

**Submission
No 22**

ELECTRIC AND HYBRID VEHICLE BATTERIES

Organisation: Australian Automotive Dealer Association

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AUSTRALIAN
AUTOMOTIVE
DEALER
ASSOCIATION

RESPONSE TO THE **INQUIRY** **INTO ELECTRIC AND HYBRID** **VEHICLE BATTERIES**

NOVEMBER 2023



CONTENTS

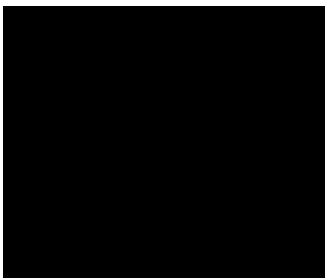
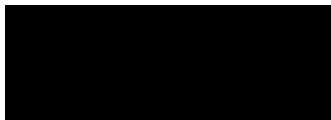
Section 1: Foreword	03
Section 2: Key Points	05
Section 3: Introduction	06
Section 4: Risk and Management of Fires Caused by Hybrid and Electric Batteries	07
Section 5: The Risk to Workers in the Automotive Industry	09
Section 6: Adequacy of Training and Equipment for Workers in the Automotive Industry	10
Section 7: Other Related Matters	12
Section 8: Conclusion	13
Section 6: References	14

FOREWORD

The AADA welcomes the opportunity to make a submission in response to the NSW Parliamentary Joint Standing Committee on Road Safety's Inquiry into Electric and Hybrid Vehicle Batteries.

AADA is the peak industry advocacy body exclusively representing franchised new car Dealers in Australia. New car Dealers range from family-owned small businesses to larger and publicly owned businesses operating in regional Australia and capital cities across the country. There are more than 1,018 new vehicle dealerships in NSW employing more than 17,000 people directly with a total economic contribution of over \$5 billion.

James Voortman
Chief Executive Officer



New South Wales

1,018 Dealerships



Economic Contribution



17,476

Dealer Employees



\$2.09 billion

Dealer Wages



\$1.10 billion

Tax Contribution



\$5.17 billion

Total Economic Contribution

KEY POINTS

1. The incidence of battery fires in road registered electric vehicles is very low.
2. Road registerable EVs and batteries are manufactured according to strict standards and subject to Australian Design Rules and the Road Vehicle Standards Act.
3. Dealers and manufacturers apply training, information, technical data, and emergency response guides (ERGs) to the task of managing EV risks.
4. Vehicle safety recall processes have proved effective in identification and rectification of EV safety risks.
5. Consumers are supplied with, and can access online, comprehensive owner manuals, charging instructions and ERGs.
6. Trained automotive technicians are the best qualified people to work on EVs.
7. Technical and safety training provided by vehicle manufacturers should be formally recognised as appropriate training that equips technicians with the appropriate EV technical skills.
8. Additional technical training should not be forced upon automotive technicians who are already trained in EV safety.
9. EV battery recycling should be included in a National End of Life Vehicle Stewardship Scheme.

INTRODUCTION

This AADA submission will focus on road registerable motor vehicles. The electric vehicle transition is well underway. Over time there will be an increasing number of hybrid and battery electric vehicles (BEVs) imported into Australia and sold through the network of over 3,000 Dealership locations. As of October 2023, the sale of EV hybrids, plug in hybrid electric vehicles (PHEVs) and BEVs represent 18 per cent of new car sales so far this year.¹

It is significant to vehicle safety and beneficial to the community that there are networks across Australia of franchised and authorised agency automotive Dealers to supply, service and repair vehicles under closely connected contracts with vehicle manufacturers. Dealer staff and technicians are trained by the manufacturing supplier in the operation and servicing of EVs and consumers can readily obtain advice and service assistance via the franchised Dealer network.

As vehicle manufacturers increase the offering and availability of hybrid, PHEVs, and BEVs, franchised Dealers will be investing in new equipment and technical training to ensure that the new vehicles are sold and serviced according to the very specific manufacturer endorsed procedures.

