
To: Victorian Government
From: Vijaya Vaidyanath, Chief Executive Officer
Date: 24 March 2020
Subject: City of Yarra Submission for the Zero Emissions Vehicle Roadmap

1. The City of Yarra has prepared the following submission in response to the background documents and questions in relation to the Victorian Government's planning for zero emissions vehicles and preparation of a Zero Emissions Vehicle Roadmap.
2. The Zero Emissions Vehicle Roadmap is of particular interest to Council as we are a proud advocate for sustainable transport, climate change and reducing carbon emissions. In addition to the declaration of a Climate Emergency, committing Council to urgent action on Climate change, Council recently released a draft Climate Emergency Plan 2020 - 2024, which includes a number of actions to support the rapid transition to zero emissions vehicles, including the expansion of electric vehicle charging points across private and public spaces within the City of Yarra, and across greater Melbourne.
3. It is important to note that draft Climate Emergency Plan highlights that the Transport sector represents the second largest source of municipal greenhouse gas emissions, accounting for around 15% of emissions.
4. Council strongly supports the State and Federal Government taking a coordinated approach to implementing a strategy and support mechanisms to accelerate the uptake of zero emissions vehicles, with Local Government being a key partner in delivery on the ground.
5. The document released for public consultation, titled '*We're making sure Victoria is ready for zero emission vehicles*', provides a high level overview of the Victorian Government's key priorities to support transition to zero emissions vehicles and seeks input from stakeholders in response to five questions. The following comments outline Council's responses to the questions, as well as additional key issues and opportunities that Council would like to see included in the Zero Emissions Vehicles Roadmap.
6. **Key priorities**
7. The key priorities for the Zero Emissions Roadmap broadly cover the challenges and opportunities that need to be considered to accelerate adoption of zero emissions vehicles. It is recommended that the key priorities are expanding on, to include the following:
 - **Develop an integrated strategy** to guide the rollout of a network of zero emissions charging stations in Victoria. The strategy should be based on research and analysis of current and projected usage and demand of zero emissions vehicles, and should include targets, guidelines, actions, funding and clearly set out the role of local, state and federal government. The actions identified should be supported by delivery timeframes and funding requirements for implementation;
 - **Continuous research**, sharing of knowledge and guidelines with Councils and industry, as well as investigation of opportunities for innovation, including trials, incentives and smart technology to efficiently capture the benefits of zero emissions vehicles;
 - Identify actions to support **making zero emissions vehicles more desirable** and accessible to the community and educate the community on benefits of zero emissions vehicles; and

- Support **updating planning requirements** and regulatory frameworks to ensure all new developments in Victoria are provisioned with electrical infrastructure to be 'electric vehicle ready' into the decades ahead.

8. Question 1 – What are the key issues to be addressed in planning a charging infrastructure network?

- A strong vision, strategy, plans and incentives at a State and Federal Government level is needed to support the transition to zero emissions vehicles. To accelerate the transition to zero emissions vehicles, a coherent and integrated plan for Victoria should:
 - Consider global best practice, research and analysis;
 - Build on and respond to recent State and Federal Government research and recommendations, including recommendations of the Federal Government's 'Senate Select Committee on Electric Vehicles' report¹, Austroads 'Assessment of Key Operator Actions to Support Electric Vehicles'² and Energeia's 'Australian Electric Vehicle Market Study'³ report;
 - Include actions, targets, timeframes for implementation and a monitoring framework to track progress;
 - Provide councils with guidance and tools to support the roll out of zero emissions charging infrastructure in municipalities, including the type and scale of charging infrastructure that should be provided in different urban and regional areas;
 - Outline the roles of different levels of Government and mechanisms to enable coordination between Local, State and Federal government to ensure future delivery of network charging infrastructure provides value for money and captures benefits in the most efficient approach; and
 - Outline potential health and safety risks, considerations and mitigation strategies e.g. trip hazards of charging cables.
- The document highlights that public charging stations are typically provided as highway and destination charging. It is important that a state-wide strategy and future network of charging infrastructure is informed by an understanding of anticipated usage and demand. Energeia's report identified that 99% of electric vehicle daily trips are under 50km, indicating the proportion of longer distance or inter-city trips is low. Residential density and the projected proportion of dwellings without off-street parking varies significantly across municipalities in Victoria. The City of Yarra has a high proportion of single dwellings without off-street parking who would need to rely on public charging infrastructure. Council has seen an increase in the number of enquiries from the community about the provision of public electric vehicle charging. With the demand for charging infrastructure expected to rise, it is important that the State Government provides guidance on the scale and type of public charging required for the City of Yarra and other municipalities.
- Increasing pressure on the electricity network and managing this to ensure a reliable electricity supply is a key challenge in planning a charging infrastructure network. Council encourages the Victorian Government to explore innovative solutions, trials, incentives and smart technology to alleviate pressure on, and even potentially strengthen, our energy system, and reduce the need for infrastructure upgrades.

