

Post Exhibition - Electrification of Transport in the City - Strategy and Action Plan

File No: X093358

Summary

This report seeks Council approval of the Electrification of Transport in the City Strategy and Action Plan (the Strategy and Action Plan). The Strategy and Action Plan creates the framework to guide the City of Sydney's approach to supporting the reduction of transport emissions to meet Net Zero Emissions by 2035. Transport accounts for around 20 per cent of emissions in the City of Sydney, and the relative proportion from this sector will increase as emissions from other sectors reduce.

Reducing the amount of motor vehicle travel is the most effective method of reducing transport emissions, and will also support the economic, environmental and social outcomes in Sustainable Sydney 2030-2050 Continuing the Vision. The priority for the City remains to create the city for walking, cycling and public transport. Achieving this reduces transport emissions while retaining accessibility, and providing opportunities for public domain, planting to mitigate heat and activities such as outdoor dining.

The Strategy and Action Plan outlines the City's commitment to working in partnership with residents, businesses, and other levels of government to reduce transport sector emissions within the city for walking, cycling and public transport framework.

The Strategy and Action Plan reflects the different fleets that operate in the City of Sydney. It reflects the changes required across the whole transport system to accelerate electrification, ranging from fuel standards and fleet availability to vehicle charging needs and opportunities. The needs and opportunities in different City of Sydney locations and land use/built form typologies inform the Strategy and Action Plan. The Strategy and Action Plan contains 21 actions ranging from advocacy actions to direct City leadership actions.

On 20 February 2023, Council approved public exhibition of the Draft Strategy and Action Plan for six weeks to allow an opportunity for the community to provide feedback. The exhibition closed in early April 2023. There were more than 900 page views on Sydney Your Say and more than 250 document downloads. 162 people completed the online survey. The City also received 17 submissions from individuals, community groups and businesses.

Feedback provided indicated strong support for the plan and for the City's proposed approach to transport system electrification. The feedback highlighted the following key areas: support for the emphasis on emissions reduction by reducing motor vehicle travel (while maintaining access); support for limiting the impact on public domain of any public charging; recognition of the opportunity and challenges of retrofitting charging into strata apartment buildings; concern that there are some areas where public charging opportunities are likely to be limited without direct intervention; concern that proposed actions will not be adequate to support Net Zero emissions by 2035; and a concern that the City's analysis of potential future public charging needs could translate into a fixed or capped supply of public charging.

Based on the nature of the feedback provided, the final Strategy and Action Plan requires only minor amendments to clarify the City's plans in several specific areas.

If adopted, the City will accelerate implementation. The City's draft budget for 2023/24 contains proposals to fund early action on key City responsibilities:

- supporting electric vehicle charging in existing buildings, with an extensive deep dive research into the opportunities and constraints of different types of strata apartment buildings; and
- preparing our depots for electrification of transport, to support further electrification of the City of Sydney's fleet.

Other priority actions will be further trialling electric vehicle charging options with low public domain impact, finalising the planning and development framework to support charging in new buildings, continued advocacy to the Australian Government on vehicle emission standards, and continued advocacy to the NSW Government for bus and other fleet electrification.

Recommendation

It is resolved that:

- (A) Council note the submissions and feedback received through the public exhibition period as shown at Attachment C to the subject report;
- (B) Council adopt the Electrification of Transport in the City Strategy and Action Plan, incorporating amendments, as shown at Attachments A and B to the subject report;
- (C) Council note the proposed expenditure in the 2023/24 budget on leadership actions consistent with the Electrification of Transport in the City Strategy and Action Plan; and
- (D) authority be delegated to the Chief Executive Officer to make amendments to the Electrification of Transport in the City Strategy and Action Plan in order to correct any minor drafting errors and finalise design, artwork and accessible formats for publication. .

