

# Transport and Infrastructure Net Zero Consultation Roadmap

## Take the survey

Department of Climate Change, Energy, Environment and Water

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1 Confirm that you have read and understand this privacy notice.

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2 Please indicate how and if you want your submission published.

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Neil Findlay

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Yes

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- 8 Phone  
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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?  
Queensland
- 14 Postcode  
4020
- 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.  
Essentially, the need to improve transport industry performance is evident, and agreed.
- 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.  
A multi-facet approach is critical if any measurable improvement in industry performance is to be achieved.
- 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.  
It should, dependant on there being a carefully staged and incremental shift to emissions reduction.
- 22 4. What should be included in a national policy framework for active and public transport and how should it be developed?  
Steady increase in active-friendly infrastructure, regulatory and tax-friendly encouragement to upgrade public transport assets to more efficient, more environmentally status - particularly passenger buses.
- 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?  
Clearly the introduction of low emissions buses is key, supported by improved dimensional vehicles; regulatory and tax encouragement; better networks and cost structures to support transition of travelling public top public transport.
- 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?  
First and foremost, recognise that there is no single solution, or pathway. Second, accept that Government does not always have the answers vs experienced people in industry. Thirdly, cease with the headlong stampede to achieve 'net zero' in unrealistic timelines.
- 25 6.2. How would these actions address the identified challenges and

opportunities for emissions reduction in the movement of goods?

Allow for a more orderly and cost effective transition to net zero, particularly by recognising and embracing the multiple, incremental actions that cumulatively would make a significant difference to our carbon footprint at a greatly reduced cost.

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

No

27 7.1 Please add details to your response.

The proposal is way too hasty and will cause expensive disruption to our economy.

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?

As already intimated, dispense with the one-size-fits-all approach of relying almost solely on electric vehicles as the solution.

29 8.2 How would these actions address the identified challenges and opportunities to reduce light vehicle emissions?

As a first step, in lieu of subsidising electric vehicle uptake, divert some of this funding to foster greater transition of older light vehicles to more modern, and significantly more efficient & cleaner vehicles.

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

No

31 9.1 Please add details to your response

The proposed net zero pathway is extremely expensive, and ignores almost total the plethora of lower cost, (proven) incremental gains that could be employed.

- 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?
- Both battery electric and hydrogen fuel cell options are hideously expensive, and very impractical for usage outside high-density metro operations. Low carbon fuels offer the ability to transition the legacy fleet into a cleaner operating paradigm and critically, in a shorter time frame.
- 34 11. What role should low carbon liquid fuels play in the heavy vehicle decarbonisation?
- They should play a key, if not dominant 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?
- Immediately embrace the multiple, well known, proven and low cost options to improve the fleets performance. (More on this later if space allows).
- 36 13. Do you agree with the proposed net zero pathway for rail?
- Yes
- 37 13.1 Please add details to your response.
- Providing low carbon fuels play a dominant role in this transition.
- 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.

- 1: Low carbon liquid fuels
- 2: Hydrogen fuel cell
- 3: Battery electric

39 14.1 Please add details to your response. Why did you rank them in that order?

My comments assume we are referring to heavy (freight) rail. Metro light rail is a different environment where the other options may well be better options.

40 15. What role should low carbon liquid fuels play in rail decarbonisation?

Dominant, in order to utilise legacy infrastructure.

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?

Immediately put effort (and funding) into developing a domestic low carbon fuel industry.

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

The effect could be substantial, and not take multiple decades to achieve, unlike attempting to transition to hydrogen or battery electric energy sources.

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

Yes

44 17.1 Please add details to your response.

With some reservations: simple steps like slowing sailing speed for large vessels will save significant amounts of energy (code: emissions). There must be, as with road and rail freight, recognition that the operating life of heavy assets is long, so a hasty transition could be prohibitively expensive and thus damage our economy.

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?

See above.

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

We have the ability to significantly reduce maritime emissions from a technical point of view, the key is to do it in a manner that can be paid for, without breaking our economy.

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

I'm not close enough to aviation to comment.

48 19.1 Please add details to your response.

Except to say that quite some work is being done to develop alternative, low carbon liquid fuels for this sector.

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.

See above.

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?

See earlier comments.

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

Yes

52 21.1 Please add details to your response.

Essentially, yes. This question is too open-ended to answer definitively. Suffice to say, migrating the legacy road freight sector to High Performance Vehicles (such as PBS vehicles - I Deputy Chair the PBS Review Panel within the National Heavy Vehicle Regulator) could very quickly reduce emissions by 20-50%. From an infrastructure perspective, the major 'hand brakes' that hold this migration/transition back includes our National bridge stock of old, under capacity bridges; the inability of road managers to provide 'last mile' access to (sometimes) larger and/or heavier vehicles. The ability of these PBS vehicles to provide very significant safety, productivity and environmental gains is now well documented and accepted by all parties.