¹ https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Electric_Vehicles/ElectricVehicles/Report/b02

² <https://austrroads.com.au/publications/low-and-zero-emission-vehicles/ap-r614-20>

³ <https://arena.gov.au/assets/2018/06/australian-ev-market-study-report.pdf>

- The Austroads' 'Assessment of Key Road Operator Actions to Support Electric Vehicles' outlines the role of government and road operators required to support the transition to electric vehicles. It highlights the need for State and Local Road Authorities to work with electricity distributors, and that action and leadership required may not be aligned with the ambition of all road authorities. As noted earlier, an integrated plan for Victoria should outline the roles of all levels of government and government agencies, and provide tools and guidance to support efficient and coordinated roll out of charging infrastructure across Victoria.
- There is also an opportunity for the Victorian Government to work with distribution network service providers (DNSPs) to help streamline the lengthy approvals process associated with installing zero emissions charging infrastructure.

9. Question 2 – What do you see are the biggest issues and potential solutions in ensuring there are adequate charging options available to all Victorians?

- An integrated public charging framework should be developed to clearly map out a coordinated approach to the provision of public chargers. This should identify the key stakeholders, roles and how each can work in a coordinated manner to ensure an efficient use of resources and maximise the outcome of supporting the transition to electric vehicles in the community.
- Council agrees that standards and planning requirements should be updated to require that all new developments are 'electric vehicle ready'. The government's support to update standards and regulatory frameworks is essential in ensuring new developments include the electrical infrastructure to allow easy installation of electric vehicle chargers in the decades ahead. This could be supported with educational material to inform developers and councils of the benefits of investing in this infrastructure during construction.
- Additional funding to support transition to zero emissions vehicles, specifically:
 - Continue research and planning, and share this knowledge with industry and councils;
 - Investigate and implement innovative approaches to managing energy consumption and pressure on the electricity grid, including smart technology or adaptable uses of space i.e. commercial car parks in evenings and weekends; and
 - Provide financial support, incentives and guidance to councils and businesses, particularly shopping centres, supermarkets and other businesses with customer car parking, to fund or co-fund appropriate public charging infrastructure.
- The document acknowledges the range of charging options depending on where people live and work. As previously noted, the scale and type of charging infrastructure should be based on research, analysis and consultation with relevant stakeholders to inform a network of charging infrastructure that is appropriate for different urban and regional areas. This could be based on data such as urban density and projected uptake of zero emissions vehicles for people without access to charging at home. City of Yarra has a high proportion of households without off-street parking, which is a key challenge for uptake of zero emissions vehicles in the municipality.
- Council has undertaken research to understand the issues, opportunities and actions to support the uptake of electric vehicles in Yarra and what role can be played Council. Council strongly supports the development of the Roadmap and an integrated strategy for Victoria as this would provide guidance to support Council to roll out charging infrastructure in an efficient manner which builds on and supports the wider community network

- The 17 recommendations of the Senate Select Committee on Electric Vehicles report, set out measures to support and accelerate the uptake of electric vehicles, as well as actions to support and develop electric vehicle manufacturing and associated business opportunities. The Victorian Government should advocate, and provide support where relevant, for the Federal Government to implement these recommendations.

