

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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City of Greater Bendigo
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Yes
- 5 First name
Not answered
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- 8** Phone
Not answered
- 9** Who are you answering on behalf of?
Organisation
- 10** Organisation name
City of Greater Bendigo
- 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
3552
- 15** What area best describes where you live?
Regional area
- 16** 1. Do you support the proposed guiding principles?
Not answered
- 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?
Not answered

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?

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?

6. Rural and regional local governments are not resourced to fully fund development of the walking and cycling networks we need without additional support. The \$100 million allocated to the new Active Travel Fund is insufficient.

The City of Greater Bendigo supports a legacy road network which is dangerous for pedestrians

and cyclists. Many roads and streets do not have footpaths and the City's separated cycling

network is only starting to be developed. At the time of preparing this submission, there were

approximately 850 footpaths on Council's capital works program which would cost approximately \$100M to construct in total.

Council developed a Walking and Cycling Infrastructure Plan which sets out a program of separated cycling infrastructure that would enable 90% of residents to live within 500 metres of

a safe cycling route. It is estimated that implementation of the first 10 year program would cost

over \$47 million with the full program costing at least \$130 million.

As an example, Council is currently working with the Victorian Department of Transport to

develop a separated cycling lane on Mundy Street which is one of the main roads that extends

through the City Centre. This project will cost over \$5 million and will deliver only 500 metres of

separate cycling infrastructure.

The investment in walking and cycling infrastructure also needs to be paired with investment in

urban realm changes that de-prioritise private vehicles, such as traffic calming and reduction of

car parking. These changes need to be conducted simultaneously to ensure the community has

continuous access to convenient transport choices that meet their needs.

Developing the scale of urban realm improvements and walking and cycling infrastructure

needed without state and federal government support is not possible given local government's

limited fund raising opportunities, including Victoria's rate capping regime.

While the Australian Government's new Active Travel Fund is welcomed, \$100 million is inadequate and will have a negligible impact given the substantial active travel

infrastructure

deficit present across most municipalities in Australia.

- 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?

No

27 7.1 Please add details to your response.

2. We cannot rely on electric vehicles alone to achieve a net zero transport sector. Instead we need to reduce the need for travel and achieve a dramatic shift away from car use.

The transition to electric vehicles alone will not enable Australia to meet its climate goals of

limiting warming to 1.5 degrees for the following reasons:

- Electric vehicle sales would need to comprise 73% of all new light vehicle sales by 2030 in

Australia (including utility vehicles) to meet this goal (in 2023 they made up 7.2% of national

light vehicle sales) 5

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- Most Australians only change vehicles every 10 to 12 years. This means that most combustion engine vehicles purchased today will still be on the road beyond 2033.

- While the cost of electric vehicles is reducing, they are still unaffordable for most community

members. For example, in Bendigo approximately 30% of households (13,200 households)

earn less than \$800 per week. For these households purchasing an electric vehicle is likely to be cost prohibitive until the second-hand market significantly matures.

- Car ownership cannot continue to exist at present levels as our population increases without

significantly impacting the liveability of our cities.

For the reasons outlined above, a reduction in car use is needed to meet Australia's emission

reduction goals, facilitate equitable access to transport and maintain the liveability of our cities.

Reducing car use will require a redesign of urban form, including the reallocation of road space

from private vehicles to pedestrians, cyclists and public transport. It will also require a significant

increase in public transport services.

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?

A reduction in car use is needed to meet Australia's emission reduction goals, facilitate equitable access to transport and maintain the liveability of our cities.

Reducing car use will require a redesign of urban form, including the reallocation of road space from private vehicles to pedestrians, cyclists and public transport. It will also require a significant increase in public transport services.

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?

Not answered

- 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?

5. Integrated land use and transport planning is critical to reducing demand for travel and achieving a mode shift away from car use. Support is required with utility and infrastructure upgrades in urban centres such as Bendigo to facilitate increased development in established areas.

Increasing urban densities in established areas close to public transport, schools, jobs and shops, is critical to reducing travel distances and achieving the mode shift required to reduce

transport emissions. The City of Greater Bendigo's draft Managed Growth Strategy currently

seeks to locate 70% of new houses in established areas and 30% in greenfield locations.

This

represents a significant shift away from current development patterns in recognition of the

benefit urban consolidation delivers for accessibility, economic vitality and emission reductions.

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In Bendigo, challenges associated with achieving this target include the high development costs

in established areas resulting from the need to upgrade utility services to achieve the water

pressure and power needs of multi-story, all electric homes. In addition, Bendigo's gold mining

legacy has left the City with large areas of contaminated land which are costly to remediate.

Support with infrastructure upgrades and land remediation would unlock development opportunities in the City Centre, facilitating a reduction in travel and a shift to walking, cycling and public transport use.

