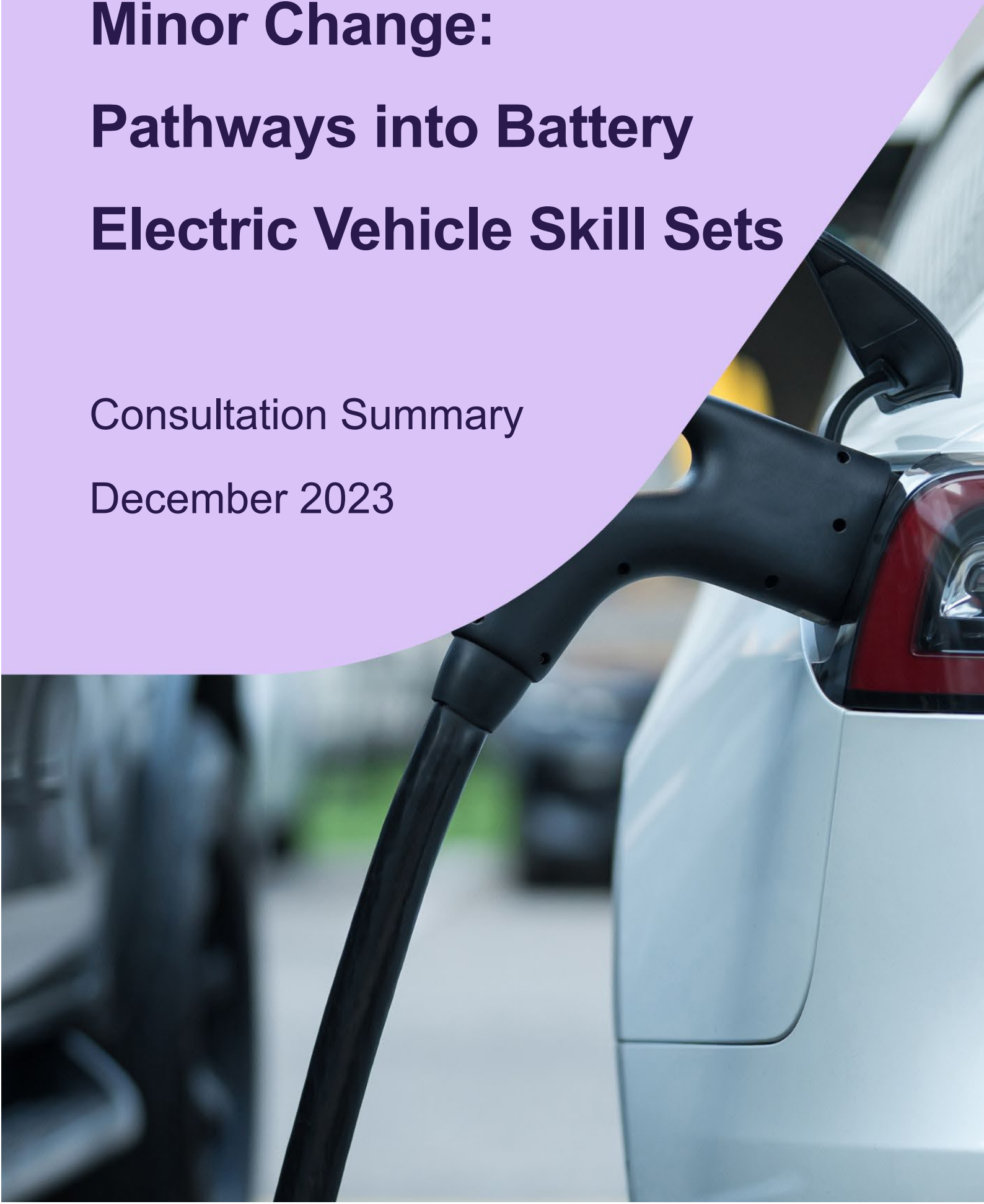


Minor Change: Pathways into Battery Electric Vehicle Skill Sets

Consultation Summary

December 2023



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Background to the Minor Change

Industry feedback received by the Mining and Automotive Skills Alliance (AUSMASA) highlighted the fact that entry to the Battery Electric Vehicle (BEV) Skill Sets was limited to graduates of automotive electrical, light vehicle mechanical and heavy commercial vehicle mechanical qualifications, excluding those with qualifications in mobile plant technology.

