11 December 2017

The Secretary
Economy and Infrastructure Committee
Parliament House, Spring Street
East Melbourne VIC 3002
Via email to electricvehicles@parliament.vic.gov.au

Dear Sir/Madam

Parliament of Victoria’s inquiry into Electric Vehicles

I write in response to the Victorian Parliament’s Economy and Infrastructure Committee’s Inquiry into electric vehicles.

Council appreciates the opportunity to contribute to the inquiry into electric vehicles.

Council has recently developed an Integrated Transport Plan (ITP) that highlights opportunities to improve sustainable transport services and supporting infrastructure as well as to take advantage of new and emerging technologies. Importantly, the ITP seeks to reduce car-based travel by increasing the link between transport and mobility planning as well as the revitalisation of local shopping precincts. Council’s Community and Corporate Greenhouse Strategies pledge to achieve a zero net emission target by 2030 and 2020 respectively. Electric vehicles and reduced car-based travel will make important contributions towards these targets.

We look forward to working with the Victorian Government to achieve our goals.

Council’s submission is attached. If you would like to discuss this submission further please contact Bill Millard, Director Strategic Development on 9932 1096 or email bmillard@hobsonsbay.vic.gov.au.

Yours sincerely,

Chris Eddy
Chief Executive Officer
Hobsons Bay City Council Submission to the Victorian Parliament Economy and Infrastructure Committee’s Inquiry into Electric Vehicles

Hobsons Bay is situated on Port Phillip Bay, between approximately six and 20 kilometres southwest of Melbourne’s central business district. It covers an area of approximately 66 square kilometres. Hobsons Bay has more than 20 kilometres of bay frontage, quality residential areas, large expanses of environmentally significant open space and a range of major industrial complexes, which contribute significantly to the economy of Victoria. These features contribute to the City’s culture, which is strongly linked to its maritime heritage, environment, industry and lifestyle. It is home to approximately 93,392 residents.

A response to each item of the terms of reference of the inquiry into electric vehicles is provided further in the document but some key points are as follows:

1. The benefits of electric vehicles (EVs) are inter-related, with zero exhaust emissions leading to a reduction in localised greenhouse emissions and noise and improvements to localised air quality and associated amenity and public health

2. The uptake of EVs can be increased through the use of various mechanisms such as altering the luxury car tax, reducing or removing the registration costs and providing publicly available charging infrastructure

3. Public transport and corporate fleet EV trials are currently being explored in Victoria and in other states. The Victorian Government could initiate trials based on the learnings of these trials, particularly in relation to local bus companies

4. The ending of vehicle manufacturing at the Toyota plant in Altona has seen the transition of some employees to new positions. Within Hobsons Bay, we have the expertise, skills and equipment (subject to required adaptation) that can be utilised to assist in the manufacture and assembly of EVs and associated components in Victoria

5. Car share providers could easily transition to incorporate EVs within their fleets, but current costs are a likely barrier and will require a range of incentives

Council’s response to each item of the terms of reference of the inquiry into electric vehicles is as follows:

1. The potential benefits of widespread uptake of electric vehicles in Victoria to the environment, including greenhouse gas emissions, air quality, noise and amenity, whereby electric vehicles are defined as vehicles that both:

   a. use one or more electric motors as their sole means of propulsion; and

   b. require recharge from an off-board electricity source

Greenhouse gas emissions

The use of electricity as a fuel with off-board electricity recharging is highly likely to reduce greenhouse gas emissions when compared to internal combustion engine vehicles (ICEVs). Whilst ICEVs have the benefit of generating energy at the point of use, the distribution of diesel, petrol and natural gas fuels requires additional energy for pumping
mounting evidence of the link between air pollution and serious health issues derived from ultrafine particles emitted from vehicles. Ultrafine particles are most prominent in diesel vehicles. With the completion of the West Gate Tunnel, the associated widening of the West Gate Freeway and the redirection of trucks onto local roads within Hobsons Bay, particularly Millers Road, Altona, the impact on our community will increase significantly.

The Minister for Planning, in response to the Environmental Effects Statement (EES) of the West Gate Tunnel, acknowledged concerns within the local community about the effects of air quality and noise on the health of residents living adjacent to the West Gate Tunnel. While no specific Environmental Performance Requirements have been proposed, effective implementation of the proposed mitigation measures for air quality and noise are required to manage the potential environmental effects on human health.