- 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?

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

Submission - City of Greater Bendigo - Transport and Infrastructure Net Zero
Consultation Roadmap.pdf

69 Upload a submission

Not answered

70 Upload supporting file

Submission by Greater Bendigo City Council.docx

71 Upload supporting file

Not answered

Transport and Infrastructure Net Zero Consultation Roadmap

Submission by Greater Bendigo City Council

Introduction

The Greater Bendigo City Council (Council) is pleased to provide a submission to the Australian Government's Transport and Infrastructure Net Zero Consultation Roadmap

Due to time constraints, this submission was not able to be considered by Council for formal endorsement and, therefore, should be considered to reflect the views of Council officers only.

The key messages outlined in the submission are as follows:

1. We cannot rely on electric vehicles alone to achieve a net zero transport sector. Instead we need to reduce the need for travel and achieve a dramatic shift away from car use.
2. We need to promote a new shared vision for Australian cities communicated through national and state level campaigns in order to change community expectations.
3. Mode share targets for each state and municipality would help incentivise investment in walking, cycling and public transport.
4. Integrated land use and transport planning is critical to reducing demand for travel and achieving a mode shift away from car use. Support is required with utility and infrastructure upgrades in urban centres such as Bendigo to facilitate increased development in established areas.
5. Rural and regional local governments are not resourced to fully fund development of the walking and cycling networks we need without additional support. The \$100 million allocated to the new Active Travel Fund is insufficient.
6. Public transport services need investment, particularly Bendigo's bus network.
7. A coordinated and / or centralised roll-out of upgrades to the electricity distribution network is required (similar to the NBN roll-out) to meet future demand generated by electric vehicle charging and electrification of households and businesses.
8. All local governments need access to holistic transport and mode share data to facilitate planning for a zero emissions transport system.

Background

About the City of Greater Bendigo

The City of Greater Bendigo is in the centre of Victoria, covering almost 3,000 km². Greater Bendigo has the third largest urban area in Victoria. It also includes many small towns and villages such as Heathcote, Axedale, Huntly, Marong, Elmore, Goornong, Kamarooka, Lockwood, Neilborough, Sebastian, Woodvale, Raywood, Mia Mia and Redesdale. The municipality's population is approximately 122,500 and is forecast to grow to 210,000 by 2056¹.

The municipality's urban form is typical of many regional cities which are often characterised by a network of wide, fast roads which preference cars and create barriers for pedestrians and cyclists.

Transport emissions

The transport sector currently accounts for approximately 22% of the City of Greater Bendigo's emissions. Of these emissions, approximately 72% are from cars and 25% are from freight. The remaining 3% are from trains, buses and motorcycles².

Train services

The Melbourne to Bendigo inter-City train service stops at 4 stations within the municipality: Kangaroo Flat, Bendigo, Eaglehawk and Epsom. This service runs every 35 minutes during peak hours in the morning and evening and approximately once an hour between the rest of the day. The municipality's other train stations, Huntly, Goornong and Elmore, are serviced by 2 or 3 services per day.

Bus services

The City's bus network is also infrequent and indirect. Most bus routes start or end at Bendigo Station and are at 30 minute intervals at peak times. This means that residents wanting to cross town almost always need to change buses which is likely to include long wait periods.

Current mode share

As a result of the City's poor public transport services, few residents use buses or trains for day to day travel and the municipality demonstrates high levels of car dependency and car ownership, both of which are on the rise. As an example, in 2021:

¹ Managed Growth Strategy, Greater Bendigo City Council,
<https://letstalkgreaterbendigo.com.au/managed-growth-strategy>

² Snapshot Climate Greater Bendigo 2021/22,
<https://snapshotclimate.com.au/locality/municipality/australia/victoria/greater-bendigo/>

- **Mode share – journey to work** - 92% of all trips to work were by car while only 1% were by public transport, 1% were by bicycle and 3% were by foot (excludes residents who worked from home and did not go to work).
- **Mode share – all journeys**³ - 78% by car, 4% by public transport, 15% by walking and 1% by bicycle.
- **Car ownership** - 33% of households had 1 car, 36% had 2 cars and 20% had 3 or more cars. Only 4.8% of households had no car.

Electric vehicles and charging infrastructure

As of 2023 there were approximately 182 electric vehicles registered in the municipality⁴. This is projected to increase to between 2,800 to 6,400 by 2025 depending on whether the trajectory follows the AEMO Net Zero Steady Progress or the CSIRO rapid decarbonisation pathway.

As of June 2024 there were four Level 3 fast chargers available in the municipality: 2 in Bendigo, one in Marong and one in Heathcote.

Council goals and programs

The City of Greater Bendigo's *Climate Change and Environment Strategy* includes the goal to achieve **zero emissions by 2030** across the municipality.

