



Name: Mining and Automotive Skills Alliance Ltd

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1. Reduce the cost of meeting carbon targets

1. What could be done to improve the cost-effectiveness and alignment of policies to reduce emissions across the industrial, electricity and transport sectors?

Expanding EV-focused training, like the AUR Certificate III in Automotive Electric Vehicle Technology, can support the transition to EVs and lower-emission vehicles by equipping the workforce with the necessary skills. As the only EV-dedicated VET qualification, this Certificate was launched in 2021 with an initial cohort of 4 enrolled students, which had risen to 70 in 2023. While upskilling through other pathways like the AUR EV-based skill sets has been far higher, we cannot assume all of these students are at the same level of competence to service in excess of 180,000 EVs. Consequently, we consider that much of the workforce remains unskilled and/or reliant on the EV manufacturers for bespoke, unaccredited, and likely inconsistent training, which we also have little data on, and visibility of such training. The Canberra Institute of Technology's EV Centre of Excellence provides an avenue to triage much of this work.

In contrast, the mining industry directly generates emissions from off-grid electricity generation from sources such as coal and natural gas. This electricity typically powers mining sites and, in some cases, new electric haul trucks and mobile plant equipment, which is helping the industry to reduce its emissions. However, similar to the above issues in the automotive industry, the skills needed to deploy, repair and maintain electric haul trucks and mobile plant equipment are lacking. For example, when Liebherr supported a 'repower' (or conversion) of its R 9400 excavator in Western Australia in 2023, the manufacturer brought several staff in from France in order to support local Australian workers to operate and maintain it going forward. Further, as VET has no accredited and dedicated EV-focused training for heavy electric vehicles or mobile plant equipment, this is likely complicating the deployment, repair, and maintenance of them in the mining industry. Consequently, while mines are increasingly deploying renewable energy sources like solar and wind to power their sites, this may not be being extended to its fullest potential to address fossil fuel combustion. This is a key issue for the industry as its fuel combustion emissions are over one and a half times larger than those from on-site electricity generation.

2. Are there gaps in the emissions-reduction policies in the industrial, electricity and transport sectors which should be addressed?

EVs are an important component in the emissions reduction equation. Even more so for heavy vehicles, however, adequate policies are lacking around the handling, dismantling, transport, and storage of EVs post-collision. EV fires are hazardous and challenging to control, especially on the road. Sustained uptake of EVs requires substantive training and handling policies around such instances.

Another potential policy gap includes the Government's 82% renewable electricity target, primarily based on the National Electricity Market (NEM). While off-grid emissions are nowhere near as substantial as NEM, they are a key source of mining emissions, due mine sites' off-grid locations, which the industry is increasingly working to reduce. As

such, while policies like the New Vehicle Efficiency Standard (NVES) and Australian Design Rule (ADR) 80/40 are aimed at reducing emissions from light and heavy vehicles, there are few policies, incentives, or frameworks aimed at mobile plant equipment and on-site generation. Furthermore, as renewable energy generation in off-grid mine sites could support existing electricity needs and electric vehicles and mobile plant equipment, we consider that this represents a gap that the Government should work with the industry on.

3. Are there any duplicative emissions-reduction policies in the industrial, electricity and transport sectors which could be streamlined?

As above, rather than duplication, we consider that such policies, frameworks, and related supports only intersect with our industries in a couple of key ways. However, one possible area where there may be a degree of duplications involves states and territories' public transport policies, particularly for buses. States and territories have a range of different transport policies for electrifying buses, both targeted at this aim and public transport more generally, with several of them pursuing bus electrification on a range of different timeframes. Policy duplication in this area could be reduced, with greater efficiencies and consistency for the heavy automotive industry, if these policies were more aligned with each other, grid capacity, and the industry's ability to deliver. While also an indication of a nascent industry maturing, range issues with some new electric buses deployed in Canberra could be an example of a technical issue that could have been addressed earlier with more coordination and testing.

2. Speed up approvals for new energy infrastructure

1. Are planning and approvals processes for large energy infrastructure taking too long? If so, what causes the most delay?

The participant did not respond to this question.

2. How can planning and approvals processes be sped up without unduly compromising regulatory standards?

The participant did not respond to this question.

3. Should clean energy projects be treated differently to other projects for the purpose of environmental and other approvals? If so, how?

The participant did not respond to this question.

4. What can be done to build local community support for new energy infrastructure projects?

The participant did not respond to this question.

5. Please outline any evidence showing the productivity benefits of faster approvals for energy projects.

The participant did not respond to this question.

3. Encourage adaptation by addressing barriers to private investment

1. What are the barriers and enablers impacting decisions by owner-occupiers, landlords and developers about how housing is built and updated over time so that it is resilient to the effects of climate change?

The participant did not respond to this question.

2. What information do people need to make decisions about where to live, how to build and how to upgrade their homes to appropriately factor in climate change?

The participant did not respond to this question.

3. What are the most cost-effective retrofitting options for improving the resilience of Australia's existing housing stock? What are their costs and benefits?

The participant did not respond to this question.

4. What role might minimum standards play in ensuring the resilience of Australia's housing stock?

The participant did not respond to this question.

5. The impacts of climate change are being factored into the regulation of where and how houses are built in different ways around Australia. What does leading practice look like? Where is there room for improvement? Are there lessons we can learn from other countries?

The participant did not respond to this question.