Dealers are by necessity early adopters of information, skills, and experience with new hybrid and electric vehicles. Staff training to work safely work on, and around electric vehicles is provided by vehicle manufacturers directly to Dealer staff and through the TAFE training curriculum for automotive technicians.

Dealers take great care with their worker health and safety responsibilities. Workplace health and safety laws are well understood by Dealers and care is taken to ensure safety. It is in the interests of Dealers and their staff to ensure safe work and that safe vehicles are supplied to the market.

Dealers are at the forefront of communication with consumers about the safe operation of vehicles.

A) RISK AND MANAGEMENT OF FIRES CAUSED BY HYBRID AND ELECTRIC BATTERIES

The AADA considers the fire risk caused by EVs to be very low. This is supported by EV Firesafe's assessment of fire risk in road registered vehicles, which declared it as a 'very low risk'.²

EV FireSafe is a private company that received seed funding from the Australian Department of Defence to research electric vehicle high voltage battery fires & emergency response and they found that BEVs are less likely to catch fire than internal combustion engine (ICE) vehicles.

However, that does not mean that the necessary and appropriate precautions are not taken in production, testing, supply, delivery to the consumer, during service and repair, or in the event of roadside recovery. The very low incidence of fires in EV batteries indicates that the safety in design, manufacturing and monitoring of vehicle faults is operating effectively.

SAFE OPERATION OF ELECTRIC VEHICLES IN SERVICE

Vehicle manufacturers also supply comprehensive information which can be used in the event of a vehicle failure or collision emergency to guide first responders in safe methods of dealing with a vehicle that is stranded at the roadside or immobile. Manufacturer supplied emergency response guides (ERGs) are available via websites for example, Hyundai³ and on the EV FireSafe website.⁴

Vehicle safety recalls, where necessary, are communicated directly to owners by manufacturers and publicised via the Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA) website. In the interests of safety and compliance with the RVSA, vehicle manufacturers and Dealers supply comprehensive information regarding recalls and assistance via internet sites and in person at the time of customer visits to dealerships. For example, and relevant to EVs, last year 615 Hyundai Kona EV models manufactured in the years 2018 to 2020 were recalled by Hyundai for battery replacements.⁵

The recall system continues to contribute to mitigating faults and failures which may cause risks to safety. Dealers provide vital information to consumers and manufacturers regarding vehicle safety and the progress of recalls.

Section 4

AUTOMOTIVE SAFETY STANDARDS AND INTERNATIONAL STANDARDS FOR EV BATTERIES

Auto manufacturers design, test and build EVs to meet international and Australian vehicle safety standards. Lithium-Ion batteries applied to the task of powering electric vehicle traction motors are subject to standards applied to the manufacture of batteries used in EVs. The UN ECE Rechargeable Energy Storage System 100 Safety Standard (UN REESS 100) is a standard applied to ensure safety. Australian Design Rules for vehicles and the Road Vehicles Standards Act 2018 also apply and approvals must be obtained for vehicles to be homologated for supply in Australia and the processes are rigorous.

On November 21, 2023, The Hon Carol Brown, Assistant Minister for Infrastructure and Transport announced the making of the Vehicle Standard (Australian Design Rule 109/01 – Electric Power Train Safety Requirements) 2023. Made under section 12 of the Road Vehicle Standards Act 2018, the new ADR further enhances the safe design, manufacture, and testing of electric vehicles. The new ADR 109/01 adopts many of the UN ECE REESS 100 requirements.

As such, the AADA considers that the design features, testing and the built-in protections have contributed to a low risk of fire in BEVs.

NATIONAL ELECTRIC VEHICLE STRATEGY ADDRESSES FIRE RISK AND TRAINING

The recently released National Electric Vehicle Strategy explored EV fire risk and includes government commitment to fund guidance, rescue training, fire safety training and risk. It highlighted a commitment to government support for emergency service workers and first responders by funding the development of world-leading guidance, EV road rescue demonstrations, and fire safety training to address safety and risk knowledge gaps around EVs, chargers and battery technology.

