

**Submission
No 20**

ELECTRIC AND HYBRID VEHICLE BATTERIES

Organisation: Association for the Battery Recycling Industry

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The Association for the Battery Recycling Industry (ABRI) considers safety and risk management for handling, storage and transport of EV and hybrid batteries is important at all lifecycle stages.

The risk management frameworks, training, tools and procedures should be fit for purpose for the battery type – light vehicles and EVs are two distinct battery types and markets. Safety and quality standards, distribution and reverse logistics chains differ between light vehicles (e.g., scooters and ebikes) and passenger, commercial, bus, heavy and industrial vehicles. While one size fits all policy approaches are preferable, policy approaches may need tailoring in some instances due to differences in: safety (battery quality and internal battery management systems) and consequent risks; battery size; and distribution/service channels.

As transport electrification gathers momentum, ABRI has advocated for no regrets measures which should be implemented immediately to improve safety and reduce risks:

- Standards/regulation - Introducing product quality standards for micromobility for example through meeting international battery product and safety testing standards.
- Data – identify battery data sharing needs on chemistry and disassembly that support customer focused outcomes and a competitive service market and facilitate end of life management. The European Battery Passport is an example of this approach, and some ABRI members are already looking to how they can track and trace batteries.
- Data - Nationally consistent fire incident reporting to share learnings from incidents and support future data analysis. The ACCC has also put forward this recommendation in its [Lithium-ion batteries and consumer product safety report](#).

The groundwork needs to be commenced to underpin long term safety and risk management outcomes as the battery reuse, repurposing and recycling (recovery of critical minerals) sectors grow. This will require government leadership and coordination to shape the policy and regulatory environment to meet the needs of all industry sectors impacted by electrification. This includes EV and energy storage battery servicing and end of life management, all stages of the recycling chain and supporting businesses such as logistics. Coordinated work which should commence includes:

- State based strategic planning for collection and aggregation sites for used batteries to minimise transport costs and support safe collection.
- Streamlined planning and environmental approvals for collection, aggregation and recycling/processing sites for used batteries, which are captured by complex approval and regulatory processes.
- Funding for proof of concept testing to ensure recyclers are ready at scale and to manage financial uncertainty at the early stages of industry development as volumes are not yet commercial.
- Consistent safe storage, handling and transport guidance for collection, aggregation and recycling sites across Australia .
- Development of robust standards and a consumer protection framework to support safe battery repurposing, turning EVs into energy storage batteries.
- Funding for research to develop solutions to partial processing of used EV batteries on a smaller scale in remote and regional areas to reduce costs in transporting batteries.



Association for the Battery Recycling Industry

ABRI is working with a range of stakeholders to support delivery of these initiatives and would welcome engagement with the Joint Standing Committee on Road Safety (Staysafe) as to how these could be accelerated. ABRI members are also working with OEMs in the passenger and larger vehicle segments of the market to support safe end of life management and the battery circular economy.

The Battery Stewardship Council (BSC) is leading work on the management of end of life batteries in the e-bike and e-scooter segment of the market. ABRI strongly supports prioritisation of this work as well as mandating standards to support improved battery quality and reduced handling risks.

Battery recycling industry background and context

The Association for the Battery Recycling Industry (ABRI) is the peak industry body in Australia for driving innovation and investment to foster a safe, sustainable and world leading battery recycling industry generating feedstock for new products. There are 60 members across the battery value chain, who recycle all battery chemistries. The growth area is lithium battery reuse, repurposing, recycling and critical minerals recovery. The lithium battery recycling start-ups in Australia are drawing on an already strong base of mining sector metallurgical knowledge and research expertise. This is developing Australian capacity as well as exportable technology. You can find further information at <https://batteryrecycling.org.au/>

Since its establishment in 2008, ABRI has worked with stakeholders across the value chain to support 100% recycling of EV batteries in Australia and the growth of the local battery recycling industry. In NSW, there are four companies at various phases of commercialisation focusing on repurposing and recycling of EV batteries.

For further information, please email [REDACTED]

Yours sincerely

Submitted by email

Katharine Hole
Chief Executive Officer