Attachments

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| Attachment A. | Marked-up Version - Electrification of Transport in the City - Strategy and Action Plan |
| Attachment B. | Design Version - Electrification of Transport in the City - Strategy and Action Plan |
| Attachment C. | Summary of Feedback and Engagement Report |

Background

1. The City of Sydney has declared a Climate Emergency and adopted a target of net zero emissions by 2035. Sustainable Sydney 2030-2050 - Continuing the Vision, the Community Strategic Plan - Delivering Sustainable Sydney 2030-2050, and the City's Environmental Strategy 2021-2025 all outline the imperative for achieving net zero emissions by 2035.
2. Transport accounts for around 20 per cent of emissions in the City of Sydney, and the relative proportion from this sector will increase as emissions from other sectors reduce.
3. Reducing the amount of motor vehicle travel is the most effective method of reducing transport emissions, and will support the economic, environmental and social outcomes in the Community Strategic Plan - Delivering Sustainable Sydney 2030-2050. Reducing emissions from motor vehicles completes the transition to net zero emissions.
4. The City's particular context is relevant in developing the Strategy and Action Plan. The land use and transport system create greater opportunity to reduce vehicle travel/emissions compared to the rest of Greater Sydney. The City of Sydney has higher density development and crowded public domain; heritage areas with little off-street parking; areas of intensive planned commercial and residential growth which can be made "electric vehicle ready"; relatively high accessibility by public transport, cycling and walking; significant proportion of households without a motor vehicle; and high impact of bus, freight/servicing and point to point fleets.
5. Factors such as availability of off-street parking and relatively low uptake of electric vehicles to date create different future needs and opportunities for an electrified transport system, compared to global cities such as Paris and London. In developing the draft Strategy and Action Plan, the City looked to these places to understand best practice, and then applied it to the City of Sydney's context.
6. The City of Sydney has a long history of actions to reduce transport emissions. The City continues to deliver a comprehensive cycleway network, and to improve streets for walking and public life. The City's planning system supports reduced car ownership and use through maximum (not minimum) parking rates in new development. The City has Australia's largest car sharing system. The City advocates successfully for public transport improvements, including: new metro lines, light rail, accessibility improvements to existing rail stations, and improved bus and ferry services.
7. The City introduced electric vehicle charging in its two major public car parks (Goulburn Street and King Cross). The City was also one of the first organisations to begin converting its fleet to zero emissions.
8. Equity was an important consideration in developing the Strategy and Action Plan. Equity in the electrification of transport within the city includes equity of access to electric vehicles and to electric vehicle charging. It also includes the broader aspects of equity of access to electric public transport, to public space, and to the equity aspects of imposing the ongoing costs of car ownership on residents, and of using public resources to support owners of electric cars. The Strategy and Action Plan aims to balance these competing needs, with a focus on equitable solutions for the community, residents, businesses, and visitors.

9. The City has worked with Ausgrid and its commercial charging partner EVX, to trial a pole-based charger in two dedicated spaces on St Johns Road, Glebe. This trial is ongoing. The City is working with Ausgrid to identify suitable locations for additional trials, in areas such as Pymont and Millers Point.
10. In early 2023, the Australian Government released a consultation paper on fuel efficiency standards with the aim of introducing standards for new cars by the end of 2023. The City will continue to advocate for broader emissions standards, including for last mile delivery vehicles. Complimentary targets and incentives on par with the USA and Europe are also required to reduce emissions from transport.
11. The then NSW Government enacted electric vehicle charging provisions in State Environmental Planning Policy (Transport and Infrastructure) 2021 in early 2023. One of the features is to enable residents without off-street parking to install their own charging infrastructure in the public domain, outside their homes, with a development application. The City is exploring the planning and development issues resulting from this. Such charging infrastructure will be subject to the City's current approach to current on-street parking, and the City will not reserve kerbside parking for private vehicle chargers.
12. The Strategy and Action Plan has key approaches, and 21 related actions including City-controlled actions, proposed collaborations with others including NSW Government, and direct advocacy to the Australian and NSW Governments.
13. The approaches and actions (summary description) are:
 - (a) creating a city for walking, cycling and public transport:
 - (i) Action 1 - reduce vehicle kilometres travelled by creating a city for walking, cycling and public transport;
 - (b) government pricing and policy that prioritises electric vehicles:
 - (i) Action 2 - Australian Government to raise fuel and vehicle emissions standards to make electric vehicles more affordable and available compared to internal combustion;
 - (ii) Action 3 - Australian Government to develop transition plan for electric vehicles by 2030 and electricity grid by 2035;
 - (iii) Action 4 - NSW Government to explore pricing mechanisms to speed uptake of electric vehicles accessing the city centre;
 - (iv) Action 5 - Australian and NSW Governments to offer subsidies based on fleet type i.e. not just private electric motor vehicles;
 - (c) a transition that focusses on high impact transport fleets:
 - (i) Action 6 - the City to maximise the electrification of its fleet;
 - (ii) Action 7 - the City to encourage the use of electric vehicles wherever possible through its procurement processes;

