

Question 1: What are the workforce requirements for wider adoption of electric and alternative energy vehicle infrastructure across NSW?

Specific workforce requirements include:

1. Skilled Tradespeople:

- Electric Vehicle Mechanics and Auto-Electricians: There is a significant need to upskill existing mechanics and auto-electricians to manage the unique technologies and safety requirements of EVs.

As technology changes within vehicles, it is imperative that repairers are up to date with the relevant technology and can ensure the safety of those who are working with electric vehicles, the safety of said vehicle for its owner, along with other road users, with appropriate repairs. Training is critical for this to occur.

- There is a draft regulation out for comment from Fair Trading.
- The current Regulation is scheduled to be repealed on 1 September 2025. The proposed Regulation will replace the current Regulation on 1 September 2025.

New repair class: Electric Vehicle Motor Mechanic

The proposed Regulation will introduce a definition for BEV that is a motor vehicle which only uses an electric motor for propulsion and is not fitted with a fuel cell or an internal combustion engine.

To ensure that the repair classes and prescribed qualifications continue to reflect the current working environment of the motor vehicle industry, the proposed Regulation establishes new repair classes and prescribed qualifications specific to work on BEVs.

The proposed Regulation introduces a new repair class of 'electric vehicle motor mechanic' tailored specifically for motor mechanic work on BEVs only. In order to become an 'electric vehicle motor mechanic', two qualifications pathways are available:

- A dedicated BEV pathway which requires the completion of a Certificate III in Automotive Electrical Vehicle Technology, including specialised units for light or heavy vehicles. This pathway is tailored for new entrants to the motor vehicle repair industry who intend to carry out motor mechanic work exclusively on BEVs.
- A BEV Bridging Pathway which requires a current motor mechanic tradesperson certificate and the completion of AURSS00064 – Battery Electric Vehicle Inspection and Servicing Skill Set. This pathway is tailored for existing motor mechanics seeking to upskill, or new entrants to the industry who intend to carry out motor mechanic work on both internal combustion engine vehicles and BEVs.

Upskilling requirements for existing tradespersons who wish to work on battery electric vehicles

In response to both the Statutory Review and feedback received during public consultation on repair classes and qualifications, the proposed Regulation introduces

new conditions for tradesperson certificates to ensure tradespersons are appropriately qualified to conduct repair work on BEVs.

A tradesperson certificate in one or more of the following repair classes will be subject to the condition that the holder is prohibited from carrying out repair work on a BEV:

- Automotive electrician
- Body maker
- Exhaust repair worker

Panel beater

- Transmission specialist
- Underbody work
- Vehicle painter.

A tradesperson certificate in one or more of the following repair classes will be subject to the condition that the holder is prohibited from carrying out repair work on hybrid vehicles and BEVs:

- Electrical accessory fitting work
- Radiator repair work and
- Steering, suspension and wheel alignment work.

The proposed Regulation exempts the holder of one of the above tradesperson certificates from these conditions where they have the required qualifications or experience. In order for the above condition to be removed, the holder of a tradesperson certificate must complete a unit of competency for depowering and reinitialising BEVs – *AURETH101 Depower and reinitialise battery electric vehicle* and apply to NSW Fair Trading to have the condition removed from their tradesperson certificate(s).

Please note that the role of automotive electricians and their access to vehicles is still under review by Fair Trading. They are currently considering industry feedback before finalizing their decision on the regulations concerning automotive electricians.

- Electrical Engineers: These professionals are essential for designing, developing, and maintaining the electrical systems in EVs and the associated charging infrastructure.

- Charging Infrastructure Installers and Technicians: The expansion of charging networks necessitates a workforce proficient in installing, maintaining, and repairing charging stations.

2. Specialized Roles:

- Battery Technology Experts: As battery technology evolves, specialists are required to handle the manufacturing, maintenance, and recycling of EV batteries.

- Renewable Energy Experts: A stable and sustainable energy supply for charging infrastructure relies on expertise in renewable energy sources such as solar and wind power.
- Manufacturing and Production Personnel: A growing EV market demands a workforce skilled in manufacturing components and assembling electric vehicles.

3. Workforce in Supporting Sectors:

- Logistics and Transport: The transition to electric vehicles in the freight and logistics sector requires specialized training for drivers, mechanics, and other personnel involved in operating and maintaining electric trucks and other heavy vehicles.
- Local Government Staff: Local councils need to be equipped with the knowledge and skills to manage the impact of EVs on local infrastructure, including roads, bridges, and parking.

4. Challenges and Considerations:

- Skills Shortages: A key challenge is the potential shortage of skilled workers in the EV and renewable energy sectors.

Australia is experiencing a tight labour market with evidence of extensive skills shortages across many occupations. The latest JSA (Job Skills Australia) Skills Priority List showed that 36% of occupations across Australia were in shortage in 2023, five percentage points higher than the equivalent figure in 2022. Skills shortages are a particular issue for the automotive industry. Of the 26 six-digit ANZSCO occupations that are most prominent in the automotive industry, 35% were assessed to be in shortage by JSA in 2023. A range of recent studies indicate that skills shortages are amongst the biggest challenges facing automotive businesses.¹

- Training and Education: Targeted training programs, including TAFE courses, are necessary to address the skills gap and ensure a sufficient supply of qualified professionals.

Training packages specify the knowledge and skills required by individuals to perform effectively in the workplace, expressed in units of competency. Training packages also detail how units of competency can be packaged into nationally recognised and portable qualifications that comply with the Australian Qualifications Framework (AQF).

Training packages are used for a range of purposes, but predominantly:

- by training providers, to design training curriculum tailored to support individual learner needs, and the needs of employers and industry
- by employers, to assist with workforce design, development, and structure.

¹ Skills shortages in the Australian automotive industry MTAA member survey findings 2024; Deloitte Access Economics

It is important to note however that Training Packages, due to a variety of reasons do not always reflect current work practices and technology. This is where tailored and current industry developed training allows individuals to develop skills that are current and utilise the most up-to-date technology and systems.

- Regional Development: It is important to ensure that skill development and training opportunities are available in regional areas of NSW to support the transition in those regions. This is noted in the NSW Skills Plan <https://education.nsw.gov.au/about-us/strategies-and-reports/nsw-skills-plan-2024-2028--building-skills-and-shaping-success>
- Government Support: Government initiatives and funding are crucial to support the development of the EV workforce and the deployment of charging infrastructure.

Question 2: What state and Commonwealth funded initiatives have supported the rollout of electric and alternative energy source infrastructure to support eligible heavy vehicles?

Commonwealth Initiatives:

- Driving the Nation Fund: Supports the demonstration and deployment of heavy battery electric vehicles (BEVs) and charging solutions, as well as other innovations to accelerate EV adoption.
- National Electric Vehicle Strategy: Aims to improve EV affordability, expand charging infrastructure, and reduce emissions from the transport sector.

State Initiatives:

- NSW Electric Vehicle Strategy: Includes programs like EV Fast Charging Grants, Destination Charging Grants, Kerbside Charging Program, and EV Ready Buildings Grant Program, contributing to a comprehensive charging network.
- EV Destination Charging Grants: Support installation of charging infrastructure at visitor destinations across regional NSW, alleviating range anxiety and supporting EV-friendly road trips.
- EV Fleet Incentive Program: Provides support for businesses and local government fleets to purchase EVs and charging infrastructure.

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