In response to industry feedback, AUSMASA sought stakeholder feedback on the impacts of adding AUR31220 - Certificate III in Mobile Plant Technology to the pathways information of the two BEV Skill Sets.

This document outlines the consultation strategy adopted and the results collected by AUSMASA in response to the Battery Electric Vehicle Skill Sets proposed change.

Battery Electric Vehicle Skill Sets Consultation

AUSMASA sought feedback from stakeholders Australia wide through a variety of channels including the AUSMASA website, via direct email to industry, training providers and State Training Authorities, key Industry Associations and Peak bodies, via our monthly newsletter The Journey and updates to our social media pages.

The AUSMASA website provided full details on the proposed change and consultation strategy for adding AUR31220 Certificate III in Mobile Plant Technology to the list of pathway qualifications into:

- AURSS00063 Battery Electric Vehicle Diagnose and Repair Skill Set
- AURSS00064 Battery Electric Vehicle Inspection and Servicing Skill Set.

Stakeholders were advised of:

- the rationale and impact of the change
- the wording that would appear in each of the skill sets should the change be agreed.

Specifically, stakeholders were advised that should the change proceed, the Pathways Information for each skill set would read as follows (new text in bold):

This Skill Set is limited to those who have completed one of the following qualifications:

- AUR30320 Certificate III in Automotive Electrical Technology or equivalent
- AUR30620 Certificate III in Light Vehicle Mechanical Technology or equivalent
- AUR31120 Certificate III in Heavy Commercial Vehicle Mechanical Technology or equivalent
- **AUR31220 Certificate III in Mobile Plant Technology (graduates of the EWP stream must have completed AURETR129 Diagnose and repair charging systems and AURETR130 Diagnose and repair starting systems)**

The units provide credit towards AUR40620 Certificate IV in Automotive Electrical Technology, AUR32721 Certificate III in Automotive Electric Vehicle Technology and other qualifications that allow for the selection of these units.

Timeline of Communications

The following outlines the completed consultation milestones:

5 September 2023

- Announcement made on new open consultation Feedback page of the AUSMASA website.

5 September 2023

- Known individuals to AUSMASA who represent major stakeholders in mining, automotive and VET industries are contacted via email.

6 September 2023

- The Journey subscribers receive a bulk email, announcing the open consultation period.

7 September 2023

- Training.gov.au on-scope organisations for the BEV Skill Sets and four affected Certificate III qualifications receive an email, announcing the open consultation.

17 September 2023

- Subscribers receive The Journey newsletter, with the consultation opportunity promoted.

21 September 2023

- Posts made to the AUSMASA Facebook and LinkedIn pages, with the feedback form promoted.

6 October 2023

- Consultation closed.

Consultation Respondents

A total of 122 responses were received. The following charts illustrate the breadth of consultation achieved including across all states and territories.

Figure 1 Responses by jurisdiction, displayed by largest number of responses to smallest number of responses

