AEVA POLICY RECOMMENDATIONS: BATTERIES
APPROVED BY THE BOARD: 24 FEBRUARY 2026

Policy statements

[1] AEVA supports the development of an Australian battery passport regime harmonised with the European Union Batteries Regulation and its battery "passport". This represents international industry best practice and creates a safe, secure and interoperable system to identify, trace and manage batteries and their components in electric vehicles, e-mobility products and stationary storage throughout their lifecycle: from production and use to reuse, repurposing and recycling. AEVA also supports any subsequent EU Commission efforts to target batteries in smaller household electronic devices.

[2] AEVA supports the EU position that batteries should be placed on the market only if they do not present a risk to human health, safety of persons, property or environment when stored and used for their intended purpose. Batteries must meet rigorous quality product standards, and non-compliant products must be prohibited from import into Australia.

[3] AEVA supports a national approach to mandatory regulatory compliance marking, either through consumer regulation or by utilising existing electrical safety regulations, such as AS/NZS 3820 (Essential Safety Requirements for Low Voltage Electrical Equipment).

[4] AEVA believes that more consumer education is needed to raise awareness of the simple steps to improve safety around lithium-ion batteries. This includes charging best practices, storage recommendations, and guidelines for multi-unit buildings where e-bikes and e-scooters may be charged in places that increase risk to occupants.

[5] AEVA advocates for an e-mobility charging connector standard like USB-C Power Delivery so that it is impossible to mismatch a charger and a battery in all compliant e-mobility products such as e-bikes and e-scooters. The widespread use of DC 'barrel' connectors makes it possible to plug a charger into a battery for which it is not electrically compatible.

[6] AEVA supports a competitive market for readily available and affordable battery health tests which conform to international standards. Likewise, AEVA supports a government mandate ensuring manufacturers freely provide key battery health data, using commonly used diagnostic protocols.

[7] AEVA supports all efforts to sensibly re-use EV batteries where practical, including vehicle upgrades and stationary energy storage. Regulations must not inhibit creative ways for businesses and competent end-users from safely keeping existing batteries operational and enabling maximum utilisation of the resources used to manufacture them.

Commentary

Battery supply chains

In line with Australia harmonising with the European battery passport, AEVA supports establishing an EU-style system of supply-chain transparency, ESG (Environmental, Social, and Governance) due-diligence and circular design requirements for batteries sold in Australia. This should ensure that battery raw materials are sourced responsibly, in line with the aims of the EU Batteries Regulation to manage environmental and human-rights impacts across the value chain, and that batteries are durable, repairable, reusable, easily recyclable and suitable for second-life applications, consistent with the circularity goals in the EU Batteries Regulation and the Ecodesign for Sustainable Products Regulation.

Battery standards

The massive uptick in imported personal e-mobility devices has brought with it a higher risk of battery fires, and this has prompted calls for more regulatory oversight. The NSW state parliament recently passed legislation requiring e-mobility batteries to be marked as compliant, but with different criteria and standards depending on the type of device battery capacity and operational power level. Electrical product safety is the responsibility of States and Territories, not the Commonwealth, though there is clearly scope for coordination. Several states are requesting a national coordinated approach to regulation of e-rideables through bodies such as the National Transport Commission. Regulation around the importation of e-rideables and batteries is also most effective with national legislation to complement state law.

The decision by the Commonwealth to reinstate the previous standard AS 15194 (Electrically power assisted cycles) is only a partial solution, as this standard applies only to e-bikes up to 250 W, and not to other commonly available e-mobility devices. In addition, it does not address battery safety related to overcharging, immersion, certain battery fault conditions, vibration resistance, drop impacts and other fire prevention measures.

Any regulation must be carefully worded and be specific in its intent and application, so as to avoid inadvertently capturing battery electric cars, motorcycles and other products known to present a low fire risk.

Battery safety

Safer use of lithium-ion batteries necessitates behavioural changes, and these must be learned by everyone. Lithium-ion batteries are unique in that they can be difficult to extinguish when forced into thermal runaway. While the likelihood of a battery fire is very low when operated normally, there remains a need to establish strong public awareness around lithium-ion batteries in common use. Regular consumer education at all levels is needed, such that their safe use is as widely understood as other common hazards, such as refuelling a petrol engine lawnmower, or climbing a ladder.

Governments, manufacturers, product distributors, strata managers, fire services agencies, and others should all play a role in developing this material. A set of easily understood principles and consistent warning notices would help reduce risk to property or life. To name a few, these are:

1. Only use equipment which meets applicable Australian standards
2. Only use the correct charging equipment specific for that device

3. Never charge any battery-powered equipment, including e-rideables, e-bikes and scooters in doorways or stairwells, or anywhere where a fire could spread rapidly
4. Never continue to use any battery-powered device which has sustained substantial physical damage, water ingress or exposure to excessive heat.

