

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

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Summary

Reducing emissions from the transport sector is a key component in meeting the City's target of 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.

The City (and local government more generally) have a limited role in many elements of the transport system, including motor vehicle technologies, standards and availabilities, and solutions to their refuelling. The City of Sydney's declaration of a Climate Emergency and adoption of a net zero emissions by 2035 target necessitate the City taking a greater interventionist/advocacy role, especially in the short-medium term, particularly in the transition to the electrification of transport.

The City worked with specialist consultants to develop a draft Electrification of Transport in the City Strategy and Action Plan ('Strategy and Action Plan'). The draft Strategy and Action Plan responds to the available evidence and to the context of our local area. It aims to position the City's role appropriately to support (within the context of the City's control and responsibilities) net zero emissions by 2035 – especially with regard to the charging needs for the private vehicle fleet.

A key element of this draft Strategy and Action Plan is achieving the land use and planning framework that allows market-based or private electric vehicle charging solutions to prosper. The vast majority of electric vehicle charging should occur in off-street locations such as service stations or at places people park for a period of time, such as their home, at work or at an off-street parking location. This also offers the best opportunity for minimising impacts on public domain on our streets from kerbside charging. Planning controls for new developments is a key action.

Supporting off-street charging in strata residential buildings is another key focus. The City of Sydney is high density and around 75 per cent of residents already live in apartment buildings. The vast majority of residential off-street parking is in these buildings. Residents are likely to aspire to charge their future electric vehicles in their parking space. The extent that they are able to will influence the need for other public charging options. There are a number of issues the City will work with communities to understand and influence – the constraints imposed by strata law, and potential insurance treatment of off-street charging in these buildings; the infrastructure requirements for individual buildings; and the opportunities for strata communities to consider vehicle charging in broader approaches to reduce their overall emissions (electrification of other aspects such as appliances, and use of Green Power.).

The draft Strategy focusses on what needs to be done over the next five years to achieve net zero emissions by 2035. The draft Action Plan focusses on the 0-5 year timeframe. It includes 21 actions, including City-implemented actions, partnership actions and advocacy actions. The City is progressing a series of key leadership actions:

- electrify City of Sydney's vehicles
- prepare our depots for electrification of transport
- encourage public charging in car parks and service stations
- increase public charging in City-controlled car parks
- trial low impact on-street charging in locations without off-street options
- support electric vehicle charging in new buildings
- support electric vehicle charging in existing buildings

The City is developing a proposal for funding these leadership actions. The current cost estimate is \$500,000. The City will incorporate the specific funding proposals into the 2023/24 Budget for Council consideration.

This report seeks Council's approval to exhibit for public comment the draft Strategy and Action Plan, and supporting technical report, for a period of four weeks. Following exhibition, the City will then consider and respond to community input.

Recommendation

It is resolved that:

- (A) Council approve for public exhibition the draft Electrification of Transport in the City Strategy and Action Plan, as shown at Attachment A to the subject report, and related technical report, as shown at Attachment B to the subject report;
- (B) Council note that the Electrification of Transport in the City Strategy and Action Plan including any recommended changes, will be reported to Council for adoption following the exhibition period;
- (C) authority be delegated to the Chief Executive Officer to make minor editorial amendments for clarity or correction of drafting errors prior to the exhibition of the draft Electrification of Transport in the City Strategy and Action Plan; and
- (D) the Lord Mayor and Councillors be signatories to a joint statement by the Cities Power Partnership (Climate Council) of which the City is a member, calling for the Australian Government to introduce fuel efficiency standards for Australia to secure more low and zero emissions vehicles.