10. Question 3 – What do you consider is important in ensuring how our energy system can optimally respond to the additional demand from zero emission vehicles while continuing to meet reliability and affordability requirements?

- Council supports the utilisation of smart, flexible charging capability and actively investigating vehicle to grid / building capability as measures to manage demand of the current electricity requirement. Smart apps that provide real time information on electricity usage and capacity to DNSPs, building management systems and users, would enable efficient use of electricity and charging.
- Innovative solutions should also be explored, such as the use of ‘vacant’ commercial and private business car parking areas on weeknights and weekends. Currently many of these car parks are empty and unproductive for at least 50% of the time and could be used for residents to charge cars overnight, rather than charging during the day, and could generate a new and innovative income stream for building owners. Trials to test new ideas and approaches to managing energy usage could enable key learnings and new ways to manage demand efficiently.
- Providing information and guidance on load management systems to the property development industry and local councils, would provide stakeholders with a clear understanding of the benefits of incorporating electrical infrastructure and load management systems in new developments, versus the often costly and complex process to retrofit at a later date.
- The Victorian Government could work with DNSPs to provide pricing incentives or educational material to encourage off-peak charging. This could also include promoting the benefits of off-peak charging to the community.
- The Victorian Government should also support DNSPs to understand, track and manage vehicle charging and analyse real time data to inform planning.
- Further research to understand the role of battery storage and recommendations for how battery storage could help manage demand profiles.

11. Question 4 – What are important issues for you to know before you would consider purchasing a zero emissions vehicle?

- The total cost of ownership of zero emissions vehicles, including resale value and costs of replacing batteries, is an important issue for consumers to understand. To support the uptake of zero emissions vehicles, the Victorian Government should implement actions to help make zero emissions vehicles accessible to everyone and competitive with conventional vehicles.
- ARENA and Everergi’s report *Unlocking Demand for Renewably Powered Electric Vehicles*⁴ outlines a number of barriers and key measures to accelerate adoption for residential and consumers, including providing more information on costs, incentives and education on infrastructure and range to alleviate ‘range anxiety’. Council recommends the Victorian

⁴ <https://arena.gov.au/knowledge-bank/unlocking-demand-for-renewably-powered-electric-vehicles/>

Government investigate the opportunities and measures identified to address the barriers, in relation to affordability, availability, evidence and infrastructure.

- Incentives for purchasing zero emissions vehicles and disincentives for fossil fuel vehicles should be explored and supported by the Victorian and Federal Government, through a range of measures such as changes to taxation, incentives and introduction of an emission standards. Victoria could introduce similar incentives to the ACT, where an exemption on stamp duty for electric vehicles is already in place, along with a 20% reduction in registration fees.
- The provision of information about zero emissions vehicles and the benefits to the community, as well as current and future charging infrastructure available in local areas, could provide confidence to people who are considering purchasing a zero emissions vehicles but may be cautious.

12. Question 5 – What do you think are the key priorities for governments at state, local and national level?

- Council supports the Victorian Government in continuing advocacy for the Federal Government to take action through its National Strategy for Electric Vehicles, as well as the recommendations of the Senate Report of Electric Vehicles.
- The key priorities for local, state and federal government include:

Local councils:

- Develop a strategy to support transition to zero emissions vehicles, which responds to an integrated strategy and vision for zero emissions vehicles in Victoria;
- Impose requirements as part of planning permits for new development to be 'electric vehicle ready' for the decades ahead;
- Work with local businesses to encourage and support electric vehicle charging within customer car parking areas;
- Transition Council fleet vehicles to be 100% zero emissions vehicles;
- Provide information to residents and businesses to educate and engage with the community on the benefits and barriers for transition to zero emissions vehicles;
- Being but one of a number of providers of public electric vehicle charging stations in locations that are visible and accessible; and
- Investigate and support electric car share schemes.