To achieve this, the City's sub-target for transport is for **1/3 trips to be on public transport, 1/3 by walking and cycling and 1/3 by electric vehicle** by 2030. At present, it is estimated that approximately 78% of trips are by car, 15% by foot, 1% by bicycle and 4% by public transport.

Achieving the mode shift needed will require a total transformation of the City's transport system including a dramatic increase in walking and cycling infrastructure, transformation of the public realm, reallocation of road space and a revolution of the City's bus service.

Most of the change required cannot be implemented by local government alone and would need the Australian and Victorian governments to share our vision and coordinate resources, programs and services to achieve it.

³ Estimated based on VISTA data from the City of Greater Geelong.

⁴ ABS Motor Vehicle Census

Submission

2. We cannot rely on electric vehicles alone to achieve a net zero transport sector. Instead we need to reduce the need for travel and achieve a dramatic shift away from car use.

The transition to electric vehicles alone will not enable Australia to meet its climate goals of limiting warming to 1.5 degrees for the following reasons:

- Electric vehicle sales would need to comprise 73% of all new light vehicle sales by 2030 in Australia (including utility vehicles) to meet this goal (in 2023 they made up 7.2% of national light vehicle sales)⁵.
- Most Australians only change vehicles every 10 to 12 years. This means that most combustion engine vehicles purchased today will still be on the road beyond 2033.
- While the cost of electric vehicles is reducing, they are still unaffordable for most community members. For example, in Bendigo approximately 30% of households (13,200 households) earn less than \$800 per week. For these households purchasing an electric vehicle is likely to be cost prohibitive until the second-hand market significantly matures.
- Car ownership cannot continue to exist at present levels as our population increases without significantly impacting the liveability of our cities.

For the reasons outlined above, a reduction in car use is needed to meet Australia's emission reduction goals, facilitate equitable access to transport and maintain the liveability of our cities.

Reducing car use will require a redesign of urban form, including the reallocation of road space from private vehicles to pedestrians, cyclists and public transport. It will also require a significant increase in public transport services.

3. We need to promote a new shared vision for Australian cities communicated through national and state level campaigns in order to change community expectations.

Reallocating road space away from cars is challenging. Most regional cities such as Bendigo have an urban form that preferences private vehicles, thereby reinforcing car dependency. This has created community expectations that are difficult to shift. As a result, traffic calming and active transport projects can be met with community opposition during the transition if the alternative modes do not yet provide the same convenience.

⁵ 'EVs alone won't save Australia from climate emergency', ClimateWorks Centre, <https://www.climateworkscentre.org/news/evs-alone-wont-save-australia-from-climate-emergency/#:~:text=New%20modelling%20by%20Climateworks%20Centre,warming%20to%201.5%20degrees%20Celsius> accessed 19 July 2024

Promoting a vision for Australian cities as places for people rather than cars would help support the paradigm shift needed, re-enforcing the rationale and need for local interventions which will change how community members experience their cities. While communications campaigns alone will not deliver the change required, they can help shift community expectations which will be critical to supporting the infrastructure and urban realm changes needed for the transition to zero emissions transport.

4. Mode share targets for each state and municipality would help incentivise investment in walking, cycling and public transport.

Mode share targets that cascade down from the national level to states and local governments would help contribute to achieving the shared, inter-governmental vision for zero emissions transport.

Currently most transport projects tackle road congestion and safety issues by investing in more or improved roads. This tackles the problem through increasing supply rather than reducing demand, resulting in an urban form that reinforces car dependency. As populations increase, this paradigm results in further congestion and road safety issues.

While road safety projects are needed, particularly on rural roads, opportunity exists in many urban areas to tackle congestion and safety risks through reducing the number of cars on the road and supporting the shift to alternative modes.

Establishing cascading mode share targets for each state and municipality should be considered to help drive the change needed. This would:

- Ensure all levels of government are working together towards a shared vision and shared objectives. In practice this would ensure state governments prioritise upgrades in public transport services that facilitate and complement interventions by local government such as traffic calming and reallocation of road space, providing an integrated and coordinated solution to transport problems and transition to low emissions transport modes.
- Ensure funding is allocated to projects that further low emission transport outcomes rather than projects that further entrench car dependency.
- Help inform community expectations as change is implemented and travel is disrupted.

5. Integrated land use and transport planning is critical to reducing demand for travel and achieving a mode shift away from car use. Support is required with utility and infrastructure upgrades in urban centres such as Bendigo to facilitate increased development in established areas.

Increasing urban densities in established areas close to public transport, schools, jobs and shops, is critical to reducing travel distances and achieving the mode shift required to reduce transport emissions. The City of Greater Bendigo's draft Managed Growth Strategy currently seeks to locate 70% of new houses in established areas and 30% in greenfield locations. This represents a significant shift away from current development patterns in recognition of the benefit urban consolidation delivers for accessibility, economic vitality and emission reductions.