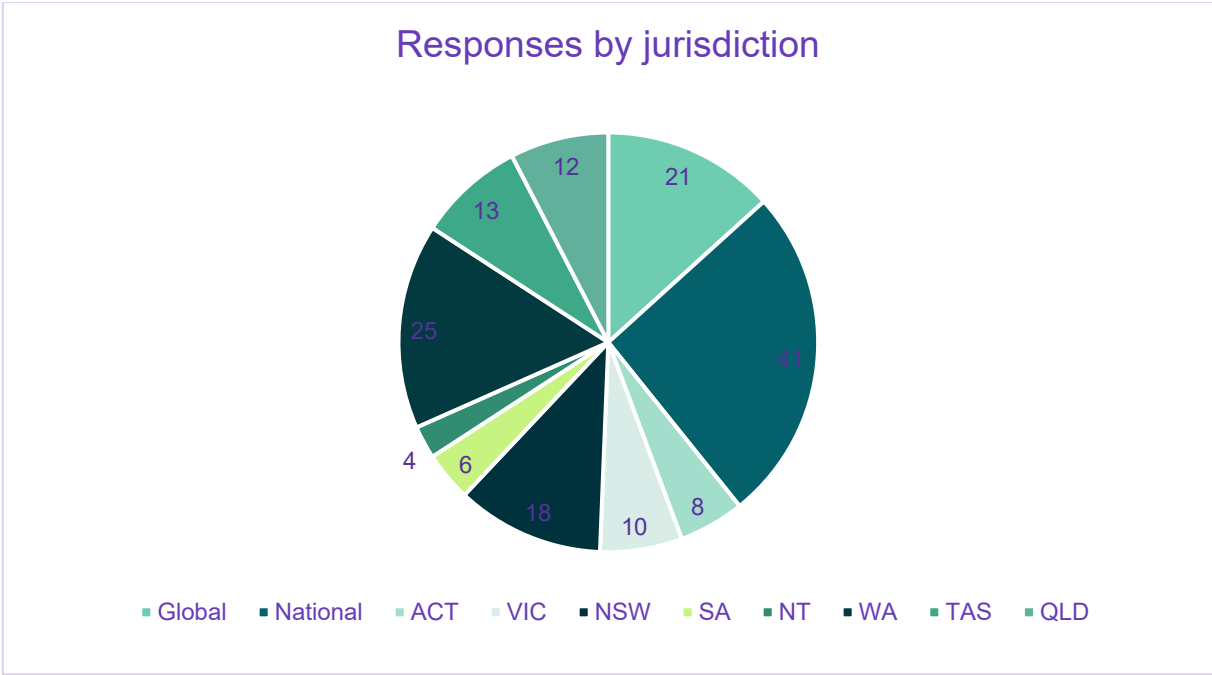


Figure 2 Responses by organisation type, displayed by largest to smallest number of responses

