

# Transport and Infrastructure Net Zero Consultation Roadmap

## Take the survey

Department of Climate Change, Energy, Environment and Water

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Response received at:

August 6, 2024 at 4:24 PM GMT+10

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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  
ITS Australia
- 4 Confirm that you have read and understand this declaration.  
Yes
- 5 First name  
Stacey
- 6 Last name  
Ryan
- 7 Email  


- 8 Phone  
[REDACTED]
- 9 Who are you answering on behalf of?  
Organisation
- 10 Organisation name  
ITS Australia
- 11 What best describes you or your organisation?  
Other: "Peak Body"
- 12 What sector do you represent?  
Rail  
Heavy road vehicles (trucks, buses etc.)  
Light road vehicles (cars, utes etc.)  
Active transport  
Public transport  
All transport  
Climate change/net zero  
Infrastructure  
Energy
- 13 What state or territory do you live in?  
Victoria
- 14 Postcode  
3182
- 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.  
Robust evidence base and ensuring equitable and inclusive outcomes are critical as well as delivering maximum emissions reduction while supporting economic opportunity and value for money. These guiding principles provide a strong framework for the development of the roadmap and action plan.
- 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.  
Innovation and adaptation could be powerful tools to include in the framework to identify opportunities for emissions reduction and abatement.
- 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.  
Modal-shift to active and public transport is a key challenge and will require cross-border and all levels of government supporting incentives and interventions that drive change. Majority of Australian's rely on private vehicle ownership for their transport needs and to come close to the net zero targets real action will be needed to shift that percentage to low or zero emission travel choices.
- 22** 4. What should be included in a national policy framework for active and public transport and how should it be developed?  
Targeted approach to national harmonisation across transport data ecosystems to support real-time multi-modal passenger information systems and seamless, planning, booking and payment to improve customer experience and encourage modal shift to active and public transport.
- 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?

There needs to be a serious campaign that outlines the costs and benefits of private vehicle use and how different choices can make a real cumulative difference. This needs to be in partnership with incentives and investment in improving customer experience for public and active transport and ensure there are equitable and accessible options for all Australian's for their needs through their lifetimes.

- 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?

Modal shift in freight is also a powerful tool to support the reduction of emissions in the transport sector.

- 25 6.2. How would these actions address the identified challenges and opportunities for emissions reduction in the movement of goods?  
Transfer of goods from heavy vehicles to rail and from rail to low / zero emission vehicles.

Pilots in delivering low - zero emission urban freight in high density jurisdictions that reduce ICE and heavy vehicle transport in cities.

- 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.

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?

<https://its-australia.com.au/vehicle-standards>

- 29 8.2 How would these actions address the identified challenges and opportunities to reduce light vehicle emissions?  
EV charging infrastructure needs to be included in this discussion, as well as transport access pricing or road user charging.
- 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  
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.  
1: Hydrogen fuel cell  
2: Low carbon liquid fuels  
3: Battery electric
- 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?  
Engage with industry on challenges for HV to transition to low / zero emission vehicles for freight

- 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: 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?  
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.

Technology offers a real opportunity to reduce the emissions footprint of transport infrastructure.

Improved procurement processes and asset management are tools to deliver serious abatement

**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?

Pilots, workshops and high-level roundtables are effective mechanisms for industry, government and community to work together

- 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?

ITS Australia conferences and events and though leadership activities with national and international leaders

- 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

ITS Australia Transport & Infrastructure Net Zero Roadmap.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered

# Transport and Infrastructure Net Zero Roadmap

## ITS Australia Submission

August 2024



ITS Australia is the peak body for the transport technology sector and many of our 150+ member organisations play a role at the leading edge of new and emerging technologies to improve safety and efficiency on our transport networks.

The early days of ITS Australia was focused on harmonising tolling technologies across Australia bringing together government and industry to develop and deliver the first national cross-border harmonised tolling system. Applying technology to solve some of transport's biggest challenges is one of the core tenets for ITS Australia and our members.

ITS Australia welcomes the opportunity for engagement with industry and the wider community and highlights potential additional transport technology benefits for Australians. From a technology perspective, there is a real opportunity that emerging innovations in vehicles and infrastructure can enable more sustainable and efficient transport networks. These technologies can also offer serious safety and productivity benefits for all road users and network operators.

