

# Transport and Infrastructure Net Zero Consultation Roadmap

## Take the survey

Department of Climate Change, Energy, Environment and Water

---

Response received at:

July 25, 2024 at 1:40 PM GMT+10

Response ID:

sbm2f7e12545b72a068ca3ba

---

- 1 Confirm that you have read and understand this privacy notice.  
Yes
- 2 Please indicate how and if you want your submission published.  
Public
- 3 Published name  
Australian Manufacturing Workers' Union
- 4 Confirm that you have read and understand this declaration.  
Yes
- 5 First name  
Mark
- 6 Last name  
Dean
- 7 Email  
[REDACTED]

- 8 Phone  
[REDACTED]
- 9 Who are you answering on behalf of?  
Organisation
- 10 Organisation name  
Australian Manufacturing Workers' Union
- 11 What best describes you or your organisation?  
Union
- 12 What sector do you represent?  
Maritime  
Rail  
Heavy road vehicles (trucks, buses etc.)  
Light road vehicles (cars, utes etc.)  
Public transport  
Energy
- 13 What state or territory do you live in?  
Victoria
- 14 Postcode  
3000
- 15 What area best describes where you live?  
City
- 16 1. Do you support the proposed guiding principles?  
Yes
- 17 1.1 Please add details to your response.  
Not answered

- 18** 2. Do you support the use of the avoid-shift-improve framework as a tool to identify opportunities for abatement?  
Yes
- 19** 2.1 Please add details to your response.  
Not answered
- 20** 3. Do you agree the development of a national policy framework for active and public transport will support emissions reduction?  
Yes
- 21** 3.1 Please add details to your response.  
Not answered
- 22** 4. What should be included in a national policy framework for active and public transport and how should it be developed?  
Not answered
- 23** 5. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure the movement of people contributes to transport emissions reduction?  
Not answered
- 24** 6.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure that the movement of goods contributes to transport emissions reduction?  
Not answered
- 25** 6.2. How would these actions address the identified challenges and opportunities for emissions reduction in the movement of goods?  
Not answered

- 26 7. Do you agree with the proposed net zero pathway for light road vehicles?  
Not answered
- 27 7.1 Please add details to your response.  
Not answered
- 28 8. The Australian Government is currently developing an Australian New Vehicle Efficiency Standard and has already begun to implement actions in the National Electric Vehicle Strategy.8.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce light vehicle emissions?  
Not answered
- 29 8.2 How would these actions address the identified challenges and opportunities to reduce light vehicle emissions?  
Not answered
- 30 9. Do you agree with the proposed net zero pathway for heavy road vehicles?  
Not answered
- 31 9.1 Please add details to your response  
Not answered
- 32 10. The proposed pathway for heavy road vehicles relies on a mix of battery electric, hydrogen fuel-cell and low carbon liquid fuels.Rank from 1 to 3, the order in which these should be prioritised for emissions reduction.  
1: Low carbon liquid fuels  
2: Hydrogen fuel cell  
3: Battery electric

- 33 10.1 Please add details to your response. Why did you rank them in that order?  
Not answered
- 34 11. What role should low carbon liquid fuels play in the heavy vehicle decarbonisation?  
Not answered
- 35 12. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce heavy vehicle emissions?  
Not answered
- 36 13. Do you agree with the proposed net zero pathway for rail?  
Not answered
- 37 13.1 Please add details to your response.  
Not answered
- 38 14. The proposed pathway for rail relies on a mix of battery electric, hydrogen fuel-cell and low carbon liquid fuels. Rank from 1 to 3, the order in which these should be prioritised for emissions reduction.  
Not answered
- 39 14.1 Please add details to your response. Why did you rank them in that order?  
Not answered
- 40 15. What role should low carbon liquid fuels play in rail decarbonisation?  
Not answered
- 41 16. What additional actions by governments, communities, industry

and other stakeholders need to be taken now and in the future to reduce rail emissions?

Not answered

42 16.1 How would these actions address the identified challenges and opportunities to reduce rail emissions?

Not answered

43 17. Do you agree with the proposed net zero pathway for maritime?

Not answered

44 17.1 Please add details to your response.

