Transport and Infrastructure Net Zero Consultation Roadmap

Take the survey

Department of Climate Change, Energy, Environment and Water

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3 Published name
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Yes

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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?

Victoria

14 Postcode

3175

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.

Key guiding principle should be fully support financially 'the emission reduction development process in transport' and 'don't do business with the process of emissions reduction'. Business comes after as a result of the emission reduction implementation.

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.

Maybe: the main focus of the government should be providing the full support to the introduction of the zero emission transport technology. The consumers will follow this trend due to availability of zero emission transport and unavailability of fossil fuel transport.

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.

National policy framework should have the key guiding principle of emission reduction, which today doesn't have it. Existing funding policies are based on business criteria and preventing Australian manufacturers to develop zero emission transport technology to achieve net zero by 2050

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

As indicated in 3.1 national policy framework must allow government fundings to support Australian manufacturers to progress projects of zero emission technology development. The policies should NOT be based on 50:50 funding, due to the lack of financial resources affecting the industry. Australia government should take responsibility to fully fund the zero emission technology development for this period of transition.

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?

The actions to be taken by government is to consult directly with the experts in zero emission technology development in Australia. This should be done according to the areas of interest, such as buses manufacturers, truck manufacturers, passenger vehicles manufacturers, special vehicle operation manufacturers, rail, support infrastructure, etc. With this approach government will understand that Australian manufacturers are fully committed to introduce zero emission transport, but without this support is not possible

to achieve this transition. All transport manufacturers have the main purpose to move people in the best possible way, and commitment to provide a clean and safe transport system is priority.
A survey consultation is only the first step.

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?

The movement of goods by truck is a big area to consider, and government should continue doing consultations, but as I said it should include the truck and goods vehicle manufacturers. Because no matter what is said without supporting the development of zero emission technology for goods vehicles in Australia is not going to abate the heavy transport emission. The policies should attain the technology development, reducing dependency of overseas importation and avoiding at some stage the burden of big investment to acquire imported vehicles that not everybody can afford.

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

I would like to present few numbers here: in Australia there is about 600,000 registered trucks, mainly 99.999% of them are running on fossil fuel. To decarbonize this sector, we need to replace these trucks in 25years to achieve net zero by 2050. This is equivalent to introduce in Australia 25,000 zero emission trucks per year on average. Who can afford this heavy cost? The challenge is not for the customers or Supply Chain only. Government should support this enormous cost and creates avenues to help local vehicle manufacturers.
Zero emission vehicles will NOT appear on the road by magic, we need to sit down and discuss the real scenarios in order to achieve the net zero proposed.

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.

Partially agreed: policies for new vehicle efficiency only benefit the customer that can afford to buy the new zero emission vehicle. However, the mass introduction of the zero

emission light vehicles on Australian roads will not happen if there is no support to massively develop the zero emission vehicles technology. Not to indicate the after-sale market for batteries, reusable and disposable parts. See the numbers indicated in point 6.2

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?

Again, consult with the vehicle manufacturers on a regular base and actualize policies and Standards according to the new technology under development.

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

The effective action to be taken in any vehicle sector is funding, funding.

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

Partially: my expertise is heavy zero emission vehicle development and I cannot see the government financial support that this industry sector requires. See again the point 6.2 which provide a dimension of the support required to achieve total decarbonization of the heavy vehicle sector.
Apart of point 6.2, I will enhance the numbers to include buses as a heavy transport vehicles. In Australia there are about 100,000 registered buses, that requiring replacement in 25 years, this is on average to introduce about 4000 zero emission buses per year in Australia. Again, who can pay for this enormous cost??. Policy of Vehicle Efficiency forces the customer to buy these vehicles, but in no way the policy makes sure that Australia will introduce 4000 zero emission buses per year.

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

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

Hydrogen heavy vehicles is the answer to extend the range, to achieve higher power delivery for heavy vehicles and it will provide cost effective solutions for remote places where the hydrogen/water is available. Battery based heavy vehicle has similar value for long distances, however today battery systems weight and volume permit only up to certain level of energy to be onboard of the vehicle.
Hydrogen fuel cell vehicles are using batteries as well.

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

Today perhaps low emission vehicles have the benefit to reduce emissions in this transitional time until all vehicles would be zero emission. However, they are low emissions only, depending on which fuel use. Being a zero emission vehicle developer: battery and hydrogen, my preference is not low emission vehicles.

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?

Design funding policies to target this sector. Funding is required, funding.

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.

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

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

Same as point described for heavy vehicles

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

In this transitional period, perhaps it has benefit. However, my opinion developing technology for low emission fuels in rail is expensive and better is to develop technology based on hydrogen from the beginning

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?

Funding is required as well.
Gather experts in rail development and zero emission technology. Creates groups of experts and meet on a regular basis.

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.

Maritime is not my expertise, however for the central focus is the development of the zero emission technology

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?

Aviation is not my expertise

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.

Partially: The infrastructure for zero emission vehicle should be in line with the process of zero emission vehicles introduction in Australia, per year, per jurisdiction, per sector and fuel system

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?

Together with the funding required for the zero emission vehicle technology development, the vehicle zero emission infrastructure should be funding with proper policies from government

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

It will speed up the introduction of the supporting infrastructure for the zero emission vehicles.

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?

Incentivize and support the use of hydrogen in transportation

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

Hydrogen is my preference over the low carbon fuels

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?

Maintain a regular consultation with vehicle manufacturers and zero emission technology developers to update policies, participate in new initiatives and solve problems due to the

lesson learnt process

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?

As example only, Brazilian government funds 90% or more all the zero emission transport technology development projects, without roadblocks of funding returns or financial return demonstration. The key criteria is based only on technology development demonstration, which is crucial for the local vehicle manufacturers to progress for the delivery of zero emission vehicles to the Brazilian roads.
In Australia there are many zero emission vehicle technology development projects that failed due to insufficient funds. I can provide example outside this survey.

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

Just concentrate to reduce the emissions in the transport with proper funding policies, engage experts in the matter, consult with communities involved in transport and provide a pathway for education about renewable energy use in transport for the young generation.

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

It should be verified that the Plan contains all the scenarios that will support and achieve the net zero emission by 2050, for all the transport sectors.

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 actual zero emission technology implementation has a cost and this cost is not quantified yet as far as I know to dimension at which extend government could support. As example, as an expert in zero emission vehicle developer my estimation to replace 100,000 buses in 25 years requires around AUD100billion without counting the cost of infrastructure implementation. This type of estimation is derived from expert technology analysis, with no bias from unknown sources.

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