Inquiry into Electric Vehicles

Victorian Parliament Economy and Infrastructure Committee

Submission

December 2017

MUNICIPAL ASSOCIATION OF VICTORIA

Table of contents

Introduction

The Municipal Association of Victoria (MAV) welcomes the opportunity to provide input to the Economy and Infrastructure Committee's inquiry into electric vehicles (EVs).

The MAV is the statutory peak body for local government in Victoria. Formed in 1879, we have a long and proud tradition of supporting councils to provide good government to their communities. We represent all Victorian councils and work to advance the interests of the local government sector as a whole.

While EVs currently make up a very small percentage of the vehicle market in Australia, there is a growing consensus, including amongst Victorian councils, that widespread uptake of EVs across Australia is both inevitable and desirable. The United Kingdom, France, Norway, the Netherlands, Germany and China are just a few of the countries that have announced that they will ban new diesel and petrol cars or are considering doing so. Bloomberg New Energy Finance estimates that EVs will account for 54 per cent of all new light-duty vehicle sales globally by 2040.

In order to assist with a smooth and efficient transition to EVs it is important that the Commonwealth and state governments work together to ensure a coordinated approach is taken and that the appropriate policies and incentives are in place.

This submission draws on recent reports and studies by a range of parties, including those prepared by the Australia Institute[1] and by ClimateWorks Australia[2] in partnership with the Electric Vehicle Council.

As road infrastructure providers, fleet managers and representatives of their local communities, Victorian councils have a strong interest in supporting a smooth transition to EVs. A number of councils have already or are currently considering investing in EVs and EV charging infrastructure as part of broader objectives to reduce emissions, improve air quality, protect and enhance local amenity, and reduce lifecycle fleet maintenance costs. With fleet emissions making up a significant proportion of councils' overall corporate emissions, councils recognise a transition to EVs powered by clean energy as a positive step to advance councils' emissions reduction objectives.

The MAV recognises that we are in a state of climate emergency that requires urgent action by all levels of government. Noting that light vehicles account for 10 per cent of Australia's total greenhouse gas emissions, we consider a transition away from internal combustion engine vehicles to EVs to be one of a number of necessary actions to reduce emissions.

[1] The Australia Institute, If you build it, they will charge: Sparking Australia's electric vehicle boom. October 2017.
[2] ClimateWorks Australia & Electric Vehicle Council, The state of electric vehicles in Australia. June 2017.

The potential benefits of widespread uptake of EVs in Victoria

As noted in the inquiry terms of reference, the potential benefits of widespread uptake of EV in Victoria are many and include reduced greenhouse gas emissions, improved air quality, and reduced noise and amenity impacts. According to SGS Economics & Planning, the lack of incentives and encouragement for EV uptake in Australia and the resulting low adoption of EVs will cost Australia `several billions of dollars per year' because these benefits won't have been able to be realised[3].

We note that the reduced emissions benefits from EVs would be maximised if charging stations were able to rely wholly, or even partly, on clean energy. Victorian councils are strong supporters of renewable energy and we encourage the State, the EV industry and electricity providers to support the development, installation and use of clean energy-dependent EV charging infrastructure wherever possible.

EVs may also deliver benefits in terms of management of peak demand and avoiding costly upgrades to the power grid. A recent study in Denmark found that EVs can work as mobile energy storage units, thereby providing flexibility for the grid to respond to supply and demand[4]. Nissan in partnership with Ovo, an energy supplier in the United Kingdom, will reportedly be offering a "vehicle-to-grid" service to purchasers of Nissan's new Leaf EV next year.

An additional potential benefit from widespread uptake of EVs in Victoria not mentioned in the terms of reference is economic stimulus, via possible cost savings to business (especially businesses centred on service delivery vehicles) and also employment opportunities including in research and development, and manufacturing. Job losses in industries such as service stations and mechanical labour will almost certainly occur as EV uptake increases. Investment in training that target EV-associated opportunities will be important.

It is perhaps worth noting that a mere switch from internal combustion engine vehicles to EVs does nothing to address traffic congestion which already costs the Victorian economy billions of dollars each year in lost productivity. According to the Victorian Government's `Victoria in Future 2016: population and household projections to 2051', the population of Victoria is projected to grow to 7.7 million by 2031, and to 10.1 million by 2051. Greater Melbourne is projected to have almost 85 per cent of the state's growth, with the population projected to increase to 8 million in 2051.

While we recognise that large-scale adoption of EVs will deliver a number of benefits, we remain of the view that a mass mode shift from private road transport to public transport and, where possible, to cycling and walking, is essential. A truly integrated transport network that

[3] SGS Economics & Planning, Australia holds the brakes on electric vehicles, 8 July 2016.
[4] Douris, C, How electric cars could help the power grid become more efficient, less expensive, 5 Oct 2017.

does not rely on individuals' privately owned road vehicles should be a Victorian Government priority objective.