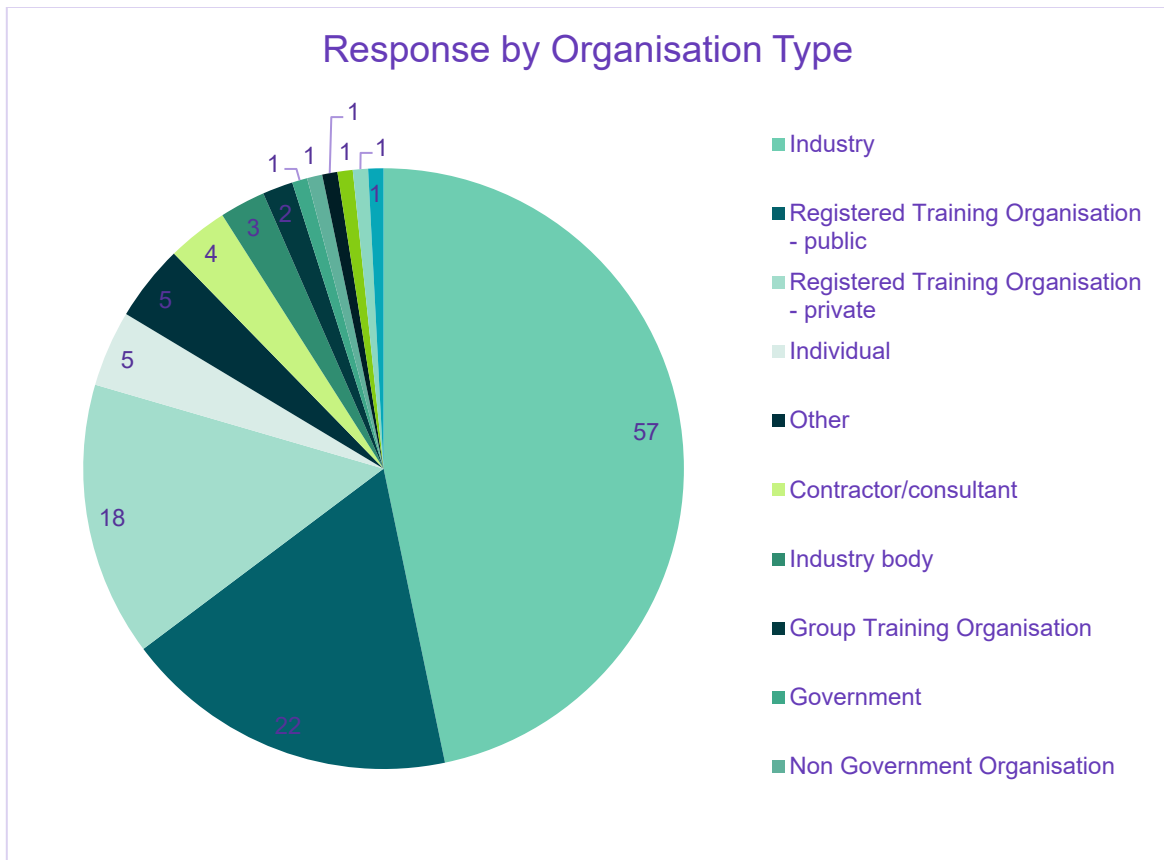


Figure 3 Number of respondents in support of change to AURSS00063

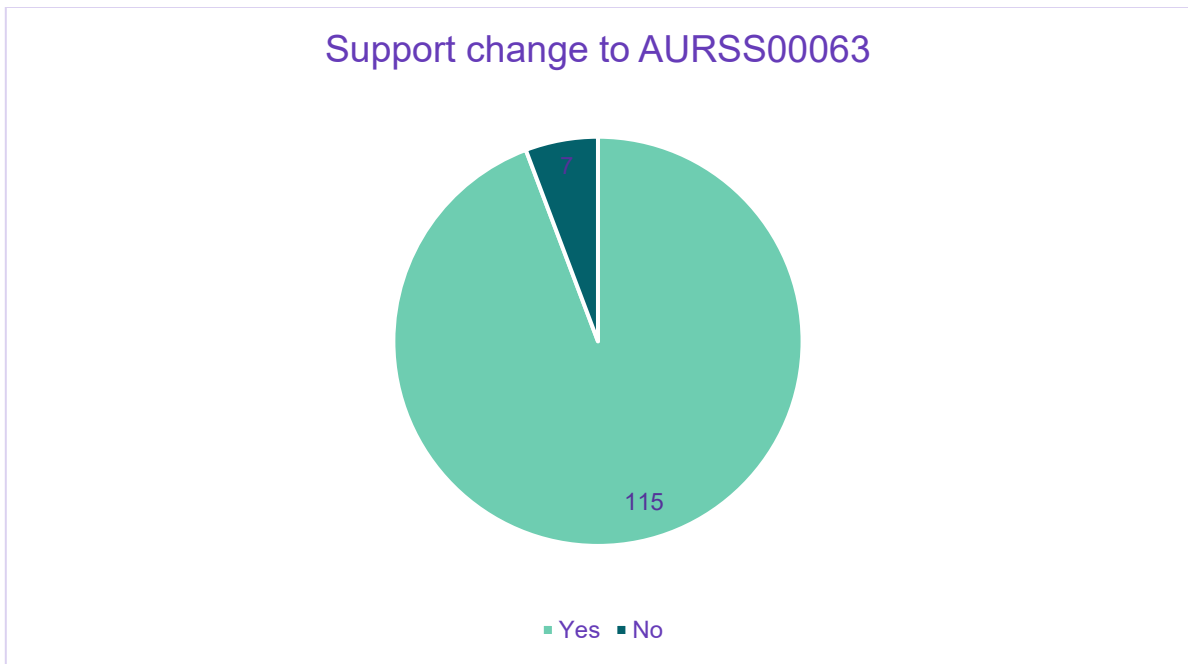
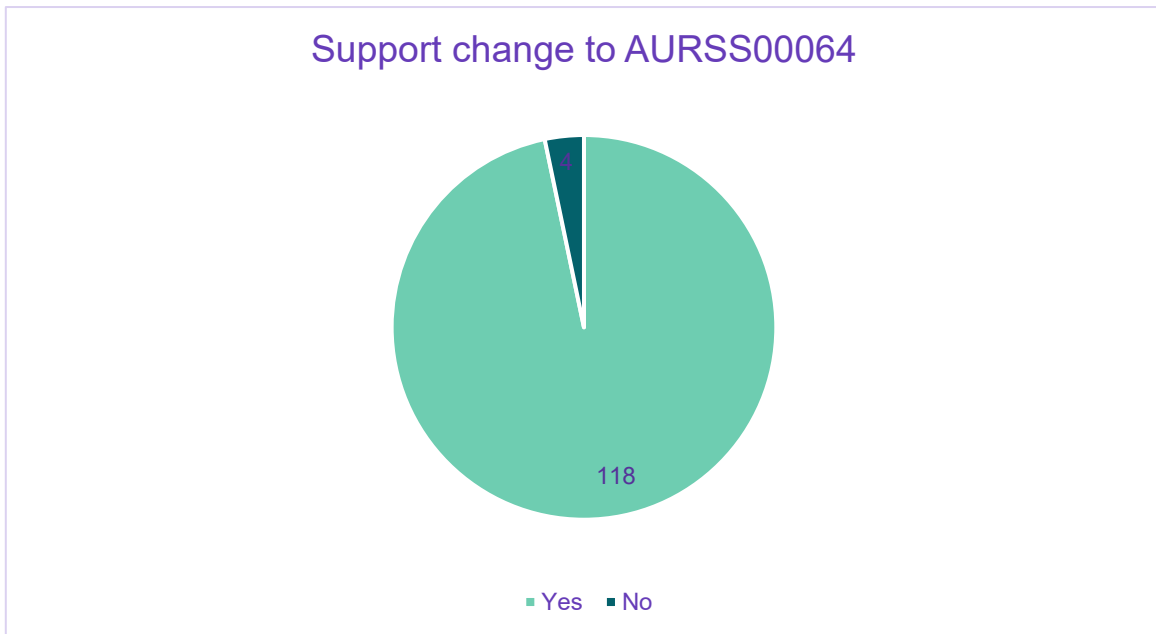