- (iii) Action 8 - the City to advocate to the NSW and Federal Governments to provide grants to facilitate local governments to upgrade the electric vehicle capabilities of their depots;
 - (iv) Action 9 - NSW Government to accelerate electrification of bus depots and fleets serving the City of Sydney;
 - (v) Action 10 - NSW Government to accelerate transition of service and delivery fleets;
 - (vi) Action 11 - the City to work with car share providers to electrify their fleet by 2030;
 - (vii) Action 12 - the NSW Government to accelerate transition of taxi and other point to point fleets;
- (d) supporting (and, in limited circumstances, providing) publicly accessible charging approaches that limit public domain impacts:
- (i) Action 13 - the City to prepare draft planning controls in the Development Control Plan 2012 requiring new development to be "electric vehicle ready";
 - (ii) Action 14 - the City to work with governments, industry, peak bodies and strata communities to support electrification of buildings and upgrades to enable onsite electric vehicle charging;
 - (iii) Action 15 - the City to integrate electric vehicle charging feasibility assessments as part of net zero plans and energy audits in the City's Green Building Grants, and provide guidance on electric vehicle charging through our energy actions plans in the Smart Green Apartments program;
 - (iv) Action 16 - NSW Government to support the provision of commercial public off-street charging, including transition of service stations;
 - (v) Action 17 – encourage public charging in car parks and service stations;
 - (vi) Action 18 - NSW Government to ensure public have information about charging locations;
 - (vii) Action 19 - the City to install additional publicly accessible charging in its public off-street car parks where feasible;
 - (viii) Action 20 - the City to work with private sector providers to trial paid on-street publicly accessible charging in residential areas with constrained private charging opportunities;
 - (ix) Action 21 - the City to investigate charging models for areas with constrained charging options, to be implemented only if required, and to only supplement other public charging offers; be based on an evidenced need; community acceptance; be cost neutral to the City; be based on available or advanced technology; and avoid negative impacts on the public domain including footpaths and planting.

Key Implications

Strategic Alignment - Sustainable Sydney 2030-2050 Continuing the Vision

14. Sustainable Sydney 2030-2050 Continuing the Vision renews the communities' vision for the sustainable development of the city to 2050. It includes 10 strategic directions to guide the future of the city, as well as 10 targets against which to measure progress. This plan is aligned with the following strategic directions and objectives:
 - (a) Direction 2 - A leading environmental performer - reducing transport emissions is a critical component in addressing the climate emergency and achieving net zero emissions by 2035.
 - (b) Direction 3 - Public places for all - the need for improved public places is a key consideration in developing the framework for future motor vehicle charging, in which most charging should occur off-street.
 - (c) Direction 5 - A city for walking, cycling and public transport - reducing the amount of motor vehicle travel is the most effective method of reducing transport sector emissions. The transition to an electrified transport system should occur within the City's broader framework for managing access and transport.
 - (d) Direction 6 - An equitable and inclusive city - the draft Strategy and Action Plan addresses the potential impacts of transport system electrification, particularly in the short-term when the price of electric vehicles is significantly higher than internal combustion engine vehicle options.

Organisational Impact

15. The Strategy and Action Plan builds on the City's existing programs and resources. There will be some minor changes to focus for business units, including City Access and Transport, Sustainability, Sustainability Programs and Parking and Fleet Services.

Risks

16. A key risk is the lack of Australian experience and guidance on this issue. Electrification of transport is a complex and fast evolving area and requires a systems view. The key considerations are base assumptions associated with cost, technology and fleet transition, which contribute to the demand for vehicle charging. To mitigate this risk, the City commissioned specialist technical consultants SGS Economics and Planning and Kinesis to develop a robust evidence base to inform the Strategy and Action Plan. The consultants also reviewed international experience and practise on this issue. Their findings and insights are summarised in the technical report provided to Council in February 2023, which was provided to the community as part of the exhibition process.
17. A second key risk is the unpredictability of the fleet transition to electric vehicles. This rate of transition constitutes a key base assumption that informs multiple aspects of the draft Strategy and Action Plan, especially demand for different types of vehicle charging. The factors determining the rate of transition are outside the City's control. Current uptake of electric vehicles is relatively slow, but there are signs it could be beginning to accelerate, as vehicles become slightly more affordable. Rather than just project this forward, the City has mitigated the risk that it accelerates (due to Australian or NSW Government policy changes) by ensuring that the Strategy and Action Plan will accommodate a range of 45 per cent (BAU) to 100 per cent fleet electrification by 2035 (while aiming for 100 per cent).