The most recent motor vehicle census data indicates that the number of registered vehicles in Victoria increased by 2.5 per cent to close to 4.8 million vehicles between 2016 and 2017[5]. Genuine long term integrated transport and land use planning and substantial investment in public transport infrastructure is critical if Victoria is to remain liveable and prosperous. Electric vehicles, especially electric heavy vehicles and electric public transport fleet, will and should be a key component of Victoria's integrated transport future.

Incentive options for supporting the uptake of EVs

Research by ClimateWorks indicates that the key barriers to uptake of EVs are cost and availability, recharging concerns, and consumer awareness. Councils also consider these issues to be the key barriers in addition to concerns about restricted travel range.

In relation to cost and availability, it is anticipated that the offering of a wider variety of EV models in the Australian market, particularly at a lower price point, would increase sales. In 2016 there were only three models of EV that were priced less than $60,000 and two of these were no longer available by mid-year. The third was a van only available through special order.

In terms of regulatory and economic incentives we note the options suggested by ClimateWorks, the Electric Vehicles Council and others, including:

- introduction of more stringent light vehicle carbon dioxide emissions standards
- removing or discounting the Luxury Car Tax (LCT) applicable to EVs
- removing fringe benefits tax for EVs
- incorporation of EVs into government fleets; and
- support for the installation of an EV charging network.

Experience in a number of overseas jurisdictions shows that the provision of incentives can and does lead to increased uptake of EVs. Successful incentives identified by the Australia Institute include federal tax credits in the US, the *bonus-malus* system in France (whereby buyers of high-emitting vehicles pay a fee and buyers of low-emissions vehicles receive a rebate), and EV exemptions from road tolls, registration charges and VAT in Norway. We encourage the Committee to study the measures and policy frameworks adopted in the likes of Norway, the US and most recently in New Zealand, and consider their applicability in the Victorian and Australian context.

In regards to infrastructure incentives, the provision of an easily accessible, efficient and reliable charging network will be critical to bolster consumer confidence in EVs. ClimateWorks has found that despite research indicating that most charging will occur at home or in the workplace,

[5] Australian Bureau of Statistics, Motor Vehicle Census Data, Australia, 31 Jan 2017.

potential purchasers of EVs still tend to seek assurance that public charging infrastructure will also be readily available.

Again, it is instructive to look at how other jurisdictions have incentivised provision of public charging infrastructure. The Australia Institute nominates New Hampshire's approach of providing targeted state rebates for installation of public EV charging stations in non-residential properties as a possible right fit for Australia. In their view, the current fragmentation of charging technology heightens the need for government intervention to help ensure heterogeneous charging stations are available in strategic locations across all areas.

Councils are already concerned about the dominance of one EV manufacturer's charging infrastructure in Victoria and are keen to see multiple providers in the market and for charge points to be accessible to all EVs. It would be a poor outcome indeed to find ourselves with one monopoly provider of EVs or EV charging infrastructure and for there not to be a smart spread of charging stations to enable EV travel across all regions of Victoria.

Rural councils in particular are concerned that the distance between charge points not be too great to prevent or deter EV travel to and across rural Victoria. In providing input to this submission, East Gippsland Shire Council, Victoria's second largest municipality in land size, noted that there is currently no public charging infrastructure within the shire and only one commercial premises that offers a charge point for Tesla vehicles only. This lack of charging infrastructure clearly needs to be addressed if potential purchasers and drivers of EVs are to have confidence that EVs are a good and sensible vehicle option in Victoria. Government regulation and incentives have a role to play.

Confidence in EVs would also likely be boosted if there was a centralised database or map of all charging points that is clear, easily accessible and kept current. Standardised signage for public charging points would also likely be beneficial. The importance of public charging infrastructure being accompanied with EV-only parking spaces adjacent to the infrastructure has also been raised by councils.

Consumer awareness of and appreciation for EVs will no doubt improve when there is a plentiful supply of EVs on our roads. In order to reach that point however, governments have an important role to play in educating the public and promoting the benefits of EVs. We note that as part of a multi-faceted package to support EVs in New Zealand, the New Zealand government has committed one million dollars per year over five years for a nationwide EV information and promotion campaign. Other measures adopted in various jurisdictions include issuing EVs with distinctive number plates and making EV public charging infrastructure highly visible.

In undertaking this inquiry, it may be prudent for the Committee to also consider the growing interest and preparation underway for automated vehicles and an automated transport network. Notwithstanding the many challenges and issues that need to be worked through, recent studies that suggest an automated and intelligent transport network could lead to significantly fewer cars on the road and improved road safety does suggest an exciting and more sustainable transport future in Australia if the appropriate planning, safeguards and incentives are in place.

Investment in public transport as a key component of the intelligent transport network will be critical.

