

Transport and Infrastructure Net Zero Consultation Roadmap

Take the survey

Department of Climate Change, Energy, Environment and Water

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Chris O'Rourke
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Yes
- 5 First name
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- 9 Who are you answering on behalf of?
Individual or individuals
- 10 Organisation name
Not answered
- 11 What best describes you or your organisation?
Not answered
- 12 What sector do you represent?
Not answered
- 13 What state or territory do you live in?
New South Wales
- 14 Postcode
2795
- 15 What area best describes where you live?
Regional area
- 16 1. Do you support the proposed guiding principles?
Yes
- 17 1.1 Please add details to your response.
The report roadmap states: "Transport activity is also expected to continue to increase to 2050 in line with population and economic growth."
The most pressing issue to stabilise our population.
The more people there are in high consuming countries like Australia, the harder it will be to reduce overall emissions especially in transport. See

more specific suggestions at the end of this submission.

The government must develop a population policy as a matter of urgency and set a target at under 30 million.

The idea of ongoing economic growth needs to be reconsidered.

People in Australia need to settle for less: "Individuals with high socio-economic status contribute disproportionately to emissions and have the highest potential for emissions reductions, e.g., as citizens, investors, consumers, role models, and professionals. (high confidence)." The IPCC also notes that increasing GDP and population levels contribute significantly to climate change.

Source: IPCC

This submission proposes that we transition from private ICE2 powered vehicles to electric powered public transport sourced renewably as soon as possible.

Not only will it reduce our emissions but it will also improve our health (mental and physical) and general quality of life.

Population

Trends in population levels in all developing countries indicate that following current increases, the number of people will stabilise or possibly decline.

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.

Yes. Agree overwhelmingly with this goal.

" Compared to road, electric rail provides deep, immediate and robust emission cuts of 80% to 90% from 2030 onwards. ...electric rail is hands down the land transport mode with the lowest emissions intensity (the amount of greenhouse gas produced per kilometre travelled) for both passengers and freight. Compared to road and diesel trains, electric rail could provide deep, fast and robust emission cuts of 80% to 90% from 2030 onwards."

Strategies:

A widespread education program (as comprehensive and ongoing as

those which were developed during the COVID pandemic) must be conducted to convince people to leave their cars at home whenever possible.

The public needs to be made aware of the very high cost of traffic crashes, road congestion and physical inactivity.

“The social cost of road crashes was estimated to have a range of between \$22.2 and \$30.3 billion, with a base case estimate of \$27.0 billion annually between the years 2016-2020 ...”

Source: Report for the Bureau of Infrastructure and Transport Research Economics 2022.

Transport emissions have grown as the population has grown. Australia must stabilise its population as soon as responsibly possible.

Transport emissions have grown in line with the economy, as GDP increases. The government must review its policies on economic growth to achieve sustainable outcomes.

There are too many short journeys undertaken by car which could be walked or cycled.

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.

Yes, overwhelmingly.

Strategies to achieve this goal

- create safe walking and cycling routes: grade separation

Positive Externalities

Increased exercise will reduce the burden of disease.

“... the negative consequences of automobility, or car harm, [can be] grouped into four categories: violence, ill health, social injustice, and environmental damage. ... 1 in 34 deaths are caused by cars and automobility with 1,670,000 deaths per year.” (Journal of Transport Geography).

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?

Invest in modern inter-modal freight facilities (eg. Horizontal transshipment under wires to replace shunting and / or craning)

- Cease the building of major new roads and invest in public transport

25 6.2. How would these actions address the identified challenges and opportunities for emissions reduction in the movement of goods?

They would provide an impetus for mode shift: As identified in Figure 5 of the Consultation Roadmap, rail is the least emissions intense of all modes.

26 7. Do you agree with the proposed net zero pathway for light road vehicles?

Yes

27 7.1 Please add details to your response.

Yes: it represents the low hanging fruit

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?

A transition to EVs will only marginally reduce the level of CO2 emissions.

- 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?
Yes
- 31 9.1 Please add details to your response
Yes.
An appropriately scaled RUC will disincentivise the use of articulated heavy vehicles and incentivise the use of rail transport.
- 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?
The ranking indicates the level of development of those technologies and how soon they can be implemented at scale. The hydrogen for HFC trucks, to be low emission, needs to be produced by “green” electricity and at the moment that process in Australia is only in its infancy.
- 34 11. What role should low carbon liquid fuels play in the heavy vehicle decarbonisation?
They should only play a transitional role.
- 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?

Yes

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?

Yes

- 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?

Yes

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?

The plan, while well intentioned needs to be much more ambitious.

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

The Australian Government must use a broad Genuine Progress Indicator as a key measure of our progress that redefines 'growth' and prioritises growth in health and wellbeing, not growth in consumption

and population as encouraged by the current manner in which we measure improvement: GDP growth.