AEVA is aware of issues in apartment buildings with residents trying to find ways to charge their EVs in the absence of agreed charging methods or equipment. The owners may be running extension leads to power points on common property circuits, sometimes without permission. The use of extension cords presents a physical trip hazard as well as potential electrical hazards like overloaded circuits, overheating sockets and pins, and water ingress of electrical equipment. Moreover, using electricity which is billed back to the Owners' Corporation (OC) rather than an individual account fuels resentment among residents. AEVA agrees that OCs should prohibit unsafe practices, but this also gives further weight to efforts to address the root cause; providing proper charging installations for any resident who requests it, *including renters*.

Battery testing

The market for third-party battery state of health testing in used EVs is developing quickly in Australia. Early data suggest that a battery health test report gives second-hand electric vehicle buyers a high degree of confidence, which is essential for a smooth and widespread transition to EVs. All electric vehicles have a battery management system which monitors key parameters like individual and pack level cell voltages and differentials, temperatures, discharge and recharge currents, cell internal resistance, cycle number, equivalent full cycle capacity and chassis leakage currents. These data are electronically corroborated to compute a battery state of health, and broadcast on the vehicle's communication network.

However, if a manufacturer does not make these data available, quickly determining battery state of health is difficult. AEVA believes governments should compel manufacturers to make this information freely available using commonly available diagnostic instruments. Dealerships and auction houses are beginning to appreciate the value of accurate battery testing when preparing a vehicle for sale, and the practice is only going to become more widespread.

Battery second-use

With over 15 years' worth of high resolution data, the real-world durability of EV batteries is becoming clearer. It is now common to see EVs which have travelled over 200,000 km still reporting states of health in excess of 90% of the original value. This suggests EV batteries in the future will easily outlast the vehicle they were installed in. An EV may be declared a statutory write-off if it was involved in a crash rendering the rest of the car unsalvageable, but the battery will be in pristine condition. Rather than landfilling, or even recycling these batteries, it makes much more sense to re-deploy them into secondary uses such as stationary energy storage for hybrid or off-grid power supplies, re-assembly into new battery packs for vehicles, or some other battery-powered equipment. In some cases, one or two individual cells are causing a battery to report a poor state of health, and their replacement would make the pack as good as new. Applied thoughtfully, this hierarchy of battery reuse will significantly reduce the amount of material destined for waste processing, recycling and rarely, disposal.

Battery recycling/disposal

Batteries which have reached the end of their useful life in any application, or have failed prematurely through physical damage or water ingress, re-use would present a fire risk. In this situation, the responsible act is to recycle the battery for valuable metals and chemicals via hydrometallurgy.

With a battery passport, resource use and material circularity can be assured. National guidelines and relevant dangerous goods storage requirements would ensure any facilities and staff are handling damaged or compromised battery waste safely. From roadside recovery, workshops, through storage and transport, to dismantling and recycling, Australia wold do well to draw on the European Union's work on promoting best practice and sound guidance on safe storage, fire prevention and appropriate emergency response in the event of a fire.

AEVA is keen to see circularity concepts embedded into battery supply chains – such as ethical sourcing of raw materials, design for easier disassembly, improved recyclability and enhanced material recovery – actually realised in practice in Australian recycling plants, not just on paper. This includes harmonising with EU rules which link recycled materials to minimum recycled-content requirements for new batteries, so that end-of-life management genuinely reduces pressure on new mining and lowering overall lifecycle emissions.

Finally, AEVA supports the development of harmonised and internationally-aligned training and competency programs for handling high-voltage traction batteries used in EVs and energy storage systems. Workers across a wide range of sectors, including tow-truck drivers, manufacturing plants, first responders, waste-facility operators and recyclers, should have clear, nationally consistent protocols and standards which ensure safe handling and maintenance on lithium-ion batteries. This helps to minimise fire and environmental risks, prevent hazardous material leakage and improve safety for workers and the community.

Several training packages across the transport and energy sectors cover working with lithium-ion batteries, and registered training organisations are working to harmonise these for a more consistent delivery of training. Efforts must be made to provide time and resources, so that these bodies can continue their work. AEVA advises against creating unnecessary regulatory and licensing burdens on sectors already working safely with batteries, particularly at a time when businesses are struggling to fill skilled roles. Unless already covered by standards cited in legislation, requiring licensed electrical workers for basic battery installation and maintenance would be counterproductive.