Not answered

45 18. The Australian Government is engaging in consultation as part of the development of the Maritime Emissions Reduction National Action Plan and those consultations will also inform the final Roadmap and Action Plan. 18.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce maritime emissions?

Not answered

46 18.2 How would these actions address the identified challenges and opportunities to reduce maritime emissions?

Not answered

47 19. Do you agree with the proposed net zero pathway for aviation?

Not answered

48 19.1 Please add details to your response.

Not answered

49 20. The Australian Government has already engaged in consultation on

aviation decarbonisation through the development of the Aviation White Paper and those consultations will also inform final Roadmap and Action Plan.

Not answered

- 50 20.1 What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce aviation emissions?

Not answered

- 51 21. Do you agree with the proposed net zero pathway for transport infrastructure?

Not answered

- 52 21.1 Please add details to your response.

Not answered

- 53 22. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to reduce transport infrastructure emissions and ensure that transport infrastructure is ready for and enables low-emission transport modes?

Not answered

- 54 22.1 How would these actions address the identified challenges and opportunities to reduce transport infrastructure emissions?

Not answered

- 55 23. What additional actions by governments, communities, industry and other stakeholders need to be taken now and in the future to ensure the energy mix is ready to support transport emissions reduction?

Not answered

- 56 24. How should the use of low carbon liquid fuels (LCLFs) be prioritised across different transport modes over time to achieve maximum abatement?  
Not answered
- 57 25. What are the best ways for the Australian Government to work collaboratively with industry, business, governments and communities to implement the proposed pathways?  
Not answered
- 58 25.1 What are good domestic or international examples of partnership and collaboration on transport and transport infrastructure emissions reduction that could inform the final Roadmap and Action Plan?  
Not answered
- 59 25.2 What opportunities can Government leverage to show leadership in Australia and internationally?  
Not answered
- 60 26. What measures and metrics should be used to evaluate the final Transport and Infrastructure Net Zero Roadmap and Action Plan?  
Not answered
- 61 26.1 What other data and evidence could governments use and how could this offer further insights on the pace, scale and location of transport emissions reduction pathways?  
Not answered
- 62 27. Do you have any feedback on the proposed review process?  
Not answered
- 63 28. Do you have any further feedback on the Consultation Roadmap and proposed pathways?

Not answered

64 28.1 Is there anything missing? Are the sections appropriately integrated? Is the Roadmap appropriately ambitious?

Not answered

65 29. Is there any further information or documentation that you wish to be considered with your submission?

Not answered

66 Would you like to upload a document?

Yes

67 Have you removed any identifying information from your submission?

Yes

68 Upload a submission

sm2024122.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered



Level 4 133 Parramatta Rd  
Granville NSW 2142

Ref: sm2024122

25 July, 2024

## **AMWU Submission to the Transport and Infrastructure Net Zero Consultation Roadmap**

The Australian Manufacturing Workers' Union (AMWU) has organised and represented workers in the Australian manufacturing sector for over 170 years. Today, the AMWU represents over 60,000 members in every Australian city and region.

Our representation includes thousands of workers around the country building, maintaining and repairing Australian vehicles like buses, trucks and trailers. Our members are the skilled tradespeople that make the vehicles Australians take to work, school and leisure, and the trucks that move our goods around the country.

The AMWU has been building, maintaining and repairing these and other vehicles for 159 years, since the formation of The Vehicle Builders Employees' Federation of Australia, which merged with the AMWU in 1993. This long and proud tradition of our union as the force behind vehicle building is an integral part of Australian vehicle manufacturing industries.

The AMWU believes that Australian jobs are central to the Federal Government's Transport and Infrastructure *Net Zero Consultation Roadmap* (henceforth NZCR). Without putting Australian jobs at the centre of a strategy to reduce transport emissions through a planned decarbonisation of the transport sector, Australia can neither benefit socially nor economically from the transition to a zero-carbon world and a climate-friendly industrial future. A sustainable transport transition means good jobs for Australian manufacturing workers in sustainable industries. An approach with this principle at its core will deliver the greatest benefits to Australian communities from our net-zero economic transition.