A robust evidence base and ensuring equitable and inclusive outcomes are critical as well as delivering maximum emissions reduction while supporting economic opportunity and value for money. These guiding principles provide a strong framework for the development of the roadmap and action plan. ITS Australia suggest that innovation and adaptation could be powerful tools to include in the framework to identify opportunities for emissions reduction and abatement.

Modal-shift to active and public transport is a key challenge and will require cross-border and all levels of government supporting incentives and interventions that drive change. Majority of Australian's rely on private vehicle ownership for their transport needs and to come close to the net zero targets real action will be needed to shift that percentage to low or zero emission travel choices.

Targeted approach to national harmonisation across transport data ecosystems to support real-time multi-modal passenger information systems and seamless, planning, booking and payment to improve customer experience and encourage modal shift to active and public transport.

There needs to be a serious campaign that outlines the costs and benefits of private vehicle use and how different choices can make a real cumulative difference. This needs to be in partnership with incentives

and investment in improving customer experience for public and active transport and ensure there are equitable and accessible options for all Australian's for their needs through their lifetimes.

Key enablers to support the pathway to net zero transport and infrastructure:

- **Data and connectivity**
- **Planning and Procurement**
- **Modal shift – People and Freight**

An important enabler for a net zero future transport will be a substantial modal shift to active and public transport. As a general population with a majoritively vehicle dependant lifestyle there will need to be all levels of government to actively support this shift by implementing a comprehensive national policy framework for active and public transport that includes infrastructure development, public engagement, legislative reform and technological advancement.

There are cutting-edge digital communication technologies which allow cars to interpret their surroundings and alert drivers to potential hazards intelligently. ITS Australia with research partners University of Melbourne and government agencies published a report 'Investigating pathways to deliver road safety and network efficiency benefits through connected technologies' which revealed that these technologies can reduce vehicle crashes by up to 78 per cent, dramatically reducing road trauma and the death toll. These same connected vehicle technologies have the potential to play a significant role in reducing GHG emissions and delivering more sustainable transport networks and infrastructure builds.

The phrase "the high cost of free parking" refers to the economic principle known as "opportunity cost." This principle highlights that even though parking might be offered for free in certain areas, there are significant hidden costs associated with it. These costs include the value of the land used for parking, the environmental impact of accommodating cars, and the missed opportunities for using that space for other purposes that might have higher economic or social benefits.

This concept can be more broadly interpreted to better understand the impacts of emissions and other pollutants that are 'paid' for through second-hand channels; when undertaking a "net zero" roadmap there is a need to ensure all stakeholders are considered and included.

## Conclusion

ITS Australia commends the Federal Government and the Department of Infrastructure, Transport, regional Development, Communications and the Arts, in undertaking this important work to better understand the impacts and opportunities a net zero transport and infrastructure future offers and is strongly supportive of adopting the pathway outlined.

In urban areas, free parking often leads to increased traffic congestion, inefficient land use, and higher pollution levels. This concept underscores the idea that seemingly free resources like parking spaces (or roads) actually have substantial costs, which can be better managed through policies like pricing parking appropriately or investing in alternative transportation options.

Appropriately pricing road use can lead to a more financially sustainable and efficient transportation system, benefiting both road users and the broader community. These benefits align with principles of economic efficiency, sustainability, and equity in infrastructure financing. There is also Innovation and Technology: Tolling systems often leverage advanced technology for payment collection and traffic management. Investing in these systems can spur innovation in transportation technology and contribute to the development of smarter, more sustainable urban mobility solutions.

ITS Australia notes there have been a number of government public consultations for comment that both directly and indirectly have potential impacts on the deployments of emissions reductions and life-saving technologies and we have provided submissions on them and make the recommendation that government consider the broader impact of these consultations collectively across industry and community stakeholders

Industry is keen to work with government to best deliver these life-saving and efficiency enhancing technologies, and ITS Australia is well placed to facilitate these discussions and activities. To facilitate any future engagement, ITS Australia Policy Manager Stacey Ryan can be contacted at [Stacey.ryan@its-australia.com.au](mailto:Stacey.ryan@its-australia.com.au).

Yours sincerely,



**Susan Harris**  
Chief Executive Officer

# itsaustralia

Intelligent Transport Systems

## PLATINUM



## GOLD



## SILVER

