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 Sydney

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Yes

5 First name
Not answered

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7 Email
Not answered

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9 Who are you answering on behalf of?

Organisation

10 Organisation name

Not answered

11 What best describes you or your organisation?

Government

12 What sector do you represent?

Not answered

13 What state or territory do you live in?

New South Wales

14 Postcode

2000

15 What area best describes where you live?

City

16 1. Do you support the proposed guiding principles?

Yes

17 1.1 Please add details to your response.

Not answered

18 2. Do you support the use of the avoid-shift-improve framework as a tool to identify opportunities for abatement?

Yes

19 2.1 Please add details to your response.

Not answered

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

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?

Not answered

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

Not answered

30 9. Do you agree with the proposed net zero pathway for heavy road vehicles?

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?

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?

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

City of Sydney Submission Australian Governments Net Zero Transport Roadmap.PDF

69 Upload a submission

Not answered

70 Upload supporting file

Not answered

71 Upload supporting file

Not answered

CITY OF SYDNEY

Australian Government's Transport and Infrastructure Net Zero Consultation Roadmap: City of Sydney Submission

FinalSubmission
July 2024

The City of Sydney acknowledges the Gadigal of the Eora Nation as the Traditional Custodians of our local area.

Contents

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1. Introduction

1.1. Purpose of this document

This document provides the City of Sydney's (the "City") submission to the Australian Government's Transport and Infrastructure Net Zero Consultation Roadmap ("Consultation Roadmap").

The Consultation Roadmap examines potential pathways to reduce greenhouse gas emissions to net zero by 2050 across all transport modes (road, aviation, maritime and rail), freight and supply chains, active and public transport planning and supporting infrastructure. The City's submission provides input into the potential pathways outlined in the Consultation Roadmap to be included when developing the subsequent transport net zero roadmap, the Transport and Infrastructure Net Zero Roadmap and Action Plan, aligning it with the City's approach to reducing transport related emissions as outlined in the City's Access Strategy and Action Plan and Electrification of Transport Strategy and Action Plan. The City's submission focuses on those transport modes and aspects that are relevant for a dense urban area such as the City of Sydney local government area.

The City thanks the Australian Government for the opportunity to provide input.

1.2. Background

1.2.1. Australian Government's net zero target

In 2022, the Australian Government legislated Australia's greenhouse gas emissions reduction targets: net zero by 2050 and 43 percent below 2005 levels by 2030.

Australia's transport sector is the third largest source of Australia's greenhouse gas emissions, amounting to 21 percent of national emissions in 2023. Since 2005, transport sector greenhouse gas emissions have increased by 19 percent and are currently projected to be the largest in Australia by 2030, with "almost 60 percent of these emissions coming from the light vehicle sector" (page vi). Transport activity's total contribution to the economy in 2020-21 was $164.4 billion or 7.9 per cent of Gross Domestic Product. Transport was the second largest sector of the economy, behind the Mining sector.

1.2.2. Australian Government's Transport and Infrastructure Net Zero Consultation Roadmap

The Australian Government has committed to developing a Net Zero 2050 Plan outlining how Australia will transition to a net zero economy. As part of this, the Australian Government will develop 6 (six) sectoral plans. They have released a Transport and Infrastructure Net Zero Consultation Roadmap for the transport sector which sets out potential pathways for transport and transport infrastructure to contribute to net zero by 2050.

The Consultation Roadmap does not set out the actions or policies that will be taken by the Australian Government to support these potential pathways. Actions and policies will be outlined in a subsequent action plan: the Transport and Infrastructure Net Zero Roadmap and Action Plan. The Consultation Roadmap provides potential pathways to reduce greenhouse gas emissions to net zero by 2050 across road, aviation, maritime and rail transport, freight and supply chains, active and public transport planning and transport infrastructure.

Submission: The Australian Government is seeking feedback on *potential pathways* for transport and transport infrastructure to support economy-wide net zero as well as *potential actions* or policies the Australian Government can take to support these potential pathways to be articulated in a Transport and Infrastructure Net Zero Roadmap and Action Plan.

2. Strategic Context

This section outlines the City's key strategies and positions relating to net zero for transport.

2.1. City of Sydney's target of net zero emission by 2035

The City's target is to reduce emissions by 70 per cent from 2006 levels by 2030 and to have net zero emissions across our local area by 2035.

As of June 2022, greenhouse gas emissions for the local government area were 41 per cent below our 2006 baseline.

As an organisation, our target is to cut emissions by 80 per cent from 2006 levels by June 2025, without offsets.

We have been certified carbon neutral since 2011 and have active programs to electrify our fleet and properties. In 2020 we began using 100 per cent renewable electricity.

Our community supports action to reduce transport emissions. Our community strongly supports a city for walking and cycling with better public transport and fewer cars.

Prior to the pandemic, transport emissions were around 20 per cent of total emissions and had been increasing as a share of total emissions as emissions were reduced in other sectors like the electricity grid. In urban centres such as ours, reducing driving is the best way to lower transport emissions.

Transformation to net zero emissions within our area by 2035 will require a significant shift in car use to walking, cycling and public transport, as well as the electrification of vehicle fleets (private, public and commercial) and greening of the electricity grid.

To achieve our net zero by 2035 target, significant changes will be required to the transport system in our city: reducing and eliminating emissions at the point source; speeding up the shift from private cars to walking, cycling and public transport; transitioning public transport and private vehicle fleets to zero-emissions fuel sources and supporting off-street charging for electric vehicles.