It is in this spirit that the AMWU has a vision to represent Australian manufacturing workers that build, service and maintain Australia's low and zero emissions vehicle road transport fleets, ranging from buses and trucks to light passenger vehicles. If the Government ensures that Australian industry's contribution to the net zero transition is maximised, workers in these industries will benefit from the NZCR.

At a time when Australia should be the world leader in climate change adaptation, economic and social expedience by the previous Government has left us in a disadvantaged position compared to many other industrial nations around the world. The AMWU believes that the Government's objectives for its NZCR for transport set important directions for the growth of a domestic low and zero emissions vehicle industry. But this plan must prioritise manufacturing jobs first, because the transformation of industry is pivotal to our national decarbonisation efforts. This means that encouraging a rapid increase in demand for low and zero emissions vehicles must consider that manufacturing industries have a central role to play. We cannot overcome issues such as choice and availability of vehicle models, costs to consumers, emissions and infrastructure without first taking stock of our existing capabilities and developing strategic intent to maximise them.

Australian workers in skilled trades already make high-quality vehicles in Australia. The opportunities that lie ahead for Australian workers must be maximised through strategically linking the NZCR to the *Future Made In Australia* manufacturing industry policy objectives to attract investment and make Australia a renewable energy superpower. This will maximise the development of Australia's manufacturing industries and grow the skilled trades that are crucial to sustaining our advanced industrial capabilities.

The AMWU supports the modernisation of Australian road-transport fleets by maximising the contribution of Australian domestic manufacturing industries to these aims. In 2023 the AMWU commissioned the *Towards a Renewable Energy Superpower*<sup>1</sup> report, which identified industry opportunities for Australia to embrace in the clean energy revolution. The report suggested that a significant part of building Australia's renewable energy industry credentials can be achieved in adding value to already-existing high-value industries. One of the identified key industries was heavy vehicles manufacturing.

Australia makes buses, trucks and mining vehicles and is well placed to utilise its capabilities and participate in efforts to modernise the vehicles made in these sectors. At present, the age of Australia's road transport fleet lags far behind many other advanced industrial nations. A transition to Euro VI (global emissions standard) vehicles would lead to a major reduction in transport emissions. But this transition must be planned and as a first step towards decarbonising transport, should be delivered as far as possible by Australian manufacturing capabilities.

The AMWU is thus vehemently opposed to seeing the solution to transport modernisation as one of simply streamlining the importation of low and zero emissions vehicles to achieve net zero targets as quickly as possible. This is not a sustainable approach to addressing the problem as it would counteract the Federal Government's intention to increase Australia's sovereign manufacturing self-sufficiency. The existing automotive component supply chain in Australia employs more than 44,700 workers.<sup>2</sup> However, due to bureaucrats prioritising net zero emissions over developing Australia's industrial capacity to deliver on these targets, a significant degree of uncertainty plagues the sector. Bus manufacturers and their supply chains receive mixed signals from state governments regarding procurement of the vehicles required to modernise fleets. This leads to an inability to plan production and compete with imports that minimise the contribution of jobs and industry to decarbonising public transport. Prime mover manufacturers face design rules regulations that, despite placing restrictions on imports that can help to protect local manufacturing's share of value-adding, also create uncertainty in the order books of component suppliers. This risks jobs and loss of capability as manufacturing firms wind down capacity to supply to Original Equipment Manufacturers, and these OEMs look to source from offshore suppliers where there is greater certainty.

These issues can be avoided by the Federal Government, as well as those of the States and Territories, understanding the importance of key elements of industrial policy for the NZCR and relative state frameworks that fall under it. As outlined above, the first, and overarching element is that decarbonising Australia's transport sector is fundamentally about a sustainable transition, not a massive leap that will make Australia's economy increasingly dependent on global capabilities. To not plan a gradual shift to zero emissions and instead prioritise rapid emissions reductions will neither deliver high-skilled, high-paid manufacturing jobs nor the sovereign capabilities that our heavy vehicles sector delivers to the economy. It will further hollow out our industrial capabilities and deskill our workforce, making us increasingly dependent on imports of value-added products at a time when the Australian economy is already the (second) least industrialised in the OECD, and at a juncture in global economic change that sees many other nations seeking to become increasingly industrially independent.

