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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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
Evorg the Elder

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

5 First name
Michael

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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

4350

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.

A clear and firm vision and commited outcome will help

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

It should focus on emissions reduction, upgrade our existing infrastructure, and avoid investing in wishfull thinking.

Transport lifecycles are critical to addressing energy transition. To progress to our Zero Emissions commitment 95+% of operating transport needs to operate on sustainable and renewal energy. Our economy can't afford anything that is less than the most efficient solution.

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?

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?

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?

No

31 9.1 Please add details to your response

The pathway as it relates to heavy road vehicles should NOT consider Hydrogen fuel cell or low carbon liquid fuels.

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: Battery electric
2: Hydrogen fuel cell

3: Low carbon liquid fuels

33 10.1 Please add details to your response. Why did you rank them in that order?

Battery electric road vehicles of any type are further developed, more efficient, and increasing capailities extremely quickly. They are more economic, efficient, reliable, and easily maintained.

Heavy vehicle manufacturers are withdrawing from fuel cell power trucks and concentrating on battery electric.
Hydrogen fuel cell heavy road vehicles will require H2 charge stations across the nation. H2 charge stations in rural and remote locations will probably use on site electrolysis to generate H2 supply requiring 3 times the energy supply needed for battery charge stations.

Low carbon liquid fuel should be prioritised for medium to long distance aircraft and shipping possibly beyond 2050.
Other than hydrogen or ammonia the feedstock for genuine low carbon liquid fuels are very limited in Australia. The potential fuel sources should be reserved for aircraft and shipping.

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

Low carbon liquid fuel use is apparently to sustain high levels of use of high carbon fuels into the 2040s. The promise of its use will definitely allow short tem thinkers to slow down heavy vehicle decarbonisation.

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?

The first and most obvious actions are:

- HD truck MW battery charge station sites on the busiest long distance journeys ASAP, and across the country from 2030.

- Truck electrification industry in all states
* Initially encourage manufacturing industry using imported power train components,

and with experience:
1. With experience and support, evaluate co-operative volume purchases and local parts manufacture
2. Grant one time assistance for transport electrification industry organisations to attend relevant heavy duty
machinery conferences / exhibitions, to evaluate and trial promising new technologies e.g.
Supplementary battery motor powering of trailers,
Vehicle battery powered motorised replacements of hydraulics, etc.

* Subsidies for electrifying existing and new HD trucks that decline as volumes increase for each option:
1. HD truck engine failures (otherwise to be rebuilt or renewed) upgrade with battery and electric motor(s).
2. Purchase new battery electric HD trucks instead of ICE.
In first 3 years focus on HD transport on the busiest fixed routes and
Urban services such as waste collection, emergency services, etc.
From 2030 focus on extreme conditions and highly specialised vehicles.

36 ## 13. Do you agree with the proposed net zero pathway for rail?

No

37 ## 13.1 Please add details to your response.

Rail operators should not consider low carbon liquid fuel for traction engines for the same reasons, I explained earlier, they should not be considered for HD trucks.

Most existing Australian rail traction engines are diesel electric or overhead caternary passenger EMUs. The following are relevant in Australia and are being considered in other countries:

* Non-electrified rail tracks should , at terminal staions and yards, be equiped with a battery charge points.
* Where interstate or long distance services operate on single rails, bypasses, where practical, should be equipped
with battery charge points.
* Electrified rail tracks used by existing electrified rolling stock could, as well, be used by new rolling stock equipped
with adequate battery electric solutions could also extend services on unelectrified tracks, better handle electrical
failures and travel between depots via unelectrified lines.

* Existing diesel electric rolling stock upgraded to operate as battery electric on short to moderate routes,
doubling distances with bypass and terminal charge points.
* For longer distances between charge points or non stop services, existing diesel electric plus battery combinations
will minimise emissions. Transcontinental services will become more affordable as batteries become cheaper,
lighter, and faster.

Whilst a decade ago fuel cell generation has been worked on and used in some overseas railways this approach is expensive to build, operate, and power with H2. For this reason and battery improvements fuel cells are not being taken as seriously in the 2020s.

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

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

Low carbon fuels are not relevant for any situation where there are alternatives available. They will simply defer electrification and are better reserved for long range aircraft and long distance cargo shipping.

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

The only reason to consider this would be 20 to 26 years away, if rail investment is defered in the meantime, there may then be a financial case to replace diesel with LCLF.

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?

Electrify Inland Rail one way or another.

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

Use the solutions that are obvious today and benefit from reliability, low operating costs and battery technology huge potential to triple battery densitty over the next 10 years.

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

Yes

44 17.1 Please add details to your response.

Add sails to ships to reduce generation costs.

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 sure

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

Not certain as their may be safety concerns we don't fully understand today.

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

neutral

48 19.1 Please add details to your response.

During the emission reduction period gradually reduce domestic flights to essential travel over 500km and international flights to once a year and virtual conferences, meetings, education classes for 90% of business travel and any more than 1 holiday trip by air annually.
or perhaps incentives or disincentives according to financial capacity.

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 aware

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?

Battery or green hydrogen fuels

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?

NA

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

NA

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?

We all need to see the plan

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

1. International flight, 2. Inland 300kmh passenger and goods rail with spokes to Adelaide, Melbourne, Canberra - Sydney, and Brisbane with hubs at Swan Hill, Junee, Toowoomba

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?

Selective support in most states to develop electric vehicle conversion industry from 2027 to 2040.

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?

We need to manage essential facts about climate change, emisssions reduction, renewable energy, and strategy.
To make this work we need all media, public speeches, politicians, businesses and informed people to be responsible for any claims to those essential facts. Penalties to be applied by judges that will include public record of their broadcast of negative or wrong information that contradicts the essential facts upon which our future are to be built.

59 ## 25.2 What opportunities can Government leverage to show leadership in Australia and internationally?

Understand and consider all aspects of any decision that is made and acknowledge all advantages and disadvantages. This would include lies, deception, secrecy, that are used to address opposition to facts about decisions being considered, implemented, and subsequently reviewed. This does not affect preferences of businesses, politicans or organisations other than expressing preferences as well as both benefits and disadvantages

60 ## 26. What measures and metrics should be used to evaluate the final Transport and Infrastructure Net Zero Roadmap and Action Plan?

Realistic, relevant, and understandable facts associated with the plan.

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?

Invite responses from businesses and the public and explain reasons for both positive and negative conclusions.

62 27. Do you have any feedback on the proposed review process?

Neutral

63 28. Do you have any further feedback on the Consultation Roadmap and proposed pathways?

If I had more time I could offer more.

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

Neutral

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

NA

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