Figure 4 Number of respondents in support of change to AURSS00064



Consultation Summary

Most respondents were in support of adding the AUR31220 Certificate III in Mobile Plant Technology to the Pathways Information of both skill sets.

The comments made by respondents echoing the need for including AUR31220 Certificate III in Mobile Plant Technology as a pathway qualification collectively highlighted recognition of the need to adapt to emerging technologies, ensure workforce readiness, and address potential skills shortages in the rapidly evolving landscape of battery electric vehicles.

The following outlines some of the key themes emerging from feedback received:

Industry Shift Towards Battery Electric Systems:

- Acknowledgment of the major shift in automotive and machinery industries towards battery electric systems and that the industry needs to prepare for this, and further future developments.
- Recognition of the focus on sustainable mining operations driving the introduction of battery electric vehicles in the mining space.
- Acknowledgment of the evolving landscape with a focus on climate change, global trends, and new technology introductions.
- Original equipment manufacturers (OEMs) already producing battery electric equipment, showing the need for corresponding skill sets.
- Recognition that battery electric technology is an emerging field with significant implications for the industry and need for training.

Skills for the Future:

- Emphasis on expanding skill sets to ensure technicians are equipped to handle emerging technologies, with support for upskilling technicians to meet industry demands.
- Concerns about potential skills shortages and the importance of avoiding bottlenecks in the qualification entry process.

- The importance of aligning qualifications with industry feedback to ensure relevance, meets demands, as well as recognising existing qualifications.
- Recognition of the skills possessed by mobile plant technicians and the need to adapt to changes in the industry.
- Recognition of the need to address skills gaps and the potential increase in demand for skilled technicians as electric vehicles become more prevalent.
- The importance of aligning workforce skills with the forecasted increase in hybrid and battery electric equipment as well as the importance of keeping skills current with new technology standards.
- Recognition that broadening entry criteria can diversify the workforce and bring in specialised skills.
- Recognition of AUR31220 Mobile Plant Technology as an allied trade with relevance to heavy commercial vehicle technology.