18. A third key risk is that the City, in providing even limited public charging, could impede the development of market-based public charging. The City has mitigated this risk by designing proposed City charging initiatives to be limited, targeted, responsive to specific short-term needs or for particular locations where it may be harder to attract commercial charging options, and are not intended to be "scaled up".
19. The proposed deep-dive research that supports Action 14 (supporting charging in existing buildings) will provide more analysis into any risks associated with activities such as installing charging into basements of existing apartment buildings.
20. The City will also follow rigorous risk assessment processes for any on-street charging, including trials of technology such as pole-based charging. This will address the potential for incidents such as shortages and fires. It will also assess trip hazards for users and non-users. This assessment will allow the City to manage its risk and its insurance liabilities.

Social / Cultural / Community

21. Affordability is a key aspect of the access and transport system. For the short-medium term, electric vehicles are likely to be owned (or leased) by higher income households or business. To ensure equitable outcomes for the City's community, the Strategy and Action Plan emphasise the importance of creating the City for walking, cycling and public transport to maximise the affordable options for access.
22. In addition, in the short-medium term, the City is not looking to preference electric vehicles or limit internal combustion vehicles in parking or road space allocation, other than when they are being charged.
23. Motor vehicle access including car sharing continues to support some of the access needs for some residents and businesses. The transition to transport system electrification will occur within the City's broader framework for access and transport. The City will maintain access arrangements that support inclusion, such as mobility parking.

Environmental

24. Reducing transport sector emissions in the City of Sydney is a key challenge in delivering net zero emissions by 2035. The transport sector contributes between 15 to 20 per cent of emissions in the City of Sydney, and the relative proportion will grow as emissions reduce from other sources such as residential and commercial buildings.

Economic

25. The City's approach to electrification supports the broader economic outcomes in Sustainable Sydney 2030-2050 Continuing the Vision. While advocating for the early transition of vital fleets such as freight/servicing and point-to-point, the City recognises the important functions these fleets perform.

Financial Implications

26. The City is developing proposals for funding to accelerate the leadership actions detailed above:
 - (a) supporting electric vehicle charging in existing buildings, with an extensive deep dive research into the opportunities and constraints of different types of strata apartment buildings; and
 - (b) preparing our depots for electrification of transport, to support further electrification of the City of Sydney's fleet.
27. Funding for these proposals has been sought in the draft 2023/24 Operating Budget, the subject of a separate report in the current Council reporting cycle.
28. Actions 1 to 5, 7 to 14 and 16 to 18 will have no direct financial impact as City staff can implement within existing resourcing.
29. Action 6 relates to maximising the electrification of the City's passenger and heavy vehicles and plant. The City seeks value for money in its use of the community's resources. Electric vehicles are currently significantly more costly to purchase than internal combustion engine comparable vehicles. Any additional costs will be considered as part of plant and asset budget submissions incorporated into future iterations of the City's Long Term Financial Plan and subject to Council approval.
30. Actions 19 to 21 relate to small-scale City-led approaches to public charging, including in its off-street car parks. The City will design any provision or facilitation of public charging (Actions 19, 20 and 21) with the aim of being revenue neutral. The emerging charging industry includes third party charging operators who could consider providing charging with no cost to the City (customers would pay the operator directly for the charge).

Relevant Legislation

31. The NSW Environmental Planning and Assessment Act 1979 provides the framework for any planning control changes to facilitate electric vehicle charging in new private and public buildings, and commercial car parks.
32. The implications of changes in early 2023 to the State Environmental Planning Policy (Transport and Infrastructure) 2021 are being explored.
33. Any kerbside changes to provide for electric vehicle charging will be consistent with the NSW Roads Act 1993, Road Rules 2014 and Road Transport (General) Regulation 2021.
34. Local Government Act 1993.
35. Civil Liability Act 2002.