State Government:

- Develop a strategy for Victoria to support councils to rollout an effective and planned charging network;
- Dedicate a budget to continue research and planning to maximise rapid uptake of zero emissions vehicles, as well as funding to Councils and businesses to support delivery of public charging stations aligned to the State objectives;
- Share research and knowledge with councils and industry as technology evolves;
- Support updates to planning requirements, standards and policy that addresses key issues and opportunities for uptake of zero emissions vehicles;
- Transition fleet vehicles to be 100% zero emissions vehicles;
- Advocate that the Federal Government deliver recommendations outlined in the 'Senate Select Committee on Electric Vehicles' report, in particular Recommendation 6 to 'introduce more stringent vehicle emissions standards, and establish a new CO₂

standard, informed by those implemented in other developed countries and the findings of the Ministerial Forum on Vehicle Emissions’;

- Complete waiver of Stamp Duty on purchases of new electric vehicles;
- Discount electric vehicle registration fees; and
- Investigate mechanisms to support the deployment of electric buses and intercity trains in Victoria, including research, trials and financial incentives to operators to make the use of electric buses more viable.

Federal Government:

- Develop a package of incentives to accelerate uptake of zero emissions vehicles. This could include initiatives to reduce comparative costs to fossil fuel vehicles, such as direct rebates, removal of the Luxury Car Tax for electric vehicles and introducing a light vehicle carbon emissions standard to support zero emissions vehicles to be competitive and accessible to our community;
- Dedicate funding to continue planning to support transition to zero emissions vehicles;
- Transition fleet vehicles to be 100% zero emissions; and
- Implement the 17 recommendations set out in the Federal Government’s Senate Select Committee on Electric Vehicles report, including recommendation 6 to introduce a new CO₂ standard, as a priority.

Other comments

- The Current and Planned EV Charging Stations in Victoria map should show the locations in a more legible format, particularly for the greater Melbourne area, to clearly show the network of chargers.
- The document does not refer to the Victorian Government’s role in supporting public transport or freight to transition to zero emissions transport, particularly considering the high particulate emissions from heavy vehicles. The Roadmap or a State Government Sector Pledge and strategy should guide the next steps for public transport sector to transition fleets to be zero emissions, through research, trials and financial incentives to operators.
- Zero emission public transport provides an opportunity for the community to experience the benefits first-hand, including reduced noise pollution, comfort and improved air quality. The benefits of electrifying public transport are particularly high as all of these vehicles, both road and regional rail, are currently diesel which is a dirty fuel with high particulate emissions
- It is worth noting the externalised costs of fossil fuel powered vehicles, including health, amenity and financial costs. Infrastructure Victoria’s report Advice on Automated and Zero Emissions Vehicles Infrastructure⁵ found that moving to electric vehicles is projected to deliver over \$700 million in economic benefits from reduced health issues in Victoria. The broader benefits of transitioning to zero emissions vehicles should also be considered, such as increasing the mode share of active transport as a result of improved amenity through reducing noise and air pollution.
- The support that is required, the challenges and net benefits of electric vehicles has also been strongly reinforced by the Senate Select Committee on Electric Vehicles report which

⁵ <http://www.infrastructurevictoria.com.au/wp-content/uploads/2019/04/Advice-on-automated-and-zero-emissions-vehicles-October-2018.pdf>

found 'the *benefits of EVs substantially outweigh [the] challenges*' and would provide '*significant economic, environmental and health benefits*'

Conclusion

13. Council is pleased to see the preparation of a Zero Emissions Vehicle Roadmap for Victoria. The documents released acknowledge some of the key issues and opportunities to support the transition to zero emissions vehicles. The priorities and topics discussed are supported, but could benefit from additional detail in some areas as noted, to increase the practical value of a State Roadmap that provides valuable strategic guidance and tools to support to councils, business and the wider community.