Skill set pathway information provided:

Some feedback received referred to the enrolment of students and pre-requisites. AUSMASA responded directly to these comments for clarification.

Suggested consideration needed when delivering BEV Skill Set training to the industry. Enquiries from Mobile Plant background applicants to attend training have to be declined due to the incorrect entry qualification for the pathway entry.

AUSMASA response:

While the skill set specifies pathway information, training providers are not precluded from delivering the individual units.

Suggested consideration that someone that has the mobile plant technology qualification will be able to look after automotive electric vehicles without being an automotive technician

would be a bad decision from a lack of understanding and skills from the automotive service and repair angle.

AUSMASA response:

Thank you for your feedback. This skill set includes the skills required to diagnose and repair a battery electric vehicle (BEV). It would not change the requirement for someone to work on an electric vehicle without completion of relevant pre-requisites. This skill set is for individuals with existing automotive technology skills and knowledge, who work in automotive mechanical or electrical technical contexts, and who are looking to upskill in the area of BEVs.

Notable feedback related to the differentiation between light and heavy vehicles and potential challenges in accessing the skill set.

Differentiation Between Light and Heavy Vehicles:

- Concerns about Registered Training Organisations (RTOs) with light vehicle qualifications delivering the skill set and heavy-qualified students working on light vehicles, potentially leading to inconsistencies.
- Questioning whether the proposed changes consider heavy machinery requirements. Advocacy for maintaining a distinction between skill sets for light and heavy vehicles to address the unique challenges associated with each category.
- Referencing UEERL0007 Disconnect-reconnect 3.3 kV electric propulsion components of self-propelled earth moving vehicles. If a mechanic trained on light vehicles attempts to work on Heavy Battery Electric Vehicles (HBEV) or Hybrid Electric Vehicle (HEV), there may be significant risks.
- Suggestion for distinct skill sets for Heavy Battery Electric Vehicles (HBEV) and Battery Electric Vehicles (BEV) on-road and commercial, considering the unique characteristics and procedures associated with each.

Challenges in Upskilling Technicians:

- Highlights that entry to the skill set is limited to certain qualifications, or their equivalent, which potentially excludes those without the current qualifications.

- Mention of challenges in obtaining information from heavy Original Equipment Manufacturers (OEMs) such as CAT, Cummins, and Komatsu regarding their hybrid and BEV equipment systems and procedures.
- Suggestions to consider other industries, including agriculture and parks & gardens, who utilise electric vehicles and require upskilling of technicians.

AUSMASA response:

We appreciate and note all the feedback we have received. In this consultation, we are actively addressing pathways into AURSS00063 Battery Electric Vehicle Diagnose and Repair Skill Set and AURSS00064 Battery Electric Vehicle Inspection and Servicing Skill Set. In 2024, AUSMASA is committed to conducting a comprehensive review of several AUR qualifications and skill sets encompassing these specific qualifications to ensure their continued fit for purpose.

As part of the consultation, AUSMASA contacted the stakeholders who responded and those who did not support the BEV Skill Set change, to further explore their rationale and to satisfy AUSMASA that there would be no unintended consequences of the changes.

