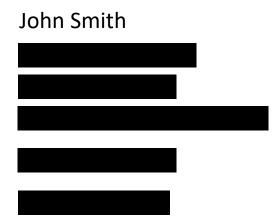
STANDING COMMITTEE ON PLANNING, TRANSPORT, AND CITY SERVICES Ms Jo Clay MLA (Chair), Ms Suzanne Orr MLA (Deputy Chair), Mr Mark Parton MLA

Submission Cover Sheet

Inquiry into electric vehicle (EV) Adoption in the ACT

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Standing Committee on Planning, Transport and City Services
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Submission by John Smith to the Standing Committee on Planning, Transport and City Services Inquiry into EV Vehicle Adoption in the ACT

Note: Personal details above, other than my name, are not for publication please. The submission itself is ok to publish on the Committee's website

Inquiry into EV Vehicle Adoption in the ACT

Thank you for the opportunity to provide input to the Inquiry.

I have been a resident of Canberra since 1993, and have been a licenced driver since 1968, owning a range of vehicles during that time including a dozen sedans, and a 4WD when I lived in the Northern Territory. I am now the owner of an EV, a 2021 Tesla Model 3 SR+ which I purchased in May 2021. I am a member of the Australian Electric Vehicle Association (AEVA) and a member of the Tesla Owners Club of Australia (TOCA), however this is a personal submission to the Inquiry. I am also a driver with a disability who requires a wheelchair at all times, and this gives me a particular perspective on a range of issues, including accessibility, that I think it would be useful for the Inquiry to take into account.

Terms of reference

a. Skills development needs to support an expanding EV uptake

It is clear to me that there is a great need for an expansion of the number of trained technicians able to service and repair EVs. Servicing EVs with their high voltage lithium batteries requires specialist skills. I understand that TAFE is working with industry and others to provide courses that will assist to accredit those wishing to work with EVs, and this is to be welcomed.

Hand Controls

From my perspective as a driver with a disability, I require my car to be fitted with appropriate hand controls so that I can safely drive without the use of my legs. These controls are very expensive (>\$8.5K) and the number of people with the skills and knowledge to fit them to any car is limited, but to find someone to fit them to an EV is another order of difficulty. I was lucky to find an auto-engineer just over the border from the ACT in Queanbeyan, Mr Chris Major from One M Engineering, who fitted Fadiel Ergonomic Radial controls (imported from Italy) to my vehicle. I was impressed with his approach to the job, as he first went to speak to the mechanics at the Tesla Service Centre in Beard to gain an understanding of what could be/needed to be done. He provided an engineering certificate which I had to present with the vehicle to the Motor Registry for inspection. It appeared to me that the staff at the Motor Registry were not very au fait with EVs, so a general increase in skills development of the auto-industry across the board with respect to EVs would stand the industry in good stead as the shift to EVs ramps up.

Driver Training

There will also be a need in the future to have driver trainers who are familiar with EVs and especially trainers able to train drivers with a disability. When I learnt to drive, I was taught by a trainer with a disability who was himself in a wheelchair, and his car was fitted with hand controls so that I could learn, not only how to drive with regard to the road rules, but how to manage a car with hand controls and the

specific things that go with that. My EV presented a whole new challenge with its regenerative braking, and I had to significantly adjust my driving techniques to suit the much more complex (in some respects) aspects of driving an EV with hand controls.

b. Industry development opportunities

I have no particular knowledge in this area, but I would expect that there are excellent opportunities for industry development with regard to EVs, either in sales, service, repair or vehicle enhancements (add-ons, upgraded equipment etc). There may also be opportunities in charging infrastructure supply and installation, and in the integration of EVs with solar and home battery systems.

c. Planning laws and regulations and education and promotions in relation to charging infrastructure requirements in a variety of residential, public and commercial configurations and precincts

I think there need to be amendments to the planning laws and regulations to require all new builds, both commercial and domestic, to provide for charging infrastructure. This should extend to ensuring the wiring and power capacity of the building is sufficient to enable charging of EVs commensurate with the likely number of cars in use in the building not just now, but in years to come when most vehicles will be EVs.