We have many strategies, advocacy and works underway to achieve these targets. These include Sustainable Sydney 2030-2050 Continuing the Vision, Access Strategy and Action Plan, Electrification of Transport in the City Strategy and Action Plan. The breadth of these strategies and action plans shows the importance of a comprehensive and integrated approach to transport system decarbonisation.

2.2. Sustainable Sydney 2030-2050

Transport targets arising from Sustainable Sydney 2030-2050 are:

- By 2035, the local government area will achieve net zero emissions.
- By 2050, people will use public transport, walk or cycle to travel to and from work.
  - 9 out of 10 people working in the city centre.
  - 2 out of 3 people working in the rest of the Local Government Area
- By 2030, every resident will be around a 10-minute walk to what they need for daily life.

2.3. Access Strategy and Action Plan

The City's Access Strategy and Action Plan: Continuing the Vision, adopted 2023, outlines how the City will manage access and effective transport to create a sustainable city with initiatives such as supporting walking and cycling, light rail, electric buses, traffic calming and reducing speed limits. It recognises that transport has a key role to play in responding to the climate emergency, building resilience and delivering on our commitment of net zero emissions by 2035.

Strategy E 'respond to the climate emergency and build resilience' outlines the City's approach to reducing carbon emissions from transport:

- E1 We will work to reduce emissions by supporting walking, cycling and public transport.
- E2 We will allocate more public street space to allow greening, primarily though new plantings to help people cope with increased heat.
- E3 We will work to speed up the electrification of transport systems, to help us achieve net-zero emissions by 2035. This includes a focus on supporting the NSW Government's commitment to make the transition to a zero-emissions bus fleet by 2030.

2.4. Electrification of Transport in the City: Strategy and Action Plan

The City's Electrification of Transport in the City: Strategy and Action Plan, adopted 2023, outlines the City's overall approach to achieving net zero emission transport by 2035 providing a hierarchy of active, public and shared transport, while supporting electric vehicle charging options.

It focuses on electrifying fleets which affect the most on people in our area, such as commercial, public transport and point-to-point vehicles, to maximise emission reduction opportunities along with co-benefits such as reduced noise. The emissions impact of the often older, less clean service/delivery and public transport vehicles concentrates in our most economically valuable places, such as Sydney's global city centre.

The Strategy and Action Plan has four (4) key strategies, and 21 related actions including City-controlled actions, proposed collaborations with others including NSW Government, and direct advocacy to the Australian and NSW Governments. The four (4) key strategies are:

- Creating a city for walking, cycling and public transport, supported by electric vehicles, is the best way we can facilitate a reduction in transport related emissions.
- Government pricing and policy that prioritises electric vehicles over conventional internal combustion vehicles.
- A transition that focuses on high impact transport fleets, those fleet with the biggest emissions and impacts on people on our streets – buses, delivery vehicles, taxis and service vehicles.
- Charging options in ways that protect the public realm.

The actions that relate to the Net Zero Roadmap include:

- Action 1 - Work with the NSW Government to reduce vehicle kilometres travelled (VKT) by all vehicle fleets by creating a city for walking, cycling and public transport to reduce transport-related emissions.
- Action 2 - Advocate that the Australian Government immediately raise fuel and emissions standards to make electric vehicles more attractive, and to avoid Australia receiving vehicles not saleable elsewhere.
- Action 3 - Advocate that the Australian Government develops a transition plan for new vehicles to be zero emissions by 2030 and powered by a fully renewable electricity grid by 2035.
- Action 4 - Advocate that the NSW Government investigates pricing mechanisms to incentivise the transition to electric vehicles in the city centre, including low emissions zone, parking levies and kerbside charging. [The Australian Government also has a role to play in this.]
- Action 5 - Advocate that subsidies for electric vehicles (including for charging) proposed by the Australian and NSW Governments reflect the City's fleet transition hierarchy (i.e. e-bikes and other micromobility and public transport first then commercial, and finally private vehicles).

3. Key recommendations

The City supports the Australian Government's commitment to reducing Australia's carbon emissions from transport. We welcome the Australian Government's commitment to developing a net zero roadmap action plan for transport. We support the integrated, whole of transport system approach as outlined in the Consultation Roadmap.

Key recommendations for inclusion in a transport and infrastructure net zero roadmap action plan include (in order of consultation questions):

1. The Australian Government needs to take decisive action to reduce transport related emissions and be much more ambitious in its timeframe to reduce transport related emissions.
2. The Transport and Infrastructure Net Zero Roadmap and Action Plan must demonstrate leadership, setting clear targets (including mode share targets for walking, cycling and public transport), goals and programs and policies that encompass an equitable, inclusive and integrated, whole of system approach to reducing transport emissions, including enabling people to undertake daily activities without a vehicle.
3. A transport hierarchy needs to be central to the Transport and Infrastructure Net Zero Roadmap and Action Plan to prioritise and support walking, cycling and public transport.
4. The Australian Government needs to work with State and Local Governments to create cities and towns for walking, cycling and public transport by having a long-term, targeted program of investment linked to strategy and active transport mode share targets.
5. The development of the Transport and Infrastructure Net Zero Roadmap and Action Plan needs to be considered along with the Australian Government's update of the National Urban Policy (consultation draft currently out for comment) in order to integrate transport and urban decisions to enable cities for walking, cycling and public transport.
6. The Australian Government should become a champion of green, equitable and walkable cities and towns, including setting national greening targets to make our urban areas more pleasant to walk and for carbon abatement.
7. The Australian Government's evaluation of infrastructure decisions should assess projects based on carbon emission values (output and embodied) and not fund transport projects that are inconsistent with meeting net zero targets.
8. The Transport and Infrastructure Net Zero Roadmap and Action Plan should include investment in high-quality, frequent electric public transport, complimented by active transport infrastructure and high quality transport interchanges. This can include modernising existing public transport infrastructure.
9. Government incentives or subsidies that accompany the Transport and Infrastructure Net Zero Roadmap and Action Plan should support active electric micro-mobility (such as e-bikes, e-cargo bikes) along with supporting electric vehicles.
10. The Australian Government should partner with State and Local Governments to develop last kilometre, shared and public loading facilities (hubs), to facilitate micromobility fleet options for last mile delivery.