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?

The pathway to a list of incremental emissions gains is copious, especially within the road freight environment: improved maintenance practices; improved training of drivers & managers; monitoring tyre pressures (major issue); migrating to improved vehicle specifications - equipment/tyre profiles/ aerodynamics/engine specifications; like ocean freight, simply slowing the fleet down by 10 kph (as done already by some major fleets) saves very substantial amounts of fuel; and the list goes on. I have spent over 50 years as a fleet operator and supplier to back up these comments - and won multiple State and Federal Training Awards in the process - so have seen and experienced the gains to be had. These steps are not the responsibility of Government alone, or industry alone, but a collaborative effort that can generate substantial, measurable improvements in carbon emissions.

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

See above

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?

My company has already invested significantly to arrive at 'net zero' regarding electricity

- we expect to reach that point early 2025. Many 'logjams' along that journey, mostly deficiencies within the electricity grid, that simply don't allow businesses like ours to generate enough energy onsite without committing major expenditure to install 'grid protection' to make up for the shortcomings of the grid. These shortcomings are massively, perhaps prohibitively expensive for Government within the next decade or two. As with charging infrastructure for EV's. The energy mix cannot, cannot advance too quickly and get ahead of the ability of (for instance) electricity provision to supply.

56 24. How should the use of low carbon liquid fuels (LCLFs) be prioritised across different transport modes over time to achieve maximum abatement?

Simply put, LCLFs should be prioritised over other energy alternatives, as there would be minimal issues with fleet integration, thus minimal impact on freight costs, this minimal impact on costs (including cost of living) to industry and the border community.

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?

Logically, step away from the fixation on renewable energy alone, and the pathological refusal to even discuss nuclear energy. This would immediately encourage entities across the Nation (public & private) to get involved, to invest, to allow innovation and markets to determine the most efficient, most practical and lowest cost pathways forward.

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?

1. The PBS High Productivity Vehicle scheme is Australian conceived, designed and operated. It was developed by government and industry over 20 years ago, and is delivering major benefits to freight operators and users - and is being closely monitored by International agencies for potential introduction into their freight systems. 2. Consider the collaboration between European Governments and road freight operators leading to the widespread adoption of 'Super Single' tyres within their freight networks across multiple countries. Advantages: lower fuel consumption therefore lower emissions; improved safety performance; reduced noise emissions etc. Australian Governments (State & Federal have procrastinated for decades and are yet to approve these Globally popular tyres for higher mass limits, therefore limiting their uptake - though progress is being made in this space at last).

- 59 25.2 What opportunities can Government leverage to show leadership in Australia and internationally?
1. Embrace change, and wholeheartedly support the road freight industry in adopting proven, low emissions policies across the legacy fleet, as well as the replacement vehicle fleet. 2. Embrace the myriad of proven strategies available to make low cost, material gains in heavy vehicle productivity and environmental performance. There is no space here to further outline all of these strategies, but allow me to throw just one more into the mix - foster the uptake of Low Rolling Resistance Tyres, that are proven to reduce fuel consumption and emissions on heavy vehicles.
- 60 26. What measures and metrics should be used to evaluate the final Transport and Infrastructure Net Zero Roadmap and Action Plan?
- Measure on a rolling basis the make-up of the legacy heavy vehicle fleet, its fuel consumption and progression to lean, clean technologies. Its transition away from older inefficient (dirty) vehicles to new much, much cleaner engine technologies. Measure the penetration of Low Rolling Resistance Tyres into the fleet (currently very, very low).
- Measure accurately how productivity improvements are being achieved i.e. operating costs/fuel consumption in (for instance) grams/tonne/kilometer. Industry associations like the ATA, Natroad and others can assist with this. (I was a Director there for years). Measure the uptake (currently very low) of driver training to achieve optimal fuel consumption. Big gains are to be had in areas like this.
- The penetration of highly efficient PBS vehicles is very well documented by the NHVR - make use of this data!
- 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?
- The above are a good place to start.
- 62 27. Do you have any feedback on the proposed review process?
- I support the process, and am available to assist, so long as the outcomes are not pre-determined (ouch).
- 63 28. Do you have any further feedback on the Consultation Roadmap and proposed pathways?

Perhaps, just keep an open mind. Australians are world class innovators, and they should be embraced and encouraged to the full. There are almost certainly multiple options not even disclosed yet.

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

Some of the questions here are a bit ambiguous, and difficult to answer succinctly.

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?

No

67 Have you removed any identifying information from your submission?

Not answered

68 Upload a submission

Not answered

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered