

# 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.  
Yes
- 2 Please indicate how and if you want your submission published.  
Public
- 3 Published name  
Australian Institute of Traffic Planning and Management Ltd
- 4 Confirm that you have read and understand this declaration.  
Yes
- 5 First name  
Not answered
- 6 Last name  
Not answered
- 7 Email  
Not answered

- 8 Phone  
Not answered
- 9 Who are you answering on behalf of?  
Organisation
- 10 Organisation name  
Australian Institute of Traffic Planning and Management Ltd
- 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  
4030
- 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.  
AITPM supports the roadmap's guiding principles. They align with AITPM's own vision of a 'sustainable, efficient, accessible and safe transport system' and map effectively to the ways in which the Australian Government exercises leadership, including through regulation and the

allocation of funding.

As TINZCR guiding principles will form the basis of future policy and investment decisions, it is

important they balance consideration of people's everyday lived experience with the long-term

target of achieving Net Zero by 2050. The TINZCR should consider how the principles 'Maximise

emissions reduction' and 'Maximise economic opportunity' can be achieved synonymously.

Balancing these two principles will ensure that Net Zero is not able to be represented as contrary to

economic productivity (including improved job opportunities).

This will in turn contribute to maximised 'Value for money', ensuring that decarbonisation is

achieved at the lowest possible cost. Costs will inevitably be experienced by the community both

indirectly (e.g., if governments' expenditure on Net Zero is reflected in reductions to other service

areas) and directly (until, for example, EVs reach price parity with fossil-fuelled vehicles).

Achieving

'Inclusive and equitable' outcomes calls for actions that demonstrate low and zero-carbon transport

choices as easy, affordable, accessible and available to all.

**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.

AITPM supports the use of an 'Avoid-Shift-Improve' framework to shape the full suite of actions

needed to reduce Australia's transport emissions. AITPM's view is that over time the most impactful

areas of direct focus for the Australian Government under the TINZCR will prove to be 'Avoid'

solutions.

Complementing this, the Australian Government must continue to provide leadership in coordinating

actions, under all three categories, that are implemented by other sectors and level of

government.

Actions must include both 'push' measures to discourage high-emissions transport outcomes and 'pull' measures that provide attractive low-emissions alternatives.

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

Not answered

- 21 3.1 Please add details to your response.

Not answered

- 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?

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?

Rethinking our transport networks and systems

To ensure transport decarbonisation actions deliver multiple flow-on benefits, the Australian

Government should include 'reduced car dependence' as an explicit aim for TINZCR implementation. This should also be adopted as a foundational element of the foreshadowed Net

Zero sector plan for Australia's built environment.

A default assumption of car ownership and use informs the planning, building and housing operation

of transport systems in Australian urban growth areas. As well as constraining short to medium-term

decarbonisation goals, this leads to significant household impacts as marginal gains in housing

affordability are traded off (In the absence of other choices) for costly 'forced car ownership' and

use. It is at odds with initiatives in other nations that are challenging assumed car dependence.

Building on recent infrastructure reviews, the Australian Government should scrutinise the nation's

existing pipeline of major road investment projects. This should assess projects' alignment both with

Net Zero goals adopted at all levels of government and with policy goals relating to housing supply

and affordability.

TINZCR: Submission by AITPM 3

Road – light vehicles and Road – heavy vehicles

Having pledged investment in various transport technology and energy innovation and

commercialisation initiatives, the Australian Government can and should:

- Require emerging vehicle-to-roadside and vehicle-to-vehicle connectivity and communications

technologies to be deployed in ways that reduce car dependence (e.g., by prioritising buses

over cars) as well as improving road safety and/or facilitating the operation of EVs

- Similarly, ensure that whatever regime replaces petroleum fuel excise is designed to promote

the space-efficient use of urban road networks by all vehicles regardless of their power source

- Work with jurisdictions to ensure that groups experiencing transport disadvantage are not left

behind by the electrification of the vehicle fleet. For example, shared mobility programs can

prioritise access to cost-effective EVs for occasional use by people from low-income households

**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?

Not answered

**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.

Not answered

**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?

Road – light vehicles and Road – heavy vehicles

Having pledged investment in various transport technology and energy innovation and commercialisation initiatives, the Australian Government can and should:

- Require emerging vehicle-to-roadside and vehicle-to-vehicle connectivity and communications

technologies to be deployed in ways that reduce car dependence (e.g., by prioritising buses

over cars) as well as improving road safety and/or facilitating the operation of EVs

- Similarly, ensure that whatever regime replaces petroleum fuel excise is designed to promote

the space-efficient use of urban road networks by all vehicles regardless of their power source

- Work with jurisdictions to ensure that groups experiencing transport disadvantage are not left

behind by the electrification of the vehicle fleet. For example, shared mobility programs can

prioritise access to cost-effective EVs for occasional use by people from low-income households.

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

Not answered

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?

Not answered

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?

Not answered

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?

### Measuring success

The Australian Government needs to maintain or advance our international standing by squarely addressing perceptions that the nation's transport preferences demonstrate a low commitment to climate action. The TINZCR signposts multiple opportunities to secure Australia's place in a changing global economic and strategic landscape. Actions to realise these should be framed as, and their achievement measured against, strong benchmarks and targets. For the movement of people targets should be applied to mode shift from driving to active and public transport, as well as private vehicle emissions reductions. Progress in the freight transport sector can be measured against targets expressed in terms of CO<sub>2</sub>-e per megatonne of cargo. With Australian Government leadership all jurisdictions should adopt a consistent approach to evaluating transport decarbonisation options through standardised policy, guidance, modelling and appraisal approaches. Public reporting will then show transparently how Australia's transport sector outcomes are contributing to – or lagging – the achievement of Net Zero.

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  
TINZCR AITPM submission 25-07-2024.pdf
- 69 Upload a submission  
Not answered
- 70 Upload supporting file  
Not answered
- 71 Upload supporting file  
Not answered



# TRANSPORT AND INFRASTRUCTURE NET ZERO CONSULTATION ROADMAP

*Submission by AITPM*

## 1. About AITPM

AITPM (the Australian Institute of Traffic Planning & Management) is the leading national membership body representing all professionals and practitioners working in transport. The industry covers fields that include transport planning, transport and traffic engineering, transport modelling, active travel, travel demand management and travel behaviour change.

AITPM members and stakeholders work together to ensure multimodal transport systems are designed, built and operated to support healthy people, communities and economies in all parts of Australia. This mission informs AITPM's Policy and Principles Platform, attached for information.

## 2. Submission on TINZCR

### 2.1. Introduction: Transport's multifaceted role in reaching Net Zero

AITPM welcomes the Transport and Infrastructure Net Zero Consultation Roadmap (TINZCR) and appreciates the opportunity to influence its development and implementation. Despite the Australian Government's commitment to Net Zero greenhouse gas emissions by 2050, our transport emissions per capita continue to rise.

Coordinated efforts to decarbonise the sector are critical to position Australia as a leader of global climate action, rather than a drag on this. When AITPM asks members and stakeholders what they see as the most important community challenges calling out for AITPM's advocacy, '*minimising transport's contribution to climate change*' sits near the top of people's concerns. Only surpassing this challenge as focal points for AITPM action, in respondents' view, are the need to better integrate land use and transport planning, and to promote active transport use. As acknowledged in the TINZCR, both of these action areas are critical to reducing the greenhouse gas emissions generated by Australian transport projects and operations.

On that basis, AITPM's comments address how the Australian Government can most effectively tackle the issue of transport sector decarbonisation. While policy conversations in this space have tended to focus on the removal of barriers to technological fixes – the uptake of electric vehicles (EVs) – AITPM is just as, if not more, interested in actions that reduce the demand for and/or distance of travel, forestall the need for investment in costly infrastructure, and enable car journeys to be completed instead using active and public transport.

These actions will deliver the broadest possible range of benefits to Australia. Simply changing the energy source that powers a car trip will do nothing to relieve congestion, reduce the road toll, free up budgets for other priorities, or improve individuals' physical activity and health outcomes.

## 2.2. TINZCR guiding principles and frameworks

AITPM supports the roadmap's guiding principles. They align with AITPM's own vision of a *'sustainable, efficient, accessible and safe transport system'* and map effectively to the ways in which the Australian Government exercises leadership, including through regulation and the allocation of funding.

As TINZCR guiding principles will form the basis of future policy and investment decisions, it is important they balance consideration of people's everyday lived experience with the long-term target of achieving Net Zero by 2050. The TINZCR should consider how the principles *'Maximise emissions reduction'* and *'Maximise economic opportunity'* can be achieved synonymously. Balancing these two principles will ensure that Net Zero is not able to be represented as contrary to economic productivity (including improved job opportunities).

This will in turn contribute to maximised *'Value for money'*, ensuring that decarbonisation is achieved at the lowest possible cost. Costs will inevitably be experienced by the community both indirectly (e.g., if governments' expenditure on Net Zero is reflected in reductions to other service areas) and directly (until, for example, EVs reach price parity with fossil-fuelled vehicles). Achieving *'Inclusive and equitable'* outcomes calls for actions that demonstrate low and zero-carbon transport choices as easy, affordable, accessible and available to all.

AITPM supports the use of an 'Avoid–Shift–Improve' framework to shape the full suite of actions needed to reduce Australia's transport emissions. AITPM's view is that over time the most impactful areas of direct focus for the Australian Government under the TINZCR will prove to be 'Avoid' solutions.

Complementing this, the Australian Government must continue to provide leadership in coordinating actions, under all three categories, that are implemented by other sectors and level of government. Actions must include both 'push' measures to discourage high-emissions transport outcomes and 'pull' measures that provide attractive low-emissions alternatives.

## 2.3. Australian Government-led Net Zero initiatives

AITPM highlights the following Australian Government-led responsibilities as focal points for the implementation of the TINZCR. These are listed under relevant TINZCR section headings.

### **Rethinking our transport networks and systems**

To ensure transport decarbonisation actions deliver multiple flow-on benefits, the Australian Government should include *'reduced car dependence'* as an explicit aim for TINZCR implementation. This should also be adopted as a foundational element of the foreshadowed Net Zero sector plan for Australia's built environment.

A default assumption of car ownership and use informs the planning, building and housing operation of transport systems in Australian urban growth areas. As well as constraining short to medium-term decarbonisation goals, this leads to significant household impacts as marginal gains in housing affordability are traded off (In the absence of other choices) for costly 'forced car ownership' and use. It is at odds with initiatives in other nations that are challenging assumed car dependence.

Building on recent infrastructure reviews, the Australian Government should scrutinise the nation's existing pipeline of major road investment projects. This should assess projects' alignment both with Net Zero goals adopted at all levels of government and with policy goals relating to housing supply and affordability.

## **Road – light vehicles and Road – heavy vehicles**

Having pledged investment in various transport technology and energy innovation and commercialisation initiatives, the Australian Government can and should:

- Require emerging vehicle-to-roadside and vehicle-to-vehicle connectivity and communications technologies to be deployed in ways that reduce car dependence (e.g., by prioritising buses over cars) as well as improving road safety and/or facilitating the operation of EVs
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- Work with jurisdictions to ensure that groups experiencing transport disadvantage are not left behind by the electrification of the vehicle fleet. For example, shared mobility programs can prioritise access to cost-effective EVs for occasional use by people from low-income households.

## **Measuring success**

The Australian Government needs to maintain or advance our international standing by squarely addressing perceptions that the nation’s transport preferences demonstrate a low commitment to climate action. The TINZCR signposts multiple opportunities to secure Australia’s place in a changing global economic and strategic landscape. Actions to realise these should be framed as, and their achievement measured against, strong benchmarks and targets.

For the movement of people targets should be applied to mode shift from driving to active and public transport, as well as private vehicle emissions reductions. Progress in the freight transport sector can be measured against targets expressed in terms of CO<sub>2</sub>-e per megatonne of cargo.

With Australian Government leadership all jurisdictions should adopt a consistent approach to evaluating transport decarbonisation options through standardised policy, guidance, modelling and appraisal approaches. Public reporting will then show transparently how Australia’s transport sector outcomes are contributing to – or lagging – the achievement of Net Zero.

