

Transport and Infrastructure Net Zero Consultation Roadmap

Take the survey

Department of Climate Change, Energy, Environment and Water

Response received at:

July 26, 2024 at 12:04 PM GMT+10

Response ID:

sbm2f82e0e1c59ca609312e8

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 Energy Council

4 Confirm that you have read and understand this declaration.

Yes

5 First name

Rhys

6 Last name

Thomas

7 Email

[REDACTED]

8 Phone



9 Who are you answering on behalf of?
Organisation

10 Organisation name
Australian Energy Council

11 What best describes you or your organisation?
Industry

12 What sector do you represent?
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?
Not answered

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?
Not answered

- 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?
Not answered
- 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.
Not answered
- 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

20240726 AEC Submission to Transport Sector Plan.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered

Department of Infrastructure, Transport, Regional Development, Communications and Arts
Australian Government

Submitted online.

26 July 2024

Transport and Infrastructure Net Zero Consultation Roadmap

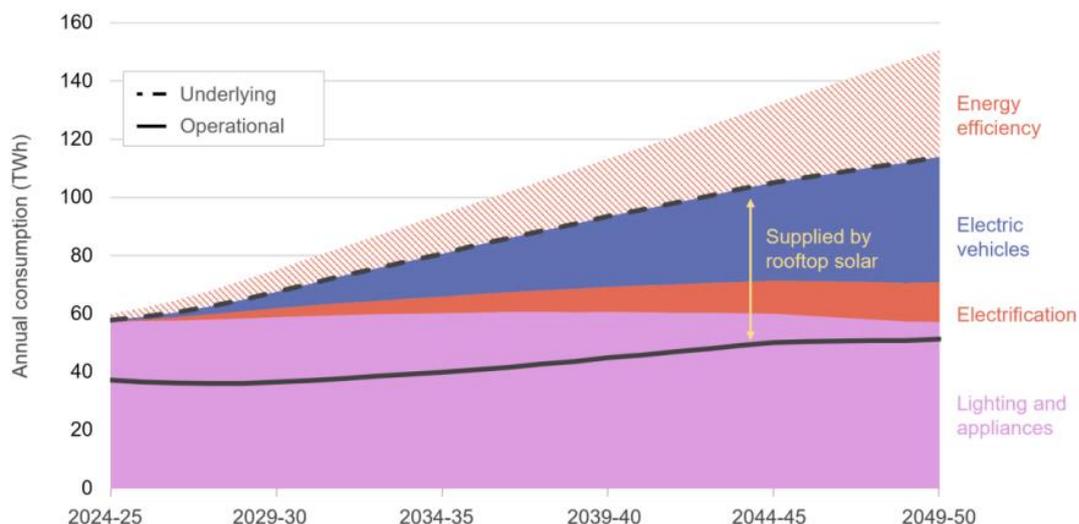
The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the Department of Infrastructure, Transport, Regional Development, Communications, and Arts (the 'Department') consultation on the *Transport and Infrastructure Net Zero Consultation Roadmap* ('Consultation Paper').

The Australian Energy Council is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

The AEC has been involved in the development of the sector pathways to date, making submissions to the [agriculture](#) and [electricity](#) roadmap consultations, and the Climate Change Authority's sectoral pathway [review](#). A key theme from these submissions is the need for greater consideration of cross-sector impacts and how the respective pathways will be integrated together to form an economy-wide Net Zero Plan.

This "integration question" is especially pertinent here because the Department has said 'the primary method for reducing transport emissions will be through electrification, which is dependent on the decarbonisation of the electricity grid'. The electrification of transport will have substantial impacts on the electricity grid, with the figure below (taken from AEMO's latest Integrated System Plan) showcasing how starkly residential electricity consumption will increase due to the electrification of light transport and the role rooftop solar is expected to play to cover it.

Figure 1: Residential electricity consumption, NEM (TWh 2024-25 to 2049-50, Step Change)



Source: AEMO [2024 Integrated System Plan](#), p26.

For this scenario to materialise, there is a range of policy, regulatory, and technical reforms that need to be implemented well ahead of time, particularly within the electricity sector. This includes:

- Managing peak and minimum demand – effective and fair CER orchestration will be needed to ensure customers are not all charging their electric vehicles at the same time of the day. If this were to happen, the electricity grid would need to build significant capacity to meet peak demand, increasing costs of the transition. Likewise, there will still need to be enough synchronous, grid-connected electricity generation online at all times to maintain essential system security services. If the electricity transition becomes disorderly or too expensive, this might dissuade customers from purchasing an electric vehicle.
- Leveraging retailers to deliver CER orchestration – as the customer-facing actor in the electricity system, retailers will play an increasingly important role in helping customers manage and control their CER technologies. This will require some innovation in tariff reform to encourage behaviours like vehicle-to-grid charging and two-way price signaling to incentivise load shifting at different times of the day. The recently published [National Consumer Energy Resources Roadmap](#) will be important for identifying these reform areas.
- Speed of decarbonisation – the decarbonisation of light transport will depend not only on the rate of uptake of electric vehicles, but also how quickly the electricity sector transitions to a lower emissions grid. Promisingly, even at current emissions intensity levels, electric vehicles [produce](#) lower emissions compared to ICE vehicles. But meeting emissions targets, especially post-2030, will require a higher penetration of renewables than there is now.

With the timelines for the sector pathways being stretched out, there should be engagement with stakeholders between now and the second tranche of consultation about how these integration elements will be reflected in the final Net Zero Plan.

Any questions about this submission should be addressed to [REDACTED], by email [REDACTED] or mobile on [REDACTED].

Yours sincerely,

[REDACTED]
Policy Manager
Australian Energy Council