11. The Australian Government should accelerate the transition of service and delivery vehicle fleets to electric vehicles, including the use of e-bikes and other micromobility modes.
12. The Transport and Infrastructure Net Zero Roadmap and Action Plan should emphasise that reducing transport related emissions requires a shift away from private vehicles, not just a transition to electric vehicles. Emphasis should be placed on 'avoid' and 'shift' pathways.
13. The Australian Government through the Transport and Infrastructure Net Zero Roadmap and Action Plan should align emission standards with other jurisdictions by banning the sale of new internal combustion cars (reducing emission limits to zero g/C02/km) by 2035.
14. The Australian Government through the Transport and Infrastructure Net Zero Roadmap and Action Plan should investigate a Zero Emission Vehicles (ZEV) program which requires manufacturers to produce and deliver for sale an increasing number of low-emitting and zero-emitting vehicles linked to clear timelines.
15. The Australian Government through the Transport and Infrastructure Net Zero Roadmap and Action Plan should partner with State Governments to investigate appropriate and feasible market driven options for scalable publicly accessible off-street charging.
16. The Australian Government, in partnership with state and local governments, should support people, through guidance, subsidies and other incentives, to charge their electric vehicles at home. This includes targeted guidance and assistance for people that live in apartments.
17. The Transport and Infrastructure Net Zero Roadmap and Action Plan and National Consumer Energy Resources Roadmap must accelerate the transition of the electricity grid to 100 per centre renewable energy sources, set requirements for buildings with electric vehicle charging to be efficient and grid interactive, and support the rapid uptake of vehicle to grid equivalent technology.
18. The Australian Government's procurement and contracting should encourage electric vehicle use.
19. The Australian Government should work with state governments to investigate banning combustion vehicle idling in areas where people are vulnerable to air pollution.
20. The Australian Government should set emission limits for heavy vehicles to encourage manufacturers to supply affordable low or zero emissions heavy vehicles in a short timeframe.
21. Grants to encourage fleet electrification should include local government depots to facilitate and encourage local government to transition their fleets.
22. The Australian Government should accelerate its support for state government investment in the electrification of the bus fleet, including charging infrastructure, in dense urban areas.
23. Sectoral Pathways should recommend funding and support for the involvement of local governments in the design, delivery, governance, and communication of climate strategies in line with Australia's commitment to the Coalition for High Ambition Multilevel Partnerships.
24. Further consultation be undertaken with local government before the Transport and Infrastructure Net Zero Roadmap and Action Plan is finalised.

These recommendations are expanded on in the next section.

4. Response to discussion questions

4.1. General response

The City supports the Australian Government's commitment to reducing Australia's carbon emissions from transport and welcomes the Australian Government's commitment to developing a net zero roadmap action plan for transport.

We support the integrated, whole of transport system approach as outlined in the Consultation Roadmap. Reducing transport related emissions requires significant changes to the whole transport system. It will also require the three levels of government to work together.

The City's net zero target is 2035. While the City supports the Australian Government's commitment to reducing Australia's transport target, the Australian Government must be much more ambitious in its timeframe for reducing transport related emissions.

Recommendation 1: The Australian Government needs to take decisive action to reduce transport related emissions and be much more ambitious in its timeframe to reduce transport related emissions.

4.2. Guiding principles

We support in principle the guiding principles of: maximise emissions reduction; value for money; maximise economic opportunity; inclusive and equitable; and evidence-based.

The Australian Government has a responsibility and opportunity to shape and prepare future actions to support broader liveability, sustainability, productivity and inclusion outcomes, while being proactive and action focused.

Chapter 1 identifies some of the challenges of the *transport system, including that transport activity is also expected to continue to increase to 2050 in line with population and economic growth. The challenge is that, at the same time transport activity is projected to increase, we need to be reducing transport emissions.* In urban areas such as the City of Sydney, integrated responses are needed facilitating people to be able to walk, cycle and catch public transport, supported by electric and low emission vehicles (public, commercial and private).

The transition to low emissions transport needs to be equitable and inclusive, supporting access to electric vehicle fleets for those who need them, for commercial use and for public transport, without entrenching the economic, social and place costs of private vehicles on people.

The Australian Government has a key role in leadership, investment and in regulation. The principles should include the Australian Government's role in leadership. Stronger leadership is needed to reduce transport related emissions.

Recommendation 2: The Transport and Infrastructure Net Zero Roadmap and Action Plan must demonstrate leadership, setting clear targets (including mode share targets for walking, cycling and public transport), goals and programs and policies that encompass an equitable,

inclusive and integrated, whole of system approach to reducing transport emissions, including enabling people to undertake daily activities without a vehicle.

4.3. Avoid-shift-improve framework

We support the Australian Government's use of the Avoid-Shift-Improve framework.