Critical Dates / Time Frames

36. The City of Sydney has adopted a net- zero emissions target by 2035.

Options

37. Staff considered the option of not developing an Electrification of Transport in the City - Strategy and Action Plan, as systems for vehicle standards, purchases and refuelling (charging) are not normal local government business. The City discounted this option as residents, businesses, property owners and charging service providers are seeking guidance and direction on a range of aspects associated with electrification of transport and are key partners in achieving net zero emissions by 2035.
38. In response to the community call for guidance and action, City staff considered the option of developing an Electrification of Transport in the City - Strategy and Action Plan that moves away from interim positions - i.e., the City taking responsibility for electric vehicle charging, providing significant on-street electric vehicle charging. The City discarded this option as it is not scalable within the City's limited resources, creates significant risk and would distort the development of a commercial charging system.
39. The City's eventual preferred option considered different scenarios for transition to electrification as part of developing the Strategy and Action Plan. These are outlined in the Technical Report. The proposed role for the City is one of targeted leadership.

Public Consultation

40. On 20 February 2023, Council approved public exhibition of the Draft Strategy and Action Plan for six weeks to allow an opportunity for the community to provide feedback. The exhibition closed in early April.
41. There were more than 900 page views on Sydney Your Say. The Draft Strategy and Action Plan was available for download on the City of Sydney website. It was available as an accessible PDF. There were more than 250 document downloads.
42. 162 people completed the online survey. The City also received 17 submissions from individuals, community groups and businesses.
43. Feedback provided indicated strong support for the plan and the City's proposed approach to transport system electrification. The feedback highlighted the following key areas:
 - (a) support for the emphasis on emissions reduction by reducing motor vehicle travel (while maintaining access). The City's draft Access Strategy and Action Plan will provide the framework for this, building on the achievements to date and the approaches and concepts in Sustainable Sydney 2030-2050 Continuing the Vision.
 - (b) support for limiting the impact on public domain of any public charging. The City is working to trial approaches consistent with this.
 - (c) recognition of the opportunity and challenges of retrofitting charging into strata apartment buildings. This is a key action area for the City, with a proposed deep dive research project in 2023/24 involving exploration of issues and engagement with strata communities.

- (d) concern from residents of particular locations that there are some areas where public charging opportunities are likely to be limited without direct intervention. The City is exploring opportunities for trialling pole-based charging in locations such as Pymont and Millers Point.
 - (e) concern from some organisations and individuals that proposed actions will not be adequate to support Net Zero Emissions by 2035. The City will implement the actions in the Action Plan, and the periodic review of the Strategy and Action Plan will identify if further actions are required to support Net Zero Emissions.
 - (f) a concern that the City's analysis of potential future public charging needs represents or could translate into a fixed or capped supply of public charging. The City has clarified this issue in the final Strategy and Action Plan. Most of the public charging will be provided by commercial providers, who will react to projections of demand, may seek to lead demand with early provision, and who will compete with each other for market share.
44. Based on the nature of the feedback provided, the final Strategy and Action Plan requires only minor amendments to clarify the City's plans in several specific areas.
45. Attachment A identifies the proposed changes to the exhibited draft, with key amendments including:
- (a) At Section 1.1, inclusion of updated information of the full life-cycle emissions of electric vehicles, compared to internal combustion engine vehicles
 - (b) At Section 1.4, inclusion of material related to the Australian Government's 2023 Discussion Paper on fuel efficiency standards; and the former NSW Government's changes in early 2023 to the Transport and Infrastructure State Environmental Planning Policy 2021
 - (c) At Section 1.5, confirmation that private electric vehicle charging in existing buildings is best pursued as part of a broader electrification of buildings; and that the City will focus any on-street charging approaches at areas in which residents have limited access to onsite parking, and fewer options for other public charging
 - (d) At Section 1.5 (Key findings from the technical analysis and modelling highlight box), clarification that the City's estimate of future public charging needs will not act as a cap on provision of such charging (primarily by commercial providers)
 - (e) At Section 2.1, confirmation that the City will only reserve kerbside space for any on-street public charging, not private charging or general electric vehicle parking
 - (f) At Section 2.3, confirmation that the Car Sharing Policy will be the mechanism for formalising fleet transition targets for car share operators, and acknowledging the potential for pole-based charging for car share vehicles
 - (g) At Section 2.4, inclusion of additional context about the opportunities and challenges in different areas of the City of Sydney, and reference to the City's proposed deep-dive research project as part of implementing Action 14. Also amendment to Action 14 to make clearer the stakeholders involved in strata, and to reinforce that broader electrification of buildings is a key pathway to enabling onsite electric vehicle charging in them.

46. Attachment B is a design version showing the proposed final Strategy and Action Plan, based on the amendments in Attachment A.
47. A summary of all feedback received and the City's response is provided at Attachment C.

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