**July 2024**

*ATTACHMENT: AITPM Policy and Principles Platform*

**AUSTRALIAN INSTITUTE OF TRAFFIC PLANNING AND MANAGMENT (AITPM)**

+61 7 3544 5670

policy@aitpm.com.au

# AITPM POLICY AND PRINCIPLES PLATFORM

## WHY ARE TRANSPORT SYSTEMS IMPORTANT?

The impact of a successful transport system shows up as healthy people, communities and economies. Transport links and activates places, enabling people and businesses to access:

- Goods and services
- Jobs
- Education and training
- Health services
- Entertainment, sport and recreation
- Friend and family networks

AITPM is committed to educating governments and the community on the importance of successful transport systems – and, in turn, a properly resourced Transport Community – in ensuring healthy and prosperous outcomes for Australians.



# AITPM POLICY AND PRINCIPLES PLATFORM



## OUR PURPOSE

**AITPM's purpose is to raise the profile of the Transport Community. The community's practitioners and stakeholders are critical participants in delivering a sustainable, efficient, accessible and safe transport system.**

Every day people across Australia's Transport Community identify, investigate, plan, develop and implement solutions to achieve this. In doing its work, the aims of the Transport Community include:

- Supporting a switch to sustainable transport choices, to help reduce Australia's emissions and lessen transport's impact on the environment
- Growing national and community prosperity by enabling the safe and efficient movement of people, goods and services
- Delivering inclusive transport services that provide access to opportunities for all users
- Building the resilience of communities and businesses by ensuring transport networks remain safe and connected under changing external conditions, including natural disasters
- Integrating the movement of people and vehicles within flourishing places in different geographic settings, from cities and towns to rural and regional areas.

# AITPM POLICY AND PRINCIPLES PLATFORM

## SUCCESSFUL TRANSPORT SYSTEMS ARE CREATED THROUGH

1. Integrated transport and land use planning at all levels, from future-focused strategic planning to the implementation of site-specific developments
2. The application of sound, long-term, non-partisan and evidence-based public policy, with cross-sectoral support
3. The systematic collection, monitoring and evaluation of transport data to support decision-making
4. The consistent application of a range of appropriate contemporary modelling tools by suitably resourced professionals
5. A culture of research and innovation that is collaborative across sectors and disciplines
6. Genuine, inclusive engagement, collaboration and co-design activities encompassing all communities and stakeholders
7. A holistic 'Safe Systems' approach covering all transport infrastructure and operations, and the interactions between people, vehicles and the transport environment
8. Sustainable and transparent funding and pricing models that support desired strategic transport outcomes
9. A diverse and welcoming community of transport professionals that has the capacity to handle the demands placed on it
10. Capable transport practitioners with the qualifications, skills and experience to plan, design, engineer, deliver, operate and manage Australia's transport systems
11. The commitment of governments and industry to educate and support the next generation of transport professionals.

As the national association for transport professionals, AITPM leads the Transport Community in connecting, collaborating and delivering, developing industry skills, capability and knowledge as we create successful transport systems together.

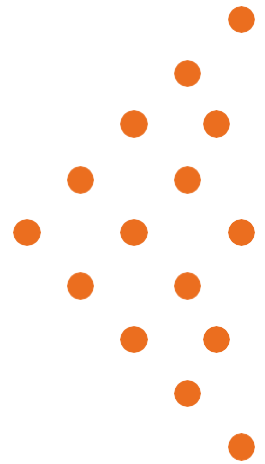
**We are the collective voice of the Transport Community, and we advocate for delivering sustainable, efficient, accessible and safe transport systems**

# AITPM POLICY AND PRINCIPLES PLATFORM

## WHO IS PART OF THE TRANSPORT COMMUNITY?

The Australian Transport Community is made up of professionals from a wide range of disciplines and backgrounds, including:

- Transport planners
- Traffic and transport engineers
- Land use, transport and traffic modellers
- Road safety practitioners
- Transport economists
- Road and public transport infrastructure designers
- Active transport specialists
- Travel behaviour change specialists
- Transport researchers, educators and engagement professionals
- Transport policy specialists.



To design, deliver and manage transport systems, this community of transport professionals connects to a broader network of professions and suppliers covering these areas of focus

- Urban and regional planning
- Transport and traffic data collection and analysis
- Modelling programs and resources
- Traffic management and control
- Intelligent transport systems
- Infrastructure supply, engineering and construction
- Transport service operations – from rail through to micromobility.