66 Would you like to upload a document?

Yes

67 Have you removed any identifying information from your submission?

Yes

68 Upload a submission

ORourke_Sub_NetZeroConsultationRoadmap.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered

A Submission to Infrastructure Australia's

Net Zero Consultation Roadmap

<https://www.infrastructure.gov.au/have-your-say/transport-and-infrastructure-net-zero-consultation-roadmap>

An Individual submission

5th August 2024

1. Do you agree with the proposed guiding principles?

The report roadmap states: "Transport activity is also expected to continue to increase to 2050 in line with population and economic growth."

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Source: IPCC¹

This submission proposes that we transition from private ICE² powered vehicles to electric powered public transport sourced renewably as soon as possible.

Not only will it reduce our emissions but it will also improve our health (mental and physical) and general quality of life.

Population

¹ <https://www.ipcc.ch/report/ar6/wg3/chapter/summary-for-policymakers/> C.10.2

² ICE: internal combustion engine

Trends in population levels in all developing countries indicate that following current increases, the number of people will stabilise or possibly decline.

2. Do you support the use of the avoid-shift-improve framework as a tool to identify opportunities for abatement?

Yes. Agree overwhelmingly with this goal.

“ Compared to road, electric rail provides deep, immediate and robust emission cuts of 80% to 90% from 2030 onwards. ...electric rail is hands down the land transport mode with the lowest emissions intensity (the amount of greenhouse gas produced per kilometre travelled) for both passengers and freight. Compared to road and diesel trains, electric rail could provide deep, fast and robust emission cuts of 80% to 90% from 2030 onwards.”³

Strategies:

A widespread education program (as comprehensive and ongoing as those which were developed during the COVID pandemic) must be conducted to convince people to leave their cars at home whenever possible.

The public needs to be made aware of the very high cost of traffic crashes, road congestion and physical inactivity.

“The social cost of road crashes was estimated to have a range of between \$22.2 and \$30.3 billion, with a base case estimate of \$27.0 billion annually between the years 2016-2020 ...”

Source: Report for the Bureau of Infrastructure and Transport Research Economics 2022 ⁴

Transport emissions have grown as the population has grown. Australia must stabilise its population as soon as responsibly possible.

Transport emissions have grown in line with the economy, as GDP increases. The government must review its policies on economic growth to achieve sustainable outcomes.

There are too many short journeys undertaken by car which could be walked or cycled.

³ <https://theconversation.com/we-compared-land-transport-options-for-getting-to-net-zero-hands-down-electric-rail-is-the-best-234092>

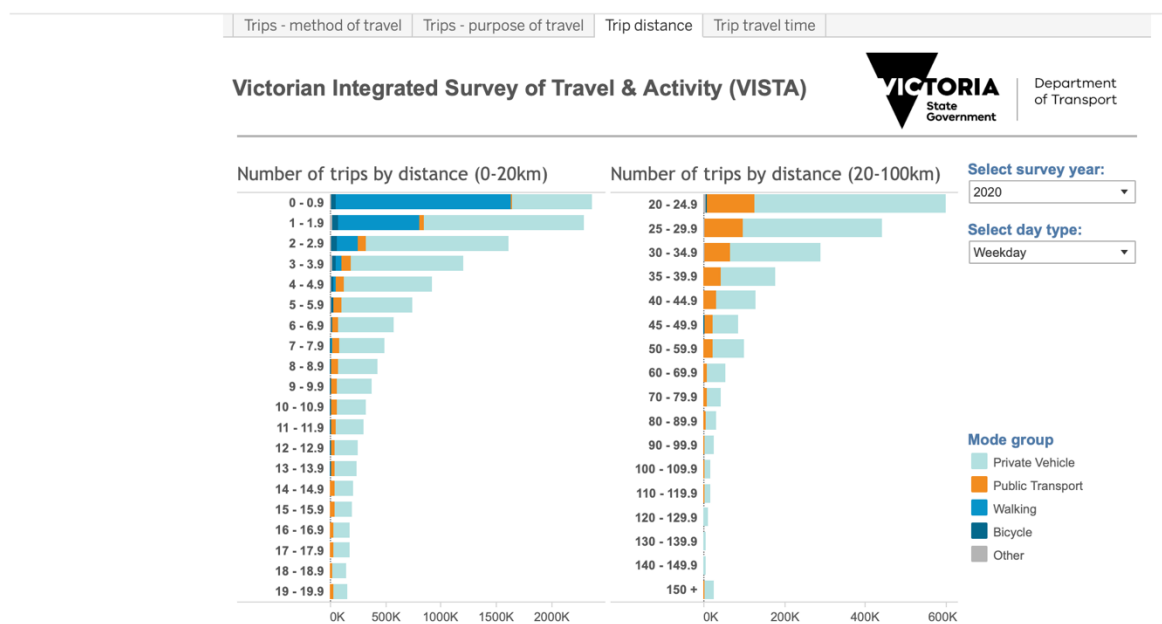
⁴ <https://www.bitre.gov.au/sites/default/files/documents/social-cost-of-road-crashes.pdf>

See footnotes ⁵ ⁶

See also image below from [Victorian Integrated Survey of Travel & Activity \(VISTA\)](#) showing the very large number of car journeys under 2kms which were taken in 2020.