The City expects that emissions reduction will be easier to achieve in some sections of the full supply chain of transport than others, due to scale, land use, ownership, availability and incentive for various transport fleets.

The Consultation Roadmap highlights the emissions contribution of private vehicles.

Reducing the amount of travel by private vehicles remains the key and immediate approach necessary to lowering transport sector emissions. In urban areas particularly, but also in rural communities, safe, accessible and inviting walking, cycling and public transport options is key to facilitating this shift. The City's approach to reducing transport related emissions is illustrated by Figure 1: facilitate and enable a mode shift to walking, cycling and public transport, reduce car use and then electrify vehicle fleets. This aligns with the avoid-shift-improve framework suggested.

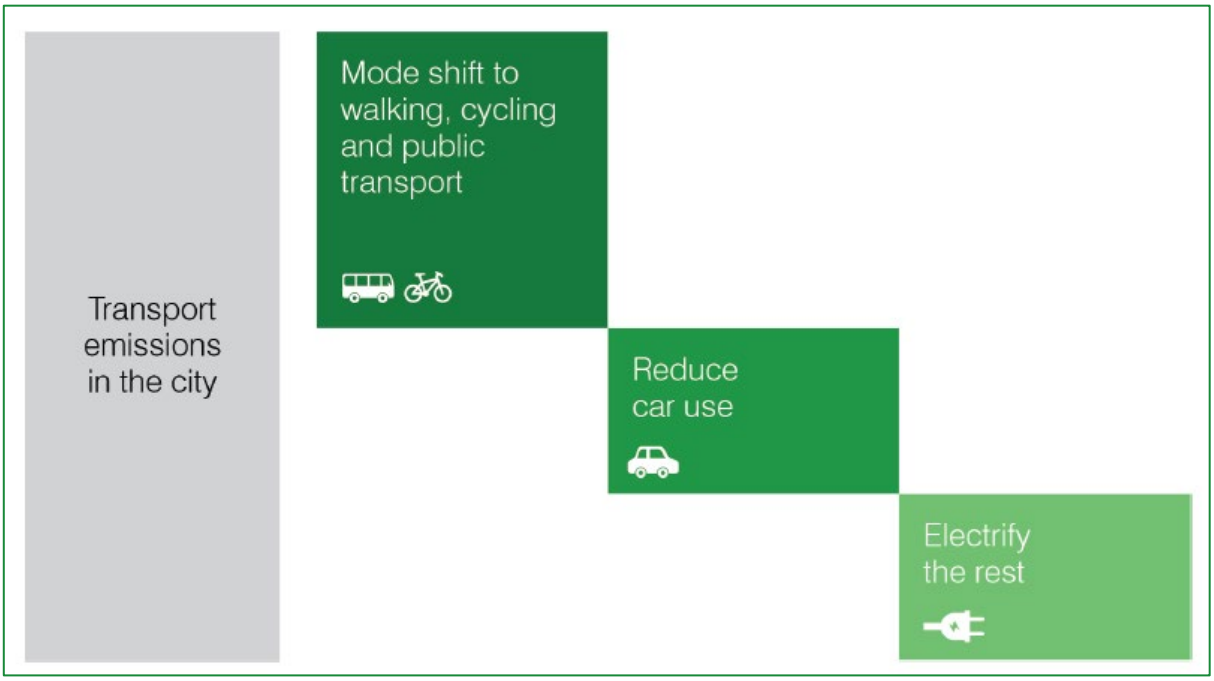

Figure 1. Reducing transport emissions in the city – illustrative only

Source: City of Sydney Electrification of Transport in the City Strategy and Action Plan, Figure 6

4.4. A national policy framework for active and public transport

Reducing emissions requires a shift away from private vehicles, not just a transition to electric vehicles. While transitioning from fossil fuelled vehicles to electric vehicles (powered by renewable energy) addresses some of the transport emissions, high levels of driving is still a fundamentally inefficient and unsustainable way to meet the transport and access needs in urban areas.

For the City of Sydney, electrification of all residential transport in our city would reduce residential carbon emissions by seven (7) per cent. Whereas a mode shift away from car usage (based on the City's current programs and policies) would reduce emissions by 23 per cent, along with improvements to access, equity and safety.

About 37 per cent of households in our area in the 2021 Census reported not owning a car and the proportion of residents that do not own a car in our area is increasing. There are significant co-benefits from setting targets and programs for transport emission reductions that include walking and cycling. These include reduced noise; reduced localised air pollution; more space in urban areas; physical, social, and mental health benefits; reduced household costs; and reduced congestion; amongst other benefits.

The biggest impact to reduce transport emissions we can make in the transport sector in cities is enabling people to walk, cycle and use public transport, supported by electric vehicles.

Recommendation 3: A transport hierarchy needs to be central to the Transport and Infrastructure Net Zero Roadmap and Action Plan to prioritise and support walking, cycling and public transport.

The Australian Government's new $100 million Active Transport Fund for the construction and upgrading of bicycle and walking paths to encourage the use of active transport across Australia is welcome. However significantly more investment is needed.

Along with the Fund, investment can be targeted as part of the Australian Government's investment in transport infrastructure projects, i.e. funding of major transport projects should include funding and the requirement of safe, attractive walking and cycling infrastructure.

The Australian Government should be a leader and champion of walking and cycling, setting national targets, both mode share and investment, for walking and cycling. See Recommendation 2.

As the Australian Government has a national road safety strategy with targets that drives investment, the Australian Government could do the same with walking and cycling, aligning funding to these targets. A national strategy for walking and cycling needs to include mode share targets, investments, engagement, and advocacy, and include review and reform of national guidance which inadvertently prioritises people driving such as road rules and road design.