It also acknowledged the potential new risks and challenges for emergency responders, trades workers, and technicians from EVs, noting this as a key consideration for governments to ensure the safety of all Australians as the transport system transitions.

AADA welcomes this Commonwealth Government commitment to the National Electric Vehicle Strategy and the national approach to the implementation of risk management.

B) THE RISK TO WORKERS IN THE AUTOMOTIVE INDUSTRY

Our comments in this section apply only to franchised new car Dealers and we make no comment about emergency services workers or roadside recovery or assistance.

Australia's Dealer network has provided service and repair services to Australians for decades. Over this time, vehicles in Australia have undergone dramatic change with the introduction of several different drivetrains such as hybrids, LPG, LNG, dual fuel vehicles and recently emerging technologies such as battery electric and plug-in hybrids. Throughout all this technological change Dealers have continued to safely provide services on these vehicles to the community through continuous training of automotive technicians.

Dealers benefit from the training packages supplied and delivered to staff upon the arrival of new automotive products and extensive training is undertaken by automotive technicians to ensure they meet the requirements of vehicle manufacturers and responsibilities under occupational health and safety laws. Dealers must ensure that automotive technicians are trained to work on all vehicles safely and do so by engaging trained people and arranging ongoing training.

Working safely on EVs in a service or repair workshop requires that risks are identified, and minimised and this will vary according to the site and the type of work undertaken.

Authorised training courses are available to Dealers (and other service and repair businesses) to teach safe methods of

work, for example the AURETH101 - Depower and reinitialise battery electric vehicles training course. AURETH101 is in effect the basic training that allows staff to work on EVs and access manufacturer supplied technical information via the Australian Automotive Service and Repair Authority (AASRA) and the Motor Vehicle Service and Repair Information Sharing Scheme Act 2021.

Since the introduction of the Motor Vehicle Service and Repair Information Sharing Scheme, many businesses have trained staff in the AURETH101 course which is mandatory for the business and staff member to become eligible to register with AASRA for access to manufacturer supplied EV service and repair information.

C) ADEQUACY OF TRAINING AND EQUIPMENT FOR WORKERS IN THE AUTOMOTIVE INDUSTRY

Automotive technicians are trained in safe EV work practices including the EV safety procedures for safe work, as taught in the AURETH101 course or equivalent provided by vehicle manufacturers. A good example of the minimum training needed for technicians is provided by the approach taken by AASRA to ensure that EV technical information is supplied to people who are trained in EV work.

Franchised Dealers benefit from the direct connection to the franchisor vehicle manufacturer and therefore are directly assisted with training, service and repair information, and technical resources.

These matters of training were raised recently by the NSW Department of Customer Service.

NSW MOTOR DEALERS AND REPAIRERS ACT

In December 2022 the NSW Dept of Customer Service engaged with the automotive industry seeking comments on a discussion paper regarding the training of people working with EVs and qualifications for licensed automotive technicians under the Motor Dealers and Repairers Act.

The Department of Customer Service issued a paper on November 25, 2022, which proposed two new classes of automotive repair work to be covered by the Motor Dealers and Repairers Regulations 2014 for Light Electric Vehicle Mechanic and Heavy Electric Vehicle Mechanic.

The paper raised a proposal that NSW automotive technicians should pass a Certificate III level course qualification in Automotive Electric Vehicle Technology, provided by an RTO, to become eligible to work under new regulations in these new EV classes of work.

AADA provided a submission⁶ which outlined our position that training of staff is important. The existing framework of qualifications, in house Dealer and manufacturer supplied training of trade workers, OH&S requirements, WorkSafe responsibilities and obligations and the interest of Dealers to provide a safe system of work is effective. Further, the risks associated with EVs in workshops are carefully monitored and mitigated by the use of appropriate equipment by trained staff.

