Transport and Infrastructure Net Zero Consultation Roadmap

Take the survey

Department of Climate Change, Energy, Environment and Water

Response received at:
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Response ID:
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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
Public Transport Association ANZ, Roads Australia, Australasian Railway Association

4 Confirm that you have read and understand this declaration.
Yes

5 First name
Kathy

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Lindsay

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[redacted]

8 Phone

[redacted]

9 Who are you answering on behalf of?

Organisation

10 Organisation name

Public Transport Association ANZ, Roads Australia, Australasian Railway Association

11 What best describes you or your organisation?

Industry

12 What sector do you represent?

Rail
Heavy road vehicles (trucks, buses etc.)
Light road vehicles (cars, utes etc.)
Active transport
Public transport

13 What state or territory do you live in?

New South Wales

14 Postcode

2016

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

PTA_ANZ_RA_ARA_roadmap_submission_final_corrected.c8658263.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

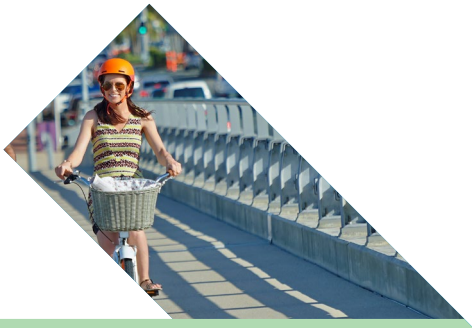
71 Upload supporting file

Not answered

Transport and Infrastructure Net Zero Consultation Roadmap

A joint submission by the Public Transport Association Australia New Zealand, Roads Australia and the Australasian Railway Association, with support from Arup

August 2024



Introduction

Transport industries rise to the challenge

Transport is the nation's social and economic engine and decarbonising the sector is critical to achieving Australia's net zero targets.

Transport's greenhouse emissions are currently the third largest and without effective intervention the sector is projected to be the largest emitter by 2030. It is time for transformative change in how we move people and goods.

United by a shared commitment to meeting this challenge, the Public Transport Association Australia New Zealand (PTA ANZ), Roads Australia (RA) and the Australasian Railway Association (ARA), supported by global sustainable development consultancy Arup, brought together transport industry leaders and senior government officials for a **National Decarbonising Transport Summit** held in Canberra on 26 June 2024. The purpose of the Summit was to bring a diverse group of leaders from across the transport sector to explore what needs to happen now to accelerate Australia's transport decarbonisation journey, and how the industry can collaborate to make it happen.

The Summit's discussion outcomes have been adopted by PTAANZ, RA and ARA as their joint response to the Transport and Infrastructure Net Zero Consultation Roadmap, identifying **priority actions needed across the sector**.

Our transport system varies widely across locations, modes, access, capacity requirements, and expectations. Effective net zero pathways require a diverse range of measures underpinned by three cross-sector ideas – **mode shift at unprecedented scale, ramping up the zero emissions vehicle transition, and making whole of life carbon assessments central to decision making.**

Our submission, reflecting cross-industry consultation, is for **radical transformation over incremental change**. Collaboration and courage will be necessary to accomplish a sustainable, equitable and efficient transport system under net zero conditions. It identifies immediate measures government should take in relation to overall transport planning and funding, and priorities that the industry should lead and act upon.

Getting the settings right, short term action to deliver long term change

Whole-of-government direction on decarbonising the transport network gives industry confidence and clarity, underpinned by consistent expectations.

A collaborative industry stance on the necessary conditions to unlock investment and innovation supports government's ability to set the necessary processes for generating desired outcomes. Together, government and industry can then work with communities to deliver place-specific progress towards our national decarbonisation goals.

The Summit surfaced **three cross-sector recommendations** and a set of short-term actions to inform the Australian Government's *Transport and Infrastructure Net Zero Consultation Roadmap*. PTAANZ, RA and ARA members and partners will also leverage these recommendations to develop and strengthen industry action plans to lay the path for a just, low-cost and sustainable transition.

Each recommendation should be complemented by:

- knowledge transfer initiatives to build carbon literacy and confidence across government, industry and community;
- collaborative planning across energy, land use and economic development sectors; and
- place-based responses that connect a national agenda to local needs, motivations and dynamics.

Recommendations

1. A 'mode shift' first approach

A credible decarbonisation plan must lead with mode shift if we are to resolve both carbon and congestion. Moving more people through active and public transport could mean, for example, replacing a five minute drive to the shops with a safe, enjoyable walk; a 35km road commute with smooth cycling-and-rail connections; or shifting from heavy vehicles to rail freight and last mile EV delivery.

The first step is to prioritise mode shift in budgets and investment cases, alongside investigation into the most effective behaviour change levers across affordability, access, convenience, comfort and quality of service.