There needs to also be regulations (and possibly incentives) relating to retrofitting existing builds in multi-tenancy situations. I have read of building management refusing to allow EVs to be charged from existing infrastructure (eg standard GPO), or refusing to allow EV owners to install charging systems even though the EV owners are willing to pay the installation costs and meet the ongoing electricity charges. The rules need to be carefully thought out, taking into account who pays for what, electrical capacity of building wiring etc, but there are many businesses now in the market who can install multiple charge points that are able to share the power available through intelligent systems to ensure all cars get charged without overloading the circuits. These systems are also able to manage the financial side of the equation, with EV owners paying a fee via an app.

There needs to be an education program around charging facilities in multi-tenant buildings and residential flats to encourage building management to understand the advantages of providing charge points, and to dispel some of the myths around EVs (such as fires etc while charging – much more likely with light EVs - scooters, bikes etc than EV cars).¹

There need to be amendments to laws such that ICEing a charge point incurs a fine (and it must be enforced) and similarly, leaving an EV on a charge point when it is not charging should also incur a fine. These are charge points not parking bays.

¹ https://www.evfiresafe.com/post/australia-has-an-ev-fire-problem-it-s-not-cars and https://www.youtube.com/watch?v=Cm7Z8LshHJw Electric vehicle fires - risks, realities and firefighting - EV fires

There should of course be an education program around these changes. Of course, different rules may apply for destination chargers.

Owners of commercial buildings and precincts should be encouraged to provide a range of charging facilities for customers and members of the public, from destination chargers to fast chargers and above. If the future is electric, then we need to adapt all our facilities towards that end, and to make it easy to charge an EV anywhere, anytime.

d. ACT Government's role in providing charging infrastructure

The ACT Government needs to take a role in providing charging infrastructure, especially in the early days of the transition to EVs where the lack of charging facilities is a major deterrent to EV uptake. These should be strategically placed around the ACT near other facilities such as toilets and food outlets so that most areas of the Territory are within no more than ten minutes' drive to a charge point. While it may not be so important for a resident with home charging, a visitor to the ACT, or someone without home charging access, would find having to drive to the airport to recharge a major disincentive to EV ownership, when they may only be visiting the north or the south of the city.

Reliability

Another important aspect for the Government is to require appropriate service standards for charging infrastructure. There are many reports across Australia, and in the ACT, of chargers being out of order for extended periods of time. Particularly when they are few and far between, as now, it is most important that high rates of 'up time' are a mandatory aspect of contracts for these services.

Accessibility

As a person in a wheelchair, I find that I cannot access either the Tesla or other chargers to recharge my vehicle because most are too high up, and / or have concrete plinths that are inaccessible to a wheelchair. I realise that it is early days in the transition and the major objective is to get plenty of chargers out there for the majority of drivers to use. But if we do not start planning for accessibility now, we will end up with a totally inaccessible system in the future, and while cars have until now provided tremendous accessibility and independence for people with a disability, that may well take a huge step backwards if we do not design accessibility into the charging system. When such accessible charging points are designed, they need to be wide enough to allow for wheelchair access for the driver and a smooth route of access from the car to the charger (and should seek input from wheelchair users to ensure the solution is fit for purpose).

e. Regional charging infrastructure and whether this is a barrier to local uptake, end-oflife battery disposal, and impact of EVs on ACT power supply requirements and vehicle-to-grid issues

Regional Charging Infrastructure

I think the lack of regional charging infrastructure is a barrier to local uptake. Most Canberrans like nothing better than to take a run down to the coast for the weekend. But many shorter range EVs struggle with the trip because the consumption is very high on the steep climb up the Clyde Mountain and there is currently no charging available between Batemans Bay and Canberra. There is a desperate need for public fast charging infrastructure in Braidwood. This applies to elsewhere in the region too. For many, a trip around the region, say visiting the wineries or other attractions, may not be a viable thing to do because the range on some EVs is insufficient to drive to a location then visit the sights and have enough charge to get home. Even though my Tesla has a good range, if I go for a Sunday drive, I keep a close watch on the state of charge so that I have enough to get home. More public charging infrastructure would alleviate this concern, and, in my view, it would lead to a faster take up of EVs.

