed metals and electronics recycler with operations encompassing the buying, processing and selling of ferrous and non-ferrous recycled metals. Established in Sydney in 1917, Sims expanded its e-waste service offering to Australia in 2005 and today SRS Australia operates fully compliant sites in Sydney, Melbourne and Brisbane. Globally, the SRS business operates 10 electronics recycling sites across five continents and approximately a dozen countries.

Century Yuasa is one of the only Australian made battery manufacturers, their history of manufacturing in Australia began in 1928 with the Century brand - a household name with Australia's and New Zealand's motoring public. They have been at the forefront of battery manufacturing and design, with a reputation for quality and innovation that has been refined and demonstrated over many decades.

**COMMITMENT TO SUSTAINABILITY**  
In addition to the recycling program Century Yuasa's is committed to making the planet a greener place for future generations when manufacturing and distributing batteries.

In 2017 Century Yuasa partnered with Cleanaway to explore a nationwide packaging solution to move from polystyrene to recycled material. Century now uses 100% recycled packaging material in its battery distribution throughout the Century Yuasa network.



**COMMITMENT TO SUSTAINABILITY**  
Century Yuasa's national battery recycling scheme provides motorists, homeowners and businesses with a network of outlets and resources to recycle used batteries responsibly.

Century has a dedicated website where motorists, homeowners and businesses can find their nearest Century Yuasa Battery Recycling Centre. The site features over 800 approved recycling sites, ensuring coverage across metro and regional Australia and providing information and advice on all aspects of battery recycling. [www.recyclemybattery.com.au](http://www.recyclemybattery.com.au)

**WHY DOES CENTURY YUASA VALUE BEING AN ABRI MEMBER?**  
Century Yuasa values the relationship with ABRI to ensure they are at the forefront of Australia's battery recycling initiatives. Century relies on ABRI to provide the latest information on regulations and best practice guidelines battery collection and recycling.

**CORPORATE PROFILE**

Phone	1300 650 702	Website	<a href="http://www.cyb.com.au">www.cyb.com.au</a>
Ownership	Century Yuasa is an affiliate of GS Yuasa Corporation, one of the world's largest battery manufacturers with affiliates in 19 countries.		

Member profile

SRS

**HISTORY**  
With more than 100 years' experience, Sims is an Australian success story that has grown to become the world's leading, publicly listed metals and electronics recycler with operations encompassing the buying, processing and selling of ferrous and non-ferrous recycled metals. Established in Sydney in 1917, Sims expanded its e-waste service offering to Australia in 2005 and today SRS Australia operates fully compliant sites in Sydney, Melbourne and Brisbane. Globally, the SRS business operates 10 electronics recycling sites across five continents and approximately a dozen countries.



**COMMITMENT TO SUSTAINABILITY**  
Sims has been named in the Dow Jones Sustainability Index for the consecutive years and has been an Index Component since 2012. Sims is the only electronics recycling company to have been nominated among the world's 100 most sustainable companies for five consecutive years by the World Economic Forum in Davos Switzerland.

Sims is listed on the NY stock exchange and Euronext as one of its "Global 120" most advanced companies on corporate responsibility.

**WHY DOES SRS VALUE BEING AN ABRI MEMBER?**  
Sims have been recycling in Australia for over 100 years. With advancement in technology the move towards the electronic generation, equipment now regularly includes batteries. SRS want to be part of assisting ABRI in providing an effective battery collection and recycling scheme, developing best practices for this waste stream, and achieving battery stewardship in Australia.

**CORPORATE PROFILE**

Ownership	Sims Metal Management		
Phone	02 8708 2015		
Website	<a href="http://www.apac.simsrecycling.com">www.apac.simsrecycling.com</a>		

Member profile

MRI

**HISTORY**  
E-cycle Solutions has a long history of working with a variety of community organisations for over 25 years with a focus on helping people in need and the environment. We have a team of 100 people and also provide significant employment opportunities to a further 60 FTE via Disability Service Enterprises.

**COMMITMENT TO SUSTAINABILITY**  
E-cycle Solutions has been a long-term provider of solutions to support customers and partners to achieve higher levels of environmental performance and business sustainability. We enable our customers to contribute to a circular economy through closed cycles that are restorative and regenerative.



**COMMITMENT TO SUSTAINABILITY**  
MRI's commitment is demonstrated through various activities and programs including our credentials which include independent certification to Australian and international standards, including ISO 14001, CHAS18001, AS/NZ8901 and AS/NZS3777.

Facilities are EPA licensed and we hold government issued export permits for transporting materials and components offshore. Effective and efficient compliance is embedded across MRI E-cycle Solutions and operations. Compliance is essential to responsibly managing waste, tyres and other consumables in Australia and abroad.

MRI is listed on the NY stock exchange and Euronext as one of its "Global 120" most advanced companies on corporate responsibility.

**WHY DOES MRI E-CYCLE SOLUTIONS VALUE BEING AN ABRI MEMBER?**  
MRI provides a framework through which we can contribute knowledge and experience based on its own services and tyres offered to the market. Organisations working together achieve a common goal is more effective and efficient through an association with ABRI. MRI E-cycle Solutions believes in a collective approach to achieving a national approach to battery stewardship that can meet consumer and business expectations while maintaining environmental protection.

**CORPORATE PROFILE**

Ownership	Mr Will LeMessurier		
Address	1789 Sydney Road Campbellfield VIC 3061 15 Stanton Road, Seven Hills NSW 2147 2/33 Gosport Street, Hemmant QLD 4174 Unit 1 & 2, 78-80 Townsville St, Fyshwick ACT 2609		
Phone	1300 439 278	Website	<a href="http://mri.com.au">mri.com.au</a>

Member profile

Battery World

**HISTORY**  
Battery World stores are proactive in collecting all batteries for recycling, regardless of where the customer purchased the battery. Some stores use money collected from recycling lead acid batteries to fund school recycling competitions, while others donate batteries to community service groups, and initiatives like National "Change Your Smoke Alarm Battery" day.