---

<sup>1</sup> SGS Economics & Institute for Sustainable Futures at UTS, 2023. *Towards a Renewable Energy Superpower: Industry Opportunities for Australia to Embrace the Clean Energy Transition*. Sydney.

<sup>2</sup> Australian Industry 2022-23, Table 1 Manufacturing industry by ANZSIC class (released 31 May 2024).

Second, planned, diligent public procurement of Australian-made vehicles and components suited for decarbonising public transport fleets is critical to building scale and capability in a manufacturing sector that will be made more capable of delivering these aims through the scale and consistency that governments provide by becoming dedicated purchasers. The NZCR must create stronger conditionalities around favouring local industry to deliver decarbonised transport fleets as a long-term planning initiative that modernises public transport and sustains the skilled workforce that builds, repairs and maintains heavy vehicles generally.

Third, the NZCR must understand the importance of providing whatever assistance is possible to heavy vehicle supply chains writ large. This can ensure that production facilities can be retooled and plant and equipment upgraded in preparation for changes to production brought about by low and zero emission vehicles. Already the failure of the Federal Government to ensure that regulations are ahead of the curve on vehicle design and safety has created bottlenecks in local supply and influenced the business decisions of OEMs to increase imports into the mix of their product offerings. Furthermore, of growing importance is the introduction of policy for Australian industry to pursue local development of more environmentally friendly transition fuels to power low emissions vehicles as fleets modernise towards zero emissions.

The fourth element is ultimately what makes all these elements possible: a highly skilled workforce. The NZCR must ensure that its plan for decarbonising road transport proposes solutions that transition all skilled workers in the trades and technical professions that are essential to a highly capable heavy vehicle manufacturing sector. The renewable energy future, including those that will deliver the NZCR, will depend greatly on the highly skilled workers that will build, repair and maintain the low and zero emissions heavy vehicles that Australia continues to manufacture.

The AMWU has long supported an industrial model capable of addressing all of these issues and contributing to sovereign manufacturing capabilities that enable further technological and industrial complexity and capacity. The Common User Infrastructure model is one tried and tested in Australia's maritime defence manufacturing industries and consists of government ownership of industrial land and infrastructure, providing open access to multiple private users to establish operations in a geographically located precinct. Government ownership presents opportunity for bidding by private sector firms, and successful bids can be based on the strategic aims of the precinct. Some of the key features and benefits of CUFs include:

- Firms leasing space and infrastructure gain access to cutting edge common use infrastructure, which can include the latest in industry 4.0, digital, additive manufacturing and machine learning technologies.
- Supporting SMEs to achieve scale through alliances and joint ventures that bid for major projects.
- Providing firms with access to research and development opportunities to help them innovate.
- Containing skills centres, run in conjunction with TAFEs and universities, which provide access to state-of-the-art education and training facilities for the training of apprentices and the upskilling of workers.
- Co-locating enterprises and related services maximises local content and local jobs and creates an economy of scale effect that helps all companies to be internationally competitive.

All these benefits are provided while maintaining public ownership over infrastructure. All proceeds generated from leasing the infrastructure is reinvested in the facilities which means significant returns on initial public investment.

The Common User Infrastructure model should be considered in the Transport and Infrastructure sectoral plan as part of its aims to drive net zero targets for the entire transport sector. This would help to incentivise transport manufacturing firms and other organisations to co-locate in precincts designed to maximise innovation and learning outcomes that lift competitive advantages in the export of high value-added renewable energy solutions. There is widespread support in the heavy vehicle manufacturing sector for a precinct that integrates major OEMs, smaller supply chain businesses, a

skills and training facility and research and development organisations that would collaborate on shared goals of low and zero emissions technologies for decarbonising the Australian transport sector, with an eye to opportunities for high-value exports to global transport supply chains that maximise Australia's industrial niches.

The AMWU welcomes further discussion and collaboration on this important issue, and we thank you for the opportunity to make a submission. If you require any further information, please contact [REDACTED] in the first instance.

Yours sincerely,

[REDACTED]