In Bendigo, challenges associated with achieving this target include the high development costs in established areas resulting from the need to upgrade utility services to achieve the water pressure and power needs of multi-story, all electric homes. In addition, Bendigo's gold mining legacy has left the City with large areas of contaminated land which are costly to remediate.

Support with infrastructure upgrades and land remediation would unlock development opportunities in the City Centre, facilitating a reduction in travel and a shift to walking, cycling and public transport use.

6. Rural and regional local governments are not resourced to fully fund development of the walking and cycling networks we need without additional support. The \$100 million allocated to the new Active Travel Fund is insufficient.

The City of Greater Bendigo supports a legacy road network which is dangerous for pedestrians and cyclists. Many roads and streets do not have footpaths and the City's separated cycling network is only starting to be developed. At the time of preparing this submission, there were approximately 850 footpaths on Council's capital works program which would cost approximately \$100M to construct in total.

Council developed a Walking and Cycling Infrastructure Plan which sets out a program of separated cycling infrastructure that would enable 90% of residents to live within 500 metres of a safe cycling route. It is estimated that implementation of the first 10 year program would cost over \$47 million with the full program costing at least \$130 million.

As an example, Council is currently working with the Victorian Department of Transport to develop a separated cycling lane on Mundy Street which is one of the main roads that extends through the City Centre. This project will cost over \$5 million and will deliver only 500 metres of separate cycling infrastructure.

The investment in walking and cycling infrastructure also needs to be paired with investment in urban realm changes that de-prioritise private vehicles, such as traffic calming and reduction of car parking. These changes need to be conducted simultaneously to ensure the community has continuous access to convenient transport choices that meet their needs.

Developing the scale of urban realm improvements and walking and cycling infrastructure needed without state and federal government support is not possible given local government's limited fund raising opportunities, including Victoria's rate capping regime.

While the Australian Government's new Active Travel Fund is welcomed, \$100 million is inadequate and will have a negligible impact given the substantial active travel infrastructure deficit present across most municipalities in Australia.

7. Public transport services need investment, particularly Bendigo's bus network.

Given the legacy of suburban development experienced across most urban centres in Australia, not all trips will be able to be switched to walking or cycling. As a result, achieving a mode shift to public transport will be critical to reducing emissions.



In Bendigo, increasing the frequency of train services to and through the City would create a commuter train service that would significantly reduce car travel into the City Centre while opening up job opportunities for regional community members. The current service which operates every 30 to 60 minutes is not viable for most workers.

More importantly the City's bus services are indirect and infrequent, generally running less than every 30 minutes at peak periods and taking over twice as long to reach their destination compared to driving. As a result, patronage is low. Reshaping the bus service into a direct, high frequency service would ensure buses are a viable alternative to driving.

8. A coordinated and / or centralised roll-out of upgrades to the electricity distribution network is required (similar to the NBN roll-out) to meet future demand generated by electric vehicle charging and electrification of households and businesses.

In 2021 there were approximately 70,000 to 80,000 cars in Bendigo. The transition of this fleet to electric vehicles will place an increasing load on the City's electricity distribution network. The power supply required for charging, coupled with the electrification of buildings, will significantly increase the power supply needs of the City, both in residential and commercial areas.

At present the distribution companies are not incentivized or empowered to upgrade their networks. As a result, power supply upgrades to cater for electric vehicle charging are borne by the private sector when they electrify their homes or businesses or install charging infrastructure. This reduces access to electric vehicles for households and reduces the financial viability of installing public electric vehicle chargers without government subsidies.

Ensuring the electricity network is fit for purpose is critical to achieving the Australian Government's emission reduction goals. As a result, upgrades to the distribution network is a critical, nation building project which requires coordination and investment at the national level, similar to the implementation of the NBN.

9. All local governments need access to holistic transport and mode share data to facilitate planning for a zero emissions transport system.

Accurately assessing and monitoring transport emissions requires access to travel data that identifies trip numbers and their mode share. Without this data government is not able to assess the impact of transport interventions.

At present councils in metropolitan Melbourne have access to the Victorian Government's [Victorian Integrated Survey of Travel and Activity](#) (VISTA). This survey is not extended to the City of Greater Bendigo or other regional or rural local governments. As a result, regional transport planning and transport emissions monitoring relies on Journey to Work data only collected through the census. This is a limited data set that only represents approximately a quarter of all trips.

Expanding the VISTA survey and / or providing free access to mobile travel data would help ensure all local governments are able to accurately track their transport emissions and identify interventions that will have the best cost-benefit outcome for their communities.