Recommended actions

Six to 12 months

- Australian federal, state and territory governments, with industry: complement existing data with new modelling evidencing the wide economic, social and environmental benefits of mode shift.
- Australian federal, state and territory governments: continue planning for mode shift alongside long-term land use and economic planning.
- Australian federal, state and territory governments, with industry and academia: share research to scale up impactful behavioural interventions, including outcomes and lessons from pilots and trials.

Twelve to 18 months

- Australian federal, state and local governments: adopt the 'avoid/shift/improve' hierarchy to identify and prioritise alternatives to carbon-costly investment in business cases.
- Australian federal, state and territory governments: investigate the benefits and impacts of consistent, equitable road and rail pricing.

2. Accelerate an equitable Zero Emission Vehicles and rolling stock transition

Australia lags behind many other countries in EV adoption. A combination of policy settings, market dynamics and the cost/effort of adapting a new technology cause slower-than-average uptake.

Strategies for electric car, bike and bus adoption are needed, particularly in market segments where the most impact will be felt – for example, large fleet transition and locations where there are few alternatives to driving.

The zero-emission transition cannot be constrained to EVs. Particularly for heavy transport fleets and long regional distances, we need the widest remit to include technologies such as low carbon liquid fuels and hydrogen fuel cells alongside battery electric vehicles.

Shifts are also needed in the rail sector, particularly rail freight which relies significantly on diesel-powered traction. The transition to renewable diesel, hybrid diesel electric technologies, and/or battery electric or alternative fuels such as hydrogen, will need to be supported by a clear, national strategy and coordinated research, investment, planning and trials.

Recommended actions

Six to 12 months

- Australian federal, state and territory governments, with industry: adopt the emerging Australian fuel efficiency standards to provide certainty and unlock the zero emission vehicle supply chain, set pathways to refine the approach, and apply it to trucks, buses and trains.
    - Australian federal, state and territory governments: continue planning for transport electrification alongside energy transition planning, to minimise lumpy demand that destabilises the grid.
    - Australian federal, state and territory governments, together with industry: develop a shared, national vision for rollingstock decarbonisation to accelerate the transition from diesel-powered traction.

Twelve to 18 months

- Australian federal, state and territory governments: promote and expand on incentives to stimulate EV demand, with an emphasis on removing barriers for lower income people and businesses, and financial instruments to accelerate industry fleet shifts.
    - Australian federal, state and territory governments, with industry: ramp up the roll-out of enabling infrastructure (e.g. charging points and retrofits), regulation (e.g. building codes) and guidance to ensure a smooth transition for communities, industry and the grid.

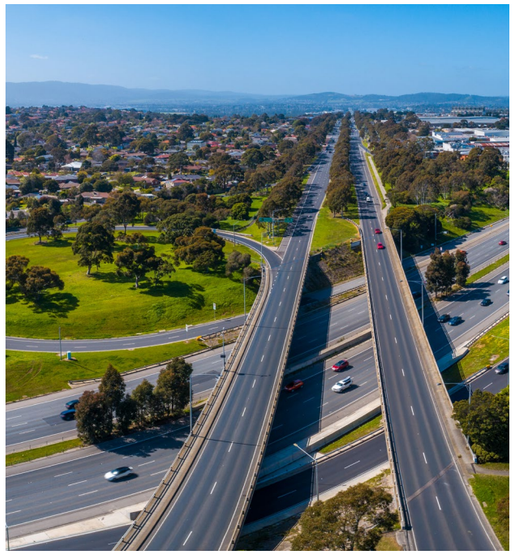
3. Consistently and adequately assess whole of life carbon

There is an urgent need to transparently and consistently address the significant carbon cost associated with our transport systems. It is essential to consider carbon costs from the whole-of-life perspective.

The UK and European Union are lighting the path with methodologies to assess and understand whole-of-life impact, from carbon embodied in assets through to the additional carbon created by using those assets.

It should also be noted that emissions assessments for electrified transport, such as rail, are not benefiting from the commitments made to increasing future renewable energy supply. For example, legislated targets for renewable energy give certainty to future energy emissions intensity and this should be considered in assessments of electric powered transport. This may require an update to the national guidelines for Transport Assessment.

The right approach will challenge the need to build new infrastructure and will prioritise low-build and no-build solutions.



Recommended actions

Six to 12 months

- Australian federal government: develop a standardised embodied carbon measurement system, and drive alignment across states and territories.
- Australian federal, state and territory governments transport sector: set agreed expectations and time frames for carbon targets, carbon accounting and shared carbon architecture.

Twelve to 18 months

- State and territory governments: work with the national government and industry to develop principles and objectives to inform nationally consistent implementation of business cases piloting carbon accounting and targets, modelling and adapting successful international approaches.
- Australian federal, state and territory governments: develop and adopt nationally consistent procurement guidance, informed by leading global practice and focused on removing barriers to innovation and low carbon construction.
- Australian federal, state and territory governments, with industry: develop and adopt performance-based, collaborative contract models to coordinate and prioritise low-carbon investments, and craft new risk-sharing frameworks to incentivise innovation and address existing barriers to industry participation.

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