Investment in walking and cycling needs to be targeted at the infrastructure providers, predominantly local governments.

Recommendation 4: The Australian Government needs to work with State and Local Governments to create cities and towns for walking, cycling and public transport by having a long-term, targeted program of investment linked to strategy and active transport mode share targets.

The Australian Government has a role to play in championing green, equitable and walkable urban environments structured around public transport. The Australian Government can set national frameworks and provide guidance. The integration of land use and transport is important to reduce transport related emissions.

Recommendation 5: The development of the Transport and Infrastructure Net Zero Roadmap and Action Plan needs to be considered along with the Australian Government's update of the National Urban Policy (consultation draft currently out for comment) in order to integrate transport and urban decisions to enable cities for walking, cycling and public transport.

The relatively low car use and ownership in our area is due, at least in part, to the established nature of our city, our dense urban form of around 9,000 people per square kilometre, walkable

streets, access to public transport and our planning controls and parking policies. This liveable, dense and relatively connected urban form is suitable for car sharing for many households. Based on recent patterns in car ownership from 2016 to 2021 and on the projected growth in dwellings, residential car ownership in our area is predicted to grow from 65,000 vehicles in 2019 to around 71,000 vehicles in 2035. For the predicted 44 per cent increase in dwellings, there is only predicted to be an eight (8) per cent increase in private vehicles. City residents currently drive on average around 10 kilometres per day. Increasing densification, mixed-use development and improvements to public transport, walking and cycling infrastructure and networks will result in this figure reducing over time.

Recommendation 6: The Australian Government should become a champion of green, equitable and walkable cities and towns, including setting national greening targets to make our urban areas more pleasant to walk and for carbon abatement.

Investment in high quality frequent and connected public transport is needed to encourage people to shift from driving to public transport. Australian cities are comparatively lacking in public transport. Increased transport solutions, including late night public transport, are needed to reduce transport related emissions along with supporting broader social and economic outcomes such as housing and economic activity in urban areas. For example, in our broader area, Infrastructure Australia's priority list includes improved public transport capacity along Parramatta Road and enhanced transport from southern Sydney to Central Sydney, with light rail the City's preferred mode. The integration between transport modes, particularly between walking and public transport, is important for use.

It is noted that at the Infrastructure and Transport Ministers' meeting June 7th 2024 Ministers' "provided in-principle support for the use of a nationally consistent set of carbon values in the assessment of business cases for transport infrastructure projects over $100 million, with an aspirational commencement date of 1 January 2025. Ministers also approved the Embodied Carbon Measurement for Infrastructure: Technical Guidance, which provides a nationally consistent approach to measuring embodied emissions in infrastructure projects" and agreed to add active transport to the work plan.

Recommendation 7: The Australian Government's evaluation of infrastructure decisions should assess projects based on carbon emission values (output and embodied) and not fund transport projects that are inconsistent with meeting net zero targets.

Recommendation 8: The Transport and Infrastructure Net Zero Roadmap and Action Plan should include investment in high-quality, frequent electric public transport, complimented by active transport infrastructure and high quality transport interchanges. This can include modernising existing public transport infrastructure.

Any subsidies or incentives should, as a priority, support people to not use cars ahead of facilitating uptake of electric vehicles. There has been significant increase in electric bike sales and use, potentially in response to the Covid-19 pandemic. Any government subsidies to encourage fleet electrification should also apply to electric bicycles, and other forms of electric micromobility.

Recommendation 9: Government incentives or subsidies that accompany the Transport and Infrastructure Net Zero Roadmap and Action Plan should support active electric micro-mobility (such as e-bikes, e-cargo bikes) along with supporting electric vehicles.

Electrification of buses is discussed in section 4.7.

4.5. Movement of goods: decarbonising freight and supply chains

Road freight has a big impact on urban areas. Road freight is expected to grow substantially (77 per cent between 2020 and 2050). Along with carbon, road freight results in noise and localised air pollution and requires substantial space. Freight is important to the effective function of our cities; however, it has a large impact on place. In dense urban environments goods can be transported to their final destination by walking and cycling, rather than by private vehicle.

The Australian Government has a role to play in supporting shared and public loading facilities (hubs) and lockers and other storage for deliveries to facilitate micromobility fleet options for last mile delivery. The City in partnership with Transport for NSW provides a courier hub at the Goulburn Street car park, where deliveries can be transferred from a van to a bike or walked to the final destination. These hubs reduce emissions and congestion by reducing the number of delivery vehicles circling.

> Recommendation 10: The Australian Government should partner with State and Local Governments to develop last kilometre, shared and public loading facilities (hubs), to facilitate micromobility fleet options for last mile delivery.

The Australian Government also has a role to play in providing guidance to reduce inefficiencies in freight such as guidance on consolidated procurement and loads to reduce empty running and minimise the emissions associated with these vehicles, as well as improve congestion and productivity.

The transition of heavy fleets is discussed in section 4.7.

> Recommendation 11: The Australian Government should accelerate the transition of service and delivery vehicle fleets to electric vehicles, including the use of e-bikes and other micromobility modes.

Road pricing and/or access charging schemes that facilitate access to urban centres consistent with government policy can assist the transition to net zero emissions. See section 4.6.

4.6. Road – light vehicles

A shift away from private vehicles

Reducing emissions requires a shift away from private vehicles, not just a transition to electric vehicles. While transitioning from fossil fuelled vehicles to electric vehicles (powered by renewable energy) addresses some of the transport emissions, high levels of driving is still a fundamentally inefficient and unsustainable way to meet the transport and access needs in urban areas.

Delivering a city for walking, cycling and public transport has the biggest impact to reduce carbon emissions from transport.

> Recommendation 12: The Transport and Infrastructure Net Zero Roadmap and Action Plan should emphasise that reducing transport related emissions requires a shift away from private vehicles, not just a transition to electric vehicles. Emphasis should be placed on 'avoid' and 'shift' pathways.

Emission standards

Not all trips can be taken by walking, cycling and public transport. Some people are not able to walk, ride a bike or use public transport easily or for all trips. Much servicing and freight activity will continue to occur via vehicles. The electrification of vehicles, particularly high-impact fleets such as delivery and service (commercial; heavy vehicles discussed in section 4.7), taxis, point-to-point (ride-share services) and car share vehicles, along with private vehicles, is necessary to reduce transport emissions. There are also additional benefits of reduced noise, localised air pollution and running costs.

The transition to electric fleets and vehicles needs to be done in a way that is equitable and inclusive, supporting access to electric vehicle fleets for those who need them without entrenching the economic, social and place costs of private vehicles.

Low and zero emissions technologies are rapidly improving, and internationally, jurisdictions are setting increasingly stringent standards and banning the sale of new internal combustion cars, for example: 2025 in Norway; 2030 in Israel and Singapore; 2035 for Britain, Canada, and the EU.

The Australian Government's introduction of an Australian New Vehicle Efficiency Standard (NVES) in January 2025 is welcome and will encourage manufacturers to supply more electric vehicles. Australia should however align with global best practice and consider banning the sale of new internal combustion cars (reducing the NVES emission limits to zero g/C02/km) in line with other jurisdictions and the availability of affordable vehicles.

> Recommendation 13: The Australian Government through the Transport and Infrastructure Net Zero Roadmap and Action Plan should align emission standards with other jurisdictions by banning the sale of new internal combustion cars (reducing emission limits to zero g/C02/km) by 2035.

In addition, the Australian Government could introduce a Zero Emission Vehicles (ZEV) program which requires manufacturers to produce and deliver for sale an increasing number of low-emitting and zero-emitting vehicles.

> Recommendation 14: The Australian Government through the Transport and Infrastructure Net Zero Roadmap and Action Plan should investigate a Zero Emission Vehicles (ZEV) program which requires manufacturers to produce and deliver for sale an increasing number of low-emitting and zero-emitting vehicles linked to clear timelines.

Public electric vehicle charging

Many people have access to off-street parking. For those who do not, a key element of the transition to electric vehicles will be the expansion of the publicly accessible off-street charging network, including fast charging for those who need it. Providing on-street refuelling ('charging facilities') for one type of private vehicle is not equitable, especially considering the current affordability and availability issues of those vehicles and the space constraints of urban streets. Most vehicles refuel now at publicly accessible service stations, not on public streets. The infrastructure requirements, impacts and costs are unlikely to make publicly accessible on-street charging feasible or scalable in our area.

Vehicles electric or otherwise still require significant space for movement and parking when not in use. Private vehicles, electric or otherwise, are inefficient in space. Charging infrastructure for these vehicles cannot be at the detriment of the public realm.

While not required in the City of Sydney, the Australian Government's support for a national network of electric vehicle charging (e.g. along the National Highway network) helps enable electrification, and complements approaches such as the City's trial of low impact pole-based

chargers in seventeen locations. The City commends the Australian Government on developing a national highway of electric vehicle charging.

Recommendation 15: The Australian Government through the Transport and Infrastructure Net Zero Roadmap and Action Plan should partner with State Governments to investigate appropriate and feasible market driven options for scalable publicly accessible off-street charging.

At home charging of electric vehicles

Most people will want to charge where they regularly park – off-street, at their homes. There are many actions the Australian Government could undertake to assist people with charging at their home. Government guidance, incentives and/or subsidies to assist in retrofitting electric vehicle chargers in houses and apartment buildings will enable all Australians to own an electric vehicle, regardless of building ownership.

The NSW Government has developed guidance for strata buildings that could be used as a starting point for that sector.

Of particular need is the opportunity to retrofit charging into existing parking in apartment buildings. More than 80 per cent of residents in the City of Sydney live in apartment buildings, many are renters, and we have a high share of social housing. We have gathered significant insights into the challenges and opportunities faced by residents and owners corporations through our Smart Green Apartments program and we are currently undertaking research into electric vehicle charging in apartment buildings. Several factors make it difficult to install charging, even where buildings are technically capable of hosting it. Major challenges for electric vehicle charging in apartments include upfront costs, a lack of general awareness, supply constraints, skills and training needs, and access and equity issues - especially for people living in older apartments, renting, and low income. There are also complex and time consuming strata decision making processes.

The Australian Government should consider this issue as it may occur in cities and towns across Australia. There could be opportunities for national approaches that help capitalise on the opportunity for apartment residents to charge in their existing parking.

Recommendation 16: The Australian Government, in partnership with state and local governments, should support people, through guidance, subsidies and other incentives, to charge their electric vehicles at home. This includes targeted guidance and assistance for people that live in apartments.

The NVES will increase the availability of lower cost electric vehicles, leading to greater uptake overall, many of which will be located within the carparks of apartment buildings that require charging.

The energy infrastructure, electrification, and charging requirements induced by the NVES will also need to be considered in the context of the National Framework for Disclosure of Residential Energy Efficiency Information that is being developed.