The health benefits associated with an increase in EVs will translate into social benefits through a reduction in premature deaths, welfare losses and reduction in sickness from gaseous and particulate pollutants. Improved air quality has downstream economic benefits such as reduced healthcare requirements and the potential for improved economic output through a reduction in sickness.

Noise and amenity

As EVs utilise electric motors, noise from these vehicles is reduced in comparison to ICEVs. In the case of stationary and slow moving traffic, noise from an EV would be virtually non-existent in comparison to an ICEV. Whilst modern ICEVs feature stop-start technology (where the engine cuts-out when the vehicle stops), the majority of existing vehicles in Victoria are unlikely to have this technology. It should also be noted that this technology can be turned off by drivers. Within Hobsons Bay and our neighbouring municipality, Maribyrnong, truck freight is the cause of several issues including noise pollution and an increasing impact on amenity. This will be improved through the use of EVs.

With the completion of the West Gate Tunnel project, there will be increases in truck movements, identified in the West Gate Tunnel ESS traffic modelling, within Hobsons Bay and increases in noise and amenity issues. There is evidence that these issues can also have a significant impact on the mental as well as physical health of residents whose homes are in close proximity to the source of these impacts.

2. The regulatory, infrastructure, economic, employment and incentive options for supporting the uptake of privately owned electric vehicles

Regulatory

- Emissions legislation

In Australia, the current vehicle emissions standards are based on the Euro 5 standard. In England, the more stringent Euro 6 standard was introduced and applied to all mass-produced cars sold from September 2015. If the Federal Government was to introduce the Euro 6 standard as a requirement for new cars, this may act as a catalyst for cleaner vehicles towards a goal of zero exhaust emitting vehicles.

- Luxury Car Tax (LCT)

In Australia, the Luxury Car Tax (LCT) threshold for the 2017-18 year is $75,526 and above for fuel efficient vehicles, that is those vehicles that use up to seven litres per 100 kilometres under Section 7 of the Motor Vehicle Standards Act 1989. A regulatory approach aimed at increasing the take-up of EVs that involves removing or increasing the LCT for EVs would stimulate demand for EV vehicles.

- Zero Emission Vehicle (ZEV) target

The introduction of a Zero Emission Vehicle (ZEV) target by the Victorian Government would be complementary to the current Victorian Government’s zero emissions target by 2050. A ZEV could
be a simple and effective regulatory instrument to increase the uptake of EVs, within both Victorian and local governments and their agencies. The ZEV would provide assurance to the EV market that governments are serious about supporting EVs.

- Market-based approach

The introduction of a market based approach by the Victorian Government could utilise the existing framework such as the Renewable Energy Target’s Small-scale Technology Certificates (STC) scheme. This mechanism would increase the uptake of EVs with emissions reductions being claimed by liable entities through the reduction in the combustion and transportation of fuels used in ICEVs. To ensure that the energy for the EVs is renewable, the STCs could be linked to solar power systems projects such as renewable power purchase agreements of the Federal Government’s GreenPower program.

Infrastructure

The lack of publicly available charging infrastructure is a realistic barrier to the uptake of EVs. The issue of range anxiety, whereby an EV driver is anxious that they will not be able to complete their journey, can be appeased through the availability of publicly available charging infrastructure. The charging infrastructure needs to be quick-charging, accessible and along existing key transport corridors such as arterial roads. An ideal arrangement, focussed on the utilisation of quick-charging outcomes, would be the inclusion of charging infrastructure in existing petrol stations. This would be as a temporary measure whilst the transition from ICEVs to EVs takes place, although this would require the retro-fitting in the majority of, if not all, cases. The use of electricity as a fuel increases the adaptability of existing places to provide charging facilities. These places could include a focus on shopping centres, community facilities such as libraries and places of employment. These places offer the advantage of utilising existing car parking facilities and having non-toxic access to refuelling. Further to this, utilising existing places may result in freeing up petrol stations for other land uses as they become obsolete.

It is prudent to note that EVs should be seen as another element within the electricity generation system. As EVs have batteries, they have the potential to act as mobile batteries and could, if connected to a building, work to supply the building with electricity and therefore reduce peak demand. This would utilise existing battery management technology whereby the battery is charged off-peak, typically at night, and then used during the day either for driving the car or supplying the building.