Attachments

- Attachment A.** Draft Electrification of Transport in the City - Strategy and Action Plan
- Attachment B.** Electrification of Transport in the City Technical Report (SGS Economics and Planning/Kinesis)

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 draft 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 draft 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 draft 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 is progressing a series of leadership actions (Action Plan reference in brackets):
 - (a) electrify City of Sydney's vehicles (Actions 6 and 7).
 - (b) prepare our depots for electrification of transport (Actions 6 and 8).
 - (c) encourage public charging in car parks and service stations (Action 17).
 - (d) increase public charging in City-controlled car parks (Action 19) including Goulburn Street and Kings Cross public car parks, along with Wilson Street in Newtown and Cope Street in Redfern, pending feasibility.
 - (e) trial low impact on-street charging in locations without off-street options (Action 20), with the initial trial in Glebe.
 - (f) support electric vehicles charging in new buildings (Action 13) through our planning system.
 - (g) support electric vehicles charging in existing buildings (Actions 14 and 15). We will work with the NSW Government to provide guidance to residential building owners and managers to enable informed decision-making regarding appropriate provision of on-site charging. This includes undertaking research to understand the technical, governance and management challenges around electric vehicle charging upgrades in apartment buildings to inform and guide future policy and programs. We will also fund electric vehicle charging feasibility assessments as part of net-zero plans and energy audits in Green Building Grants and provide guidance on electric vehicle charging through our energy.

10. The draft 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. 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”¹;
 - (ii) Action 14 - the City and NSW Governments to provide guidance to existing building owners to enable informed decision-making on providing charging there;
 - (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; and

- (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

11. Sustainable Sydney 2030-2050 Continuing the Vision renews the community's 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:
 - (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

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

Risks

13. 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 draft Strategy and Action Plan. The consultants also reviewed international experience and practise on this issue. Their findings and insights are summarised in the attached technical report.

14. 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. 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 draft Strategy and Action Plan will accommodate a range of 45 per cent (BAU) to 100 per cent fleet electrification by 2035.
15. 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, and are not intended to be "scaled up".
16. There are potential risks from installation of electric vehicle charging. The City will work with strata communities to explore the potential risks of installation in off-street parking areas (generally basements), and any attendant impact of insurability of these buildings. The City will also follow rigorous risk assessment processes for any on-street charging, including trials. 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

17. 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 Draft Strategy and Action Plan emphasise the importance of creating the City for walking, cycling and public transport to maximise the affordable options for access.
18. 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.
19. 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

20. 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

21. The City's approach to electrification supports the broader economic outcomes in Sustainable Sydney 2030-2050. 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.

22. There are market development opportunities for private and public charging facilities, both in the technological sectors and in the retailing of charging to customers. The City's overall, long-term approach is to foster a commercial charging environment, appropriate competition that protects the interests of customers.

Financial Implications

23. The City is developing proposals to kickstart the leadership actions detailed above. The estimated additional funding is \$500,000. The City will seek Council approval for these funds and action via the 2023/24 Budget process.
24. 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.
25. 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.
26. 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

27. 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.
28. Any kerbside changes to provide for electric vehicle charging will be consistent with the NSW Roads Act 1933, Road Rules 2014 and Road Transport (General) Regulation 2021.
29. Local Government Act 1993.
30. Civil Liability Act 2002.

Critical Dates / Time Frames

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

Options

32. 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.
33. 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.
34. The City's eventual preferred option considered different scenarios for transition to electrification as part of developing the draft Strategy and Action Plan. These are outlined in the Technical Report. The proposed role for the City is one of targeted leadership.

Public Consultation

35. Following endorsement by Council, the draft Strategy and Action Plan will be placed on public exhibition.
36. Public exhibition will be undertaken through the Sydney Your Say web page and advertised via the City's communication channels. Notice of the exhibition will be published on the City's website.
37. Exhibition of the draft Strategy and Action Plan will provide the community and all stakeholders the opportunity to provide feedback on the specific strategies and actions.
38. City staff were informed by the community engagement and submissions around Sustainable Sydney 2030-2050 and the Environmental Strategy. Discussions have also occurred with NSW Government agencies since 2019 as they have developed their strategies.

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