It should be noted that specific employee training and categorisation under the Motor Dealers and Repairers Act (MDRA)

Section 6

and Regulations is supported by AADA, and that any changes in training should be included in a review of the MDRA regulations due in 2024. The MDRA regulations sunset on 1 September 2024.

AADA supports the use of a minimum standard of training, as is applied by the AASRA arrangements which require AURETH101 or specific manufacturer training on EV work safety. Technicians working on EVs should be appropriately qualified in automotive work and trained in safe work on electric vehicles.

As a minimum, technicians who have been provided with vehicle manufacturer technical training should have those qualifications recognised immediately and not be forced by regulation to attend further training which covers what they already know.

Whilst there may be some perception of a policy void and urgency, and we are supportive of training for the future, we don't see an immediate need to have NSW motor mechanics trained in the certificate III training course as was proposed. A bridge that may be used could be to adopt the method applied by Australian Automotive Service and Repair Authority (AASRA) to motor vehicle service and repair information, which is to require technician training that:

- Teaches competency in safely depowering, isolating, and re-initialising high voltage battery installed in a scheme vehicle: and
- Is provided by a scheme RTO or provided by, or on behalf of, a manufacturer of one of those systems of a scheme vehicle in which one of those systems is installed.

AADA recommends that this method adopted by AASRA be applied generally to automotive workshops.

QUEENSLAND ELECTRICAL SAFETY ACT REVIEW

AADA also submitted to the Queensland Government's Review of the Electrical Safety Act which proposed to regulate EV electrical work in dealerships as licensed work under the licensing requirements of the Queensland Electrical Safety Act.⁷

AADA is opposed to such an overreach of regulation and submitted that the best people to work on vehicles, EVs included, are those who are automotive technicians not electricians.

D) OTHER RELATED MATTERS

EV BATTERY RECYCLING

AADA responded to a recent EV battery recycling discussion paper issued by the Battery Stewardship Council. In our submission, AADA observed that, AADA members are currently managing end of life EV batteries in collaboration with the vehicle manufacturers, however, as the uptake of EVs in Australia increases it is essential that Australia moves quickly to explore and establish the infrastructure needed to recover resources and avoid the stockpiling of EV batteries and manage subsequent safety risks.

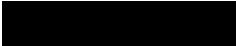
Dealers risk becoming a dumping ground for batteries where there is no clear delegation of responsibilities in all stages of a battery/vehicle life cycle. EV batteries should be provided with a serial number and be easily identifiable, traceable, and accounted for to ensure that stockpiling, dumping or inappropriate use does not occur.

The AADA also recommends that a battery stewardship scheme for EV batteries should be informed by the work being done at the industry level on the prospect of a National End of Life vehicle product stewardship arrangement.

CONCLUSION

We would be happy to meet with you to discuss our submission and participate in any further consultation. If you require further information or clarification in respect of any matters raised, please do not hesitate to contact me.

James Voortman
Chief Executive Officer



REFERENCES

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- 2 - EV Fire Safe - <https://EVfiresafe.com>
- 3 - Hyundai ERGs - <https://www.hyundai.com/au/en/cars/eco/ev-emergency-response>
- 4 - EV FireSafe Website ERGs - <https://www.evfiresafe.com/ev-erg>
- 5 - Road Vehicle Standards Act – Recalls <https://www.vehicle recalls.gov.au/recalls/rec-001592>
- 6 - AADA Submission to NSW Department of Customer Service: Proposed introduction of light electric vehicle mechanic and heavy electric vehicle mechanic repair classes - <https://www.aada.asn.au/submission/consultation-paper-proposed-introduction-of-light-electric-vehicle-mechanic-and-heavy-electric-vehicle-mechanic-repair-classes-in-nsw/>
- 7 - AADA Submission Queensland Review of Electrical Safety Act – EOS Discussion paper - <https://www.aada.asn.au/submission/response-to-review-of-the-electrical-safety-act-2002-electrical-safety-office-discussion-paper/>



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