As noted by academics from Monash University and Queensland University of Technology, `through the convergence of automation, electrification and ride-sharing technologies, autonomous vehicles could significantly reshape real estate, urban development and city planning — as the automobile did in the last century.'[6] Serious consideration needs to be given to how our land-use planning and building system can appropriately support and facilitate a smooth and efficient transition to a transport network that is markedly different to the transport system we live with today.

The applicability of EVs in public transport bus fleets and public sector fleets

As noted above, a number of Victorian councils have invested in and/or or trialled electric vehicles for their fleet and have also supported the installation of public charging stations. The City of Melbourne and the City of Moreland are notable early adopters and leaders in the EV space, as are Whitehorse City Council and City of Casey. Numerous Victorian councils eagerly participated in the Victorian Government's EV trial in 2012-2014.

The lack of suitable lower-cost EV models available for purchase has been a key barrier to greater uptake of EV in council fleets. We anticipate that as more EV models become available councils' willingness to invest in EV will also increase. It is worth noting that in seeking council input to this submission it was made clear to the MAV that rural and regional councils are just as interested and excited by the opportunities that EVs present as metropolitan councils. As noted above, affordability, availability of charging infrastructure, vehicle travel range and fit for purpose will be key considerations for councils considering transitioning their fleet to EV.

It would be remiss for this submission not to note the ground-breaking work that Moreland City Council is doing to develop a fleet of waste vehicles powered by 100 per cent renewable hydrogen, the first of its kind in Australia. The 100 per cent renewable hydrogen will be generated using electrolysis and a mix of storm water harvesting and solar generation, as well as power purchased from wind farms. Council is partnering with H2U to develop and test a fleet of prototype trucks which will be built locally. Benefits to residents will include quieter rubbish collection and better air quality, while carbon emissions and costs for the council will also decrease.

We understand that bulk purchasing of EVs for government fleet in New Zealand and other countries has been utilised effectively as a strategy to encourage widespread uptake of EVs and investment in EV charging infrastructure. With the Victorian Government's fleet management centralised through VicFleet, a business unit of the Department of Treasury and Finance, it seems likely that it would not be too complex to have the same approach applied here in

[6] Yigitcanlar, T., Currie, G., & Kamruzzaman, Md. Driverless vehicles could bring out the best – or worst – in our cities by transforming land use**. October 2017.**

Victoria. As the minister responsible for the government's passenger and light commercial vehicle fleet policy, it will be critical that the Minister for Finance understands the many benefits of EVs.

There are a number of trials and research projects underway in other jurisdictions exploring the feasibility and benefits of EV usage in public transport systems. Potentially helpful case studies for the Committee include the Zero Emission Urban Bus System (ZEUS) activity in the European Union and, more locally, the ACT government's EV bus trials. Councils are very keen to see the State invest in and support greater uptake of electric buses in our public transport network.

Conclusion

The MAV appreciates the opportunity to register our and Victorian councils' interest in the Committee's inquiry.

By adopting a zero net emissions by 2050 target, the Victorian Government has made clear its commitment to be a leader in climate change action. Noting that transport emissions are a substantial contributor to Victoria's overall emissions, it is clear that support for and investment in EVs, including in our government fleet and public transport network, will play a key role in helping Victoria meet its emissions reduction targets.

Apart from emissions reductions, widespread uptake of EVs in Victoria offers many potential benefits including improved air quality, reduced noise and amenity impacts, reduced fleet maintenance costs, and new economic stimulus. Experience overeas shows however that regulatory and economic incentives are essential in order to realise the benefits that widespread uptake of EVs bring. Both the Victorian government and the Australian government have a critical role to play in this regard.

As road infrastructure providers, fleet managers and representatives of their local communities, Victorian councils also have a strong interest in supporting a smooth transition to EVs and are keen to work with other levels of government and with community and industry to make this transition happen.

Recommendations

In order to assist with a smooth and efficient transition to EVs it is critical that the Commonwealth and state governments work together to ensure a coordinated approach is taken and that the appropriate policies and incentives are in place.

Specifically we recommend that:

1) The Victorian Government advocates for the Commonwealth to :
    a. Introduce more stringent light vehicle carbon dioxide emissions standards
    b. Consider removing or discounting the Luxury Car Tax (LCT) applicable to EVs
    c. Consider removing fringe benefits tax for EVs

2) The Victorian Government actively supports increased uptake of EVs in government fleets and public transport fleet including by establishing minimum targets.

3) The Victorian Government provides regulatory and economic incentives in order to achieve a heterogenous, strategically placed network of EV charging points across Victoria.

4) The State, the EV industry and electricity providers support the development, installation and use of clean energy-dependent EV charging infrastructure wherever possible.

5) The State support the development of a centralised database or map of all EV charging points that is clear, easily accessible and kept current.

6) The State invest in educating the public and promoting the benefits of EVs.