Overcoming these challenges will also need to be a key focus for the National transport sector decarbonisation plan.

The Australian Government needs to ensure that support and increasing uptake of electric vehicle charging in buildings is compatible with and does not reflect negative on NABERS ratings, especially with the proposed expansion to Commercial Building Disclosure, and the introduction of a National Framework for Disclosure of Residential Energy Efficiency Information.

Interaction with the electricity grid

Electrification of buildings and transport, powered by renewable electricity, will be critical for meeting City of Sydney and national emission reduction targets. It is imperative that this electrification is powered by renewable energy. The City supports the Australian Government's aim for 82 per cent renewables by 2030 and programs like the Capacity Investment Scheme and Rewiring the Nation.

With electrification of buildings and transport, the lines between stationary energy used in buildings and electric vehicle charging needs is becoming less distinct.

It is imperative that buildings with electric vehicle charging are efficient and that most load occurs at times of the day when there is abundant renewable energy being generated, and demand is reduced during peak periods. This will support the transition, reduce emissions, improve utilisation of the electricity network, and reduce energy bills through lower wholesale electricity and network charges.

The Australian Energy Market Operator (AEMO) 2024 Integrated System Plan (ISP) highlights the significant contribution that consumer energy resources (CER) - i.e. behind-the-meter rooftop solar, battery storage, and electric vehicles - are expected to contribute to the transition. Household batteries could save $4.1 billion in avoided costs in grid investment through to 2050 (if well-co-ordinated).

Technologies such as 'Vehicle to Everything' (bi-directional electricity flow between electric vehicles and infrastructure), 'Vehicle to Load' and 'Vehicle to Grid', amongst others, provides significant potential to help balance the grid and help manage electricity usage and consumption.

Given that the rate of uptake and the physical capacity of electric vehicle batteries is significantly greater than household batteries, the Australian Government needs to ensure that appropriate technologies are supported in a way that enables orchestration with fair and equitable returns.

Recommendation 17: The Transport and Infrastructure Net Zero Roadmap and Action Plan and National Consumer Energy Resources Roadmap must accelerate the transition of the electricity grid to 100 per centre renewable energy sources, set requirements for buildings with electric vehicle charging to be efficient and grid interactive, and support the rapid uptake of vehicle to grid equivalent technology.

Road pricing reforms and subsidies

Any road pricing mechanisms (such as road user charges) should make electric vehicles more attractive than internal combustion vehicles – especially for vehicles that spend the most time on the road network.

A Low Emissions Zone, or similar, in urban centres such as the Sydney city centre, where many taxis and service vehicles travel could incentivise operators to transition fleets to electric to reduce operating costs and assist in the City achieving net zero by 2035.

There is an opportunity for broader road pricing, incorporating motorway tolls into a more comprehensive system that focuses on distance travelled, congestion and emissions. It could encompass various parking charges, such as the NSW Parking Space Levy, to ensure a more coherent focus on travel demand management.

The Australian Government needs to wind back subsidies to fossil fuels as a matter of priority. Incentives to zero emissions vehicles needs to be at least at parity or exceed federal funding to fossil fuels (i.e. matching the $41b in foregone revenue in fuel excise over four years in the 2023 budget). An equivalent amount of funding for zero emissions transport infrastructure could assist current recipients of the fuel excise to decarbonise.

Any subsidies or incentives for electric vehicles should also apply to electric bicycles, and other forms of electric micromobility. See Recommendation 9.

The Australian Government should disincentivise the purchasing of large heavy passenger vehicles – these impact on safety and urban areas, including using space inefficiently, along with producing more emissions and using more fuel than smaller vehicles. Larger vehicles (including SUVs, utes and light commercial vehicles) are considerably more dangerous to other road users and produce more emissions. Larger vehicles are associated with a 30 per cent increase in the risk of death or serious injury during collisions as compared with smaller-to-medium sized vehicles. These vehicles, the large single or dual cab utes such as (Ford Ranger/F150, Nissan Navara, Toyota HiLux, RAM 1500), should be classified as small trucks.

Support fleet vehicles to become electric

The Australian Government has a role to demonstrate leadership in the purchasing of its own vehicle fleets. The Government has committed to the conversion of the Commonwealth's fleet to 75 per cent no-emission vehicles by 2025. This is commended and will facilitate the second hand electric vehicle market. This commitment should be extended to contracting and procurement.

Recommendation 18: The Australian Government's procurement and contracting should encourage electric vehicle use.

Ban idling

The Australian Government should consider introducing a national idling ban in areas where people are vulnerable to air pollution, for example around school zones, parks and playgrounds and in dense urban areas. This would complement fuel efficiency standards by ensuring any new internal combustion vehicles sold in Australia are installed with *instant start technology*. It would also improve health outcomes by reducing emissions of existing vehicles which is the major source of transport emissions. Similar bans have been introduced in France and Belgium.

Recommendation 19: The Australian Government should work with state governments to investigate banning combustion vehicle idling in areas where people are vulnerable to air pollution.

4.7. Road – heavy vehicles

The transition of heavy fleets, such as trucks and buses, to electric and/or hydrogen is critical. Many transport-related emissions, around 60 per cent in the City's area, come from non-residential transport. Our fleet target is to maintain emissions from the City's fleet below 2014 levels and aim to achieve zero fleet emissions by 2035 or sooner.