**HISTORY**  
Battery World Australia's parent company is Century Yuasa Batteries. Century is Australia's oldest battery manufacturer and a leader in development, manufacturing and distribution of batteries and services across Australia and New Zealand. For over 90 years, Century has operated a local Australian Manufacturing Facility. Today this world class facility is located at Carole Park (QLD), supported by state-based distribution centres and local agents.



**COMMITMENT TO SUSTAINABILITY**  
In addition to the recycling program, customer incentives and providing collection bins in convenient locations, Battery World is committed to research and continuous improvement in battery recycling. This is being done by working with research institutes on product development from recycled batteries, new products like home solar storage solutions, and partnerships like that with Mobile Muster to be a hub for battery stewardship across the product life cycle.

**WHY DOES BATTERY WORLD VALUE BEING AN ABRI MEMBER?**  
Battery World is proud to be an ABRI member, and shares their vision and values. As a member, Battery World is exposed to best practice, latest information in regulations and guidelines for battery collection, storage and transport, and recycling. ABRI also allows Battery World to work with other members to further develop and improve Australia's battery recycling initiatives.

**CORPORATE PROFILE**

Ownership	Battery World Australia is a franchise network owned by Century Yuasa Batteries.		
Phone	13 17 60		
Website	<a href="http://www.batteryworld.com.au/">www.batteryworld.com.au/</a>		



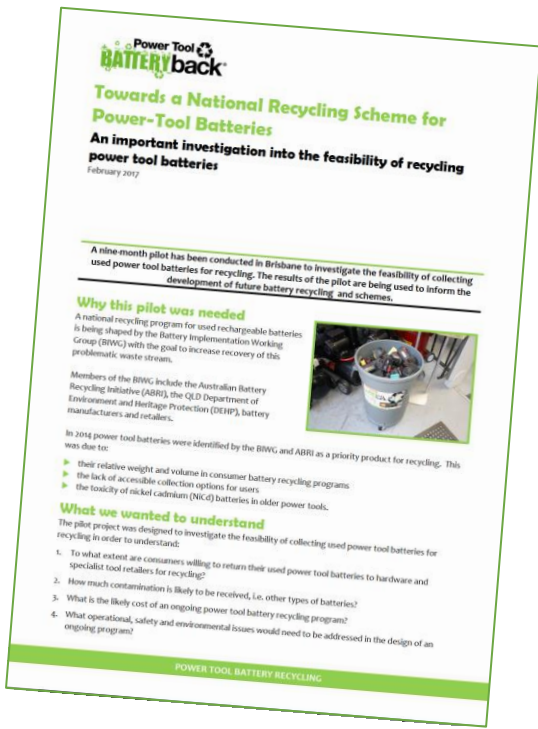
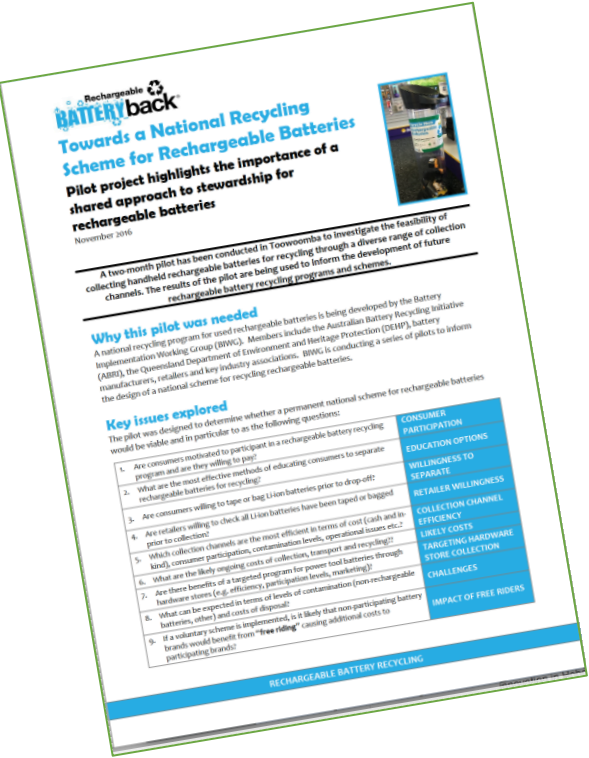
# Support for battery stewardship

ABRI conducts trials and facilitates research to understand the market and the on the ground realities for increasing collection rates



Establishing a national battery stewardship scheme for Australia

ABRI plays an leadership role in the Battery stewardship Council and the design of the proposed battery stewardship scheme





# Members have said they find value in membership because ABRI provides



An industry wide perspective on key issues



Opportunities to collaborate, network & share expertise



Access to best practice guidance for battery handling



Advocacy for harmonised government policy & infrastructure development



Visibility for members as a battery stewards



Access to the latest industry developments, research & market knowledge



Awareness of international best practice and initiatives



Centralised voice for battery stewardship and industry issues



Join us today!

[www.batteryrecycling.org.au](http://www.batteryrecycling.org.au)



# Use of this presentation

- ABRI members are encouraged to use this presentation to promote ABRI and educate the broader community about battery issues and solutions
- ABRI does not endorse the activities or services of our members
  - This presentation is not to be used to suggest we do endorse the activities or services of any member
- This presentation (in full or in part) is intended for use by ABRI and its members
  - Any changes to the above slides are required to be approved in writing by the ABRI secretariat in advance

**For further information**  
**[info@batteryrecycling.org.au](mailto:info@batteryrecycling.org.au)**

About ABRI 190604