Economic and employment

In Hobsons Bay and the wider western metropolitan region of Melbourne, the greatest opportunities that exist are in relation to supporting the manufacture and assembly of EVs are two-fold.

Firstly, manufacturing contributes over twenty four billion dollars of economic output for Melbourne’s West which is worth over six billion dollars to the local economy in Hobsons Bay. This represents 54 per cent of total economic output within the municipality (Remplan August 2015). The local strength in this sector provides an opportunity for existing advanced manufacturing and engineering companies to diversify and take advantage of growth opportunities with EV technologies, such as the ability to develop and construct equipment and components.

Secondly, there is the opportunity for highly skilled workers, particularly those employed in transition industries such as automotive and ship building to transfer these skills into the production of high tech, advanced EV equipment and components. There are many other businesses that have appropriate expertise that would allow expansion and diversification into EV technologies; however they are likely to need assistance, at least initially, to make these steps. The Victorian Government is encouraged to provide direct assistance to guide and mentor businesses through an expansion or diversification process. This should include assistance with business planning and market analysis, streamlining regulatory processes and facilitating conversations between stakeholders in relevant sectors to ensure first-hand experiences are being shared for the benefit of all.

Melbourne’s west is one of the fastest growing urban areas in Australia. Melbourne itself is undergoing rapid change, with the Western Region set to accommodate 18 per cent of forecast
population growth between 2013 and 2030. The west currently has a net deficit of employment opportunities, forcing its communities to travel to other regions for employment. This leads to increases in congestion and subsequent travel times. It also leads to the inefficient use of transport networks (particularly roads) and energy as they provide for ‘one way’ travel to the employment cluster. An opportunity exists within the west to utilise existing businesses and provide employment opportunities that reduce commuting and the associated losses of time and money.

Incentives

Within Victoria, there are several mechanisms that could be used to provide incentives for EVs. These include, but are not limited to, the following:

- Retro-fitting of existing vehicles to be 100 per cent EVs

The on-set of EVs, either through market forces or tighter regulations in relation to ICEVs, has the potential to generate a flood of ICEVs that would be surplus to requirements. To minimise the scrapping of otherwise useful vehicles and the subsequent landfiling of their non-recyclable or reusable parts, retrofitting of existing cars with electric motors could be incentivised. This could be a very practical solution for those vulnerable and low-income community groups who would not be able to afford a brand new car.

- Statutory planning

In Victoria, several inner city councils have adopted the use of the green building tool ‘Built Environment Sustainability Scorecard (BESS)’ as a requirement of applicable statutory planning applications. Applications are required to achieve a minimum score in several different sustainability-related categories. Within the BESS tool, the transport section contains a credit which requires that as a minimum, one parking space should be nominated for electric vehicle charging, with appropriate signage and charging infrastructure installed (2.1 Electric Vehicle Infrastructure).

This tool could be utilised and expanded upon to include EVs such as buses and bicycles along with EVs that are owned by car share organisations.

Opportunities for incentives also exist through the use of EVs and could include one or all of the following:

- Refuelling

If refuelling costs were subsidised or completely removed this would provide an incentive for the uptake of EVs. Some EV charging infrastructure providers include digital advertising as a way to offset the capital and operational costs of the charging stations or smart poles provide a range of functionalities thus offsetting the cost of the charging facility.

- Maintenance

Electric vehicles have less moving parts compared to ICEVs and, due to the technology, able to identify problems related to the car. This makes EVs cheaper to maintain from a parts and labour perspective. Therefore, an incentive could be to provide free maintenance for a period of five years.

- Parking

A parking incentive could be convenience-related by requiring ‘EV only’ parking bays in close proximity to public building entrances such as supermarkets. This could be enforced in a similar way to the requirements for disabled parking bays under the Disability Discrimination Act 1992. This proposal would create exposure for EVs in the public domain. Another parking option could be the provision of free parking for EVs. This incentive should only be for a limited duration, once there has been a localised increase in EVs.

- Financial incentives

In Victoria, VicRoads currently provide a $105.70 discount to the registration costs of a hybrid vehicle. This model could be followed for EVs at either the same discount amount or having zero registration costs for a short period such as five years.
A further incentive could be to reduce the LTC threshold for ‘Other vehicles’ (those that are not fuel-efficient) to capture more vehicles and utilise the increased LCT revenue to offset incentives for EVs. This mechanism would assist in reducing the costs of EVs along with potentially increasing the uptake of fuel efficient vehicles.