The Australian Government should set emissions limits for heavy vehicles via the NVES or other mechanism(s) to encourage manufacturers to supply affordable low or zero emissions heavy vehicles domestically in a short timeframe. The City of Sydney operates a large fleet of light electric vehicles, maintenance equipment, and one electric conversion truck. Most of our fleet emissions come from heavy vehicles, yet at present there are no cost effective heavy fleet electric options available. The NVES as proposed does not apply to heavy vehicles, however it does apply to commercial vehicles so a higher emission cap could be set on larger commercial vehicles (see point about larger vehicles above).

Emission limits for heavy vehicles should be established to encourage manufacturers to supply affordable low or zero emissions heavy vehicles in a short timeframe.

Recommendation 20: The Australian Government should set emission limits for heavy vehicles to encourage manufacturers to supply affordable low or zero emissions heavy vehicles in a short timeframe.

Recommendation 21: Grants to encourage fleet electrification should include local government depots to facilitate and encourage local government to transition their fleets.

Rapid electrification of the bus fleets in urban areas is crucial.

78 per cent of Transport for NSW's emissions are from buses. Buses circle and idle in dense urban areas, creating localised air and noise pollution, impacting on people's health and on urban amenity. Rapid electrification of bus fleets is critical.

Recommendation 22: The Australian Government should accelerate its support for state government investment in the electrification of the bus fleet, including charging infrastructure, in dense urban areas.

4.8. Rail

Transitioning urban rail systems to net zero emissions is supported. It is noted that Transport for NSW has a commitment to net zero transport operations by 2035. Sydney Metro, Sydney Trains and urban NSW TrainLink services are powered by "green electricity" (see https://www.future.transport.nsw.gov.au/strategy-highlights/environmentally-responsible).

Comments on rail based public transport are discussed in section 4.4.

4.9. Transport infrastructure

Investing in roads will increase carbon emissions. The Australian Government could evaluate transport infrastructure projects based on emission output. See Recommendation 7.

4.10. Transport energy use

See section 4.6.

4.11. Travelling in Partnership

Collaborative partnerships are needed to reduce transport emissions and create walkable, bikeable cities and towns supported by public transport and low carbon vehicles. The Consultation Pathway correctly identifies local government as an important partner in this transition.

The Australian Local Government Climate Review 2021 identified that around three quarters of Australian councils have set or are developing community emissions targets.

Local government is the closest level of government to the community making it well situated to implement and communicate climate programs and policies. Involving local government in the design, delivery, governance and communication of key Australian Government net zero policies and programs would improve outcomes.

Local governments have significant insights and are essential for connecting with communities and delivering place-based actions. Local governments need to be involved during the formation and delivery of Federal policy.

Australian Government funding is also needed to support local government in the delivery of programs.

As a local government, the City doesn't control many aspects related to the electrification of transport fleets, including transport sector emissions, fleet turnover and low-emission vehicle availability and uptake. We do have roles in the planning and development in our area; working with and providing guidance to residents and businesses; implementing changes to our streets and roads (working with the NSW Government); and in managing and enforcing kerbside arrangements such as parking. We also have a leadership role. We are committed to delivering a city for walking, cycling and public transport supported by electric vehicles.

The Australian Government is responsible for developing a national plan for zero-emission vehicles. It controls industry development and import systems, vehicle standards, research and development, and taxation. It is responsible for the framework for national approaches to electric vehicle charging, including direct investment in the national highways. It is responsible for national resilience, on issues such as fuel security and vehicle fuel efficiency standards.

Coordination between the three levels of Government is needed to deliver attractive public transport, linked to walking and cycling infrastructure and quality public space. This is imperative to reduce transport related emissions.

In late 2023, the Australian Government joined the Coalition for High Ambition Multilevel Partnerships (CHAMP) at COP28 - to enhance cooperation with subnational governments in the planning, financing, implementation, and monitoring of climate strategies.

Recommendation 23: Sectoral Pathways should recommend funding and support for the involvement of local governments in the design, delivery, governance, and communication of climate strategies in line with Australia's commitment to the Coalition for High Ambition Multilevel Partnerships.

Recommendation 24: Further consultation be undertaken with local government before the Transport and Infrastructure Net Zero Roadmap and Action Plan is finalised.

4.12. Measuring Success

Measures and metrics to evaluate the Transport and Infrastructure Net Zero Roadmap and Action Plan include:

- Percentage reduction of transport related emissions.
- Mode share of transport modes, including walking and cycling mode share (all trips, not just mode of travel to work).
- Investment in walking infrastructure.
- Investment in cycling infrastructure.
- The value of investing walking and cycling, including co benefits such as health.
- Percentage of people living in areas with footpaths on both sides of the road.
- Kilometres of separated cycleways.
- Investment in low emission public transport.
- Distance of people/homes from frequent (15 min or less frequency) public transport.

- Cost of transport and transport infrastructure (whole of life cycle) on cities, town and households.
- Percentage of buses that are electric or low emission fuel.
- Proportion of major national highways with electric vehicle fast charging infrastructure at 100km intervals.
- Percentage of households with convenient access to off street public vehicle charging – within 10km of their home.
- Emissions inventory for noxious emissions and greenhouse gas emissions of the national vehicle fleet to track improvements.
- Electric vehicle availability/ownership as percent of vehicle population by vehicle type (e.g., light passenger, light commercial and heavy vehicles).
- Metrics on engagement and advocacy are also needed.

These measures and metrics could take the form of an implementation plan, or similar, with articulated governance, targets, timings, milestones, funding and review process. Measures and progress should be published at regular and defined timeframes. Measures and targets should be coordinated across Government policy such as, for example, the (forthcoming) updated National Urban Policy.

CITY OF SYDNEY