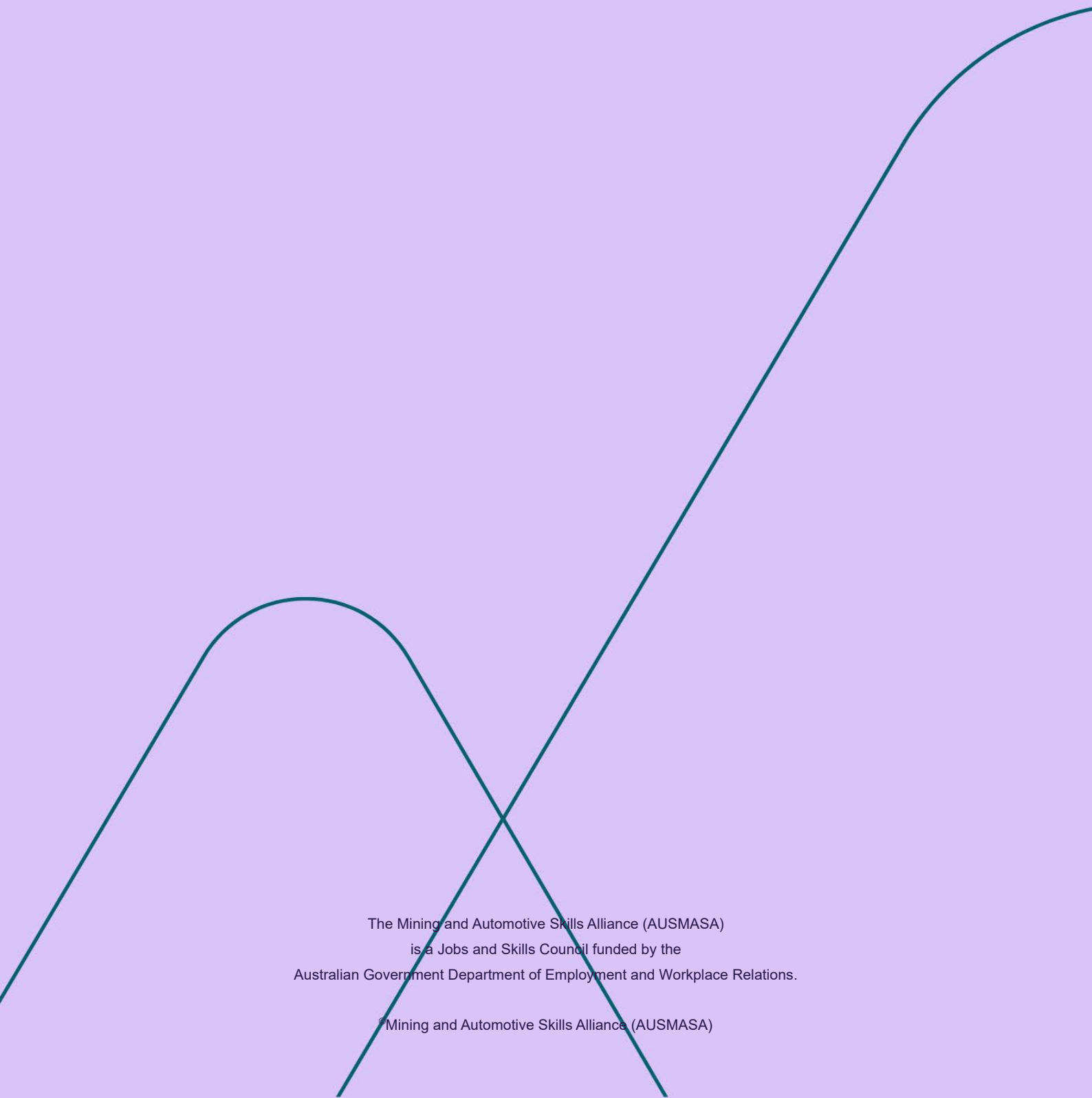
Outcome

The majority of respondents were in support of both changes to the AURSS00063 Battery Electric Vehicle Diagnose and Repair Skill Set and AURSS00064 Battery Electric Vehicle Inspection and Servicing Skill Set.

As such, AUSMASA will move to add *AUR31220 Certificate III in Mobile Plant Technology* as a pathway to *AURSS00063 Battery Electric Vehicle Diagnose and Repair Skill Set* and *AURSS00064 Battery Electric Vehicle Inspection and Servicing Skill Set*.

In making a minor change AUSMASA will:

- keep a record of the minor change, setting out the date the change was made, a detailed description of the change, the reason for the change, and any relevant evidence of support for the change
- advise relevant stakeholders, including State Training Authorities (STAs), of the minor change.



The Mining and Automotive Skills Alliance (AUSMASA)
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