(<https://public.tableau.com/app/profile/vista/viz/VISTA-TripsDraft/Trips-methodoftravel>)

VISTA - Trips - 2008 to 2020 by [Victorian Integrated Survey of Travel & Activity \(VISTA\)](#)



3. Do you agree the development of a national policy framework for active and public transport will support emissions reduction?

Yes, overwhelmingly.

Strategies to achieve this goal

- create safe walking and cycling routes: grade separation

Positive Externalities

Increased exercise will reduce the burden of disease.

“ ... the negative consequences of automobility, or car harm, [can be] grouped into four categories: violence, ill health, social injustice, and environmental

⁵ **Fewer of us are cycling – here’s how we can reverse the decline**

<https://www.unsw.edu.au/newsroom/news/2023/09/fewer-of-us-are-cycling--heres-how-we-can-reverse-the-decline>

⁶ The declining rate of walking and cycling to school in Perth

https://www.transport.wa.gov.au/mediaFiles/active-transport/AT_P_Declining_Rate_walking_cycling_to_school_in_Perth.pdf

damage. ... 1 in 34 deaths are caused by cars and automobility with 1,670,000 deaths per year.” (Journal of Transport Geography⁷)

4. What should be included in a national policy framework for active and public transport and how should it be developed?

See response to part 3.’

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?

- prioritise public transport infrastructure over private
- The Federal government should work with States and Territories to take over the funding of road transport and introduce a national Road User Charge (RUC)
- Further raise the standards for liquid fuel quality, in addition to those recently legislated
- Introduce a Road User charge for **all** motorised vehicles. The amount of this RUC should vary from vehicle to vehicle according to the amount of damage that each vehicle does to the environment (emissions) and to the roads (requiring maintenance). Lightweight EVs would attract a low RUC, while a heavy diesel powered B Double would attract a high RUC. The Federal Government would discontinue the fuel excise but continue to make payments to the states for road maintenance hypothecated from the RUC.
- Remove the “Fuel tax credits for heavy vehicles”, as this does not incentivise the transition to electric vehicles or modal shift⁸.
- Take immediate steps to restrain the rise in sales of large passenger vehicles (SUVs, utes)

⁷ <https://www.sciencedirect.com/science/article/pii/S0966692324000267>

⁸ Heavy vehicles over 4.5 tonnes GVM can receive a liquid fuel subsidy up 49.6 cents per litre. There is an over representation of delivery vans and other Local Pick up and Delivery (LPUD) vehicles as a result of this subsidy.

Source: <https://www.ato.gov.au/businesses-and-organisations/income-deductions-and-concessions/incentives-and-concessions/fuel-schemes/fuel-tax-credits-business/rates-business/from-1-july-2023-to-30-june-2024>

6. The Australian Government has already engaged in consultation on the 2023 review of the National Freight and Supply Chain Strategy and those consultations will also inform the final Roadmap and Action Plan.

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?

- Invest in modern inter-modal freight facilities (eg. Horizontal transshipment under wires to replace shunting and / or craning)
- Cease the building of major new roads and invest in public transport

6.2. How would these actions address the identified challenges and opportunities for emissions reduction in the movement of goods?

They would provide an impetus for mode shift: As identified in Figure 5 of the Consultation Roadmap, rail is the least emissions intense of all modes.

7. Do you agree with the proposed net zero pathway for light road vehicles?

Yes: it represents the low hanging fruit

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?

A transition to EVs will only marginally reduce the level of CO2 emissions.

9. Do you agree with the proposed net zero pathway for heavy road vehicles?

Yes.

An appropriately scaled RUC will disincentivise the use of articulated heavy vehicles and incentivise the use of rail transport.

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. BEV. 2. HFC. 3. LCLF

2. Why did you rank them in that order? The ranking indicates the level of development of those technologies and how soon they can be

implemented at scale. The hydrogen for HFC trucks, to be low emission, needs to be produced by “green” electricity and at the moment that process in Australia is only in its infancy.

11. What role should low carbon liquid fuels play in heavy vehicle decarbonisation?

They should only play a transitional role.

12. Do you agree with the proposed net zero pathway for rail?

Yes

13. 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.

Rank 1. Electric, by catenary NOT via battery 2. HFC 3. LCLF

Electric

28. Is there anything missing? Are the sections appropriately integrated? Is the Roadmap appropriately ambitious?

The plan, while well intentioned needs to be much more ambitious.

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

The Australian Government must use a broad Genuine Progress Indicator⁹ as a key measure of our progress that redefines 'growth' and prioritises growth in health and wellbeing, not growth in consumption and population as encouraged by the current manner in which we measure improvement: GDP growth.

⁹ https://en.wikipedia.org/wiki/Genuine_progress_indicator