In relation to the cost of EVs, Hobsons Bay is the ninth most disadvantaged municipality in Metropolitan Melbourne with a Socio-Economic Indexes for Areas (SEIFA) index of 997.8. Inequalities exist within a number of population groupings especially women and girls, newly arrived communities, people with a disability, older people, young people, and children. Further to this, the increase in household debt in Australia generally, along with increasing living costs and stagnant wage growth could pose a barrier to new vehicle ownership, let alone ownership of EVs which are typically more expensive to purchase than ICEVs. It is important to consider the context in which EVs are developing, in particular, consideration of who benefits most from the introduction of EVs.

- Workplaces

It is understood that an individual is 20 times more likely to purchase an EV if their workplace provides charging infrastructure (Jetcharge 2017). It would be beneficial for the Victorian Government to consider providing employers with incentives (financial or otherwise) to install EV charging infrastructure.

3. The applicability of electric vehicles in public transport bus fleets and public sector fleets

In Australia, electric buses are being trialled at Sydney and Brisbane airports and in Canberra and South Australia, electric buses are being trialled for use within existing public transport routes. In the public sector, the City of Melbourne has had ten EVs as part of their light corporate vehicle fleet since 2012.

In 2018 the contracts of 12 of the 13 bus service providers in Victoria will be up for renewal. This provides an excellent opportunity for the Victorian Government to be bold and innovative in this space. The inclusion of a certain percentage of electric buses and buses that install bicycle racks are a couple of examples of how the Victorian Government could show leadership on sustainable, integrated transport. The evidence of the applicability of EVs in fleets is growing and the Victorian Government should seriously entertain taking the lead and learning from these examples. As our community in Hobsons Bay is highly dependent upon bus services as the main form of public transport, our municipality would be a feasible location for an electric bus trial. In addition, a local bus company such as CDC Victoria who operate routes in Hobsons Bay would provide a model for the implementation of an EV bus route. This opportunity would showcase both the bus technology and associated infrastructure to local businesses to encourage diversification into EV infrastructure as discussed above.

4. Options for supporting the manufacture and assembly of electric vehicles in Victoria, including transition of workers and suppliers affected by the closure of vehicle manufacturing in Victoria

Hobsons Bay and the wider western metropolitan region of Melbourne provides a supply of suitable land and premises in close proximity to major transport infrastructure, including the Port of Melbourne. This provides several advantages for companies to locate and expand their operations within the municipality. In Hobsons Bay, the closure of vehicle manufacturing in Altona has seen employees transition into new positions. To support the manufacture and assembly of EVs in Victoria, the Victorian Government’s EV Jobs Fund (NEJF) could be utilised to facilitate this. The NEJF eligibility requirements include the support of manufacturing EV technology components and systems along with projects that enable industry to optimise, adapt or integrate commercially available EV technologies. Further to this, the Victorian Government could investigate the feasibility of retro-fitting vehicles with electric motors as an innovative way to create new technology and potentially utilise existing manufacturing skills and equipment.

The Victorian Government is encouraged to support the manufacture and assembly of EVs in Victoria, through an investigation of the options available as well as engagement with key
stakeholders. This should be undertaken as a matter of urgency given that the high-volume EV manufacturers such as Mitsubishi, Renault-Nissan Alliance and Tesla are currently manufacturing EVs. If there is no support and incentives for the manufacture and assembly of EVs soon, the manufacturing opportunity in Victoria will be lost.

5. The applicability of electric vehicles to the car share providers market

In Victoria, car sharing organisations such as Flexicar, GreenShareCar, Popcar and GoGet have dedicated off-street and on-street parking bays in several inner-city municipalities including the City of Melbourne, City of Port Phillip and the City of Stonnington. Utilisation of, or in addition to, these bays, the inclusion of EVs and associated infrastructure could provide a very visible and accessible introduction to EVs. From a behavioural change perspective, car share users being seen driving and charging EVs in the public domain has the potential to challenge perceptions about EVs through modelled behaviour. Further to this, the increased availability and use of electric bicycles could be an opportunity to share charging infrastructure with EVs and thus facilitate the uptake of active transport. It is noted that the current capital cost of EVs are a likely barrier to the procurement of EVs by car share providers, thus support from the Victorian Government will be vital if this initiative is to successful.

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