Battery recycling

End of life battery recycling is something that is absolutely required, and governments at all levels should be working to ensure that it happens. I am led to believe that up to 96% of a battery is recyclable, and they are made of precious and scarce resources that should be reused. In my view, governments should not leave this issue to become a problem, but should, at some level of government (possibly Federal), be looking to mandating that recycling occur and put in place policies and laws to ensure that it does. I know that some of the EV manufacturers such as Tesla are working on battery recycling, but we cannot just leave something as important as this up to the market — it needs a government push!

Power Supply

I am not fully across the impact of EVs on the power supply, but I do know that there is a lot of misinformation about it. Not all EVs are charged at the same time each night, nor are the power requirements equal to the battery capacity, because most cars are not run to zero charge on a daily basis. I think sensible power pricing to encourage EVs to be charged either during the day when there is a surplus of solar, or late at night when the demand is low, should be able to manage the power supply requirements provided the grid is upgraded with the increase in EVs and other electrical items (consequent to the electrification of the ACT policy announced this week). I, myself, charge my vehicle after 11pm at night and always have a full charge the next day. It's not an imposition to do, and the setting is in the Tesla app.

V2G

I think there is a lot of confusion about this and exactly what it entails. 'Vehicle to grid' interests some of my friends very much. I would be very interested in 'vehicle to house' (to run the house in the case of power outage, or to save money by using the car battery instead of grid power). Such a facility is not available on the Tesla but is becoming more common with other models such as Nissan, BYD, Hyundi, Kia, and the new MG ZS EV. I think it has potentially a major advantage in providing grid services in the future. I certainly think that the government should be providing for it to happen and encouraging electricity suppliers to allow it.

f. Application of Territory taxes and charges for EV purchases including registration charges

The Territory incentives were a big factor in my purchase of my Tesla. The major incentive was the waiving of stamp duty charges. That is a real incentive that puts dollars in the pocket, especially when purchasing EVs which are at a premium price point compared to ICEVs. The two-year waiver of registration fees was also welcome. Given I was up for \$8.5K in costs to install hand controls on top of the initial purchase price of the car, these Territory incentives made all the difference. However, a major gap appears to be that the interest free loan program does not apply to the most popular EV model, the Tesla Model 3. As it was, I did not need to use the interest free loan program for my purchase, but not including Teslas is a problem.

Other jurisdictions have unfortunately imposed Road User Charges on EVs and I think this is a retrograde step when we are trying to encourage take up of this technology to save the planet. I was pleased to see that the Territory did not follow suit. I realise that in the years to come the Federal Government will face a fall in fuel excise receipts as the switch to EVs ramps up. But now is not the time to impose charges when we want that switch to EVs to continue at pace to remove fossil fuels from the system. It is inappropriate for State/Territory governments to impose such charges anyway. The Fuel excise is a Federal tax, not a State tax, and Victoria cannot claim it is missing out on anything in the form of road funding at the moment, because it was never the collector of the tax.

Eventually, a fair system of road users paying for road services will need to be devised, but it should be national, not State by State, and it should apply to all road users, not just EVs, and it should be such that it encourages a switch from ICEVs to EVs.

g. Federal taxes and charges for EV purchases, including import taxes

Luxury Car Tax should be significantly adjusted and, in most cases, removed for EVs, or at least have the tax only apply for true luxury vehicles, not cars like Tesla Model 3 Long Range or Performance. The Federal Government must understand that this is

the infancy of EVs and to get the transition to EVs we need to encourage manufacturers to deliver a wide range of models including 4WD equivalent EVs that can tow reasonable distances. Given these need large batteries, and the cost is in the batteries, we must accommodate that by not charging LCT on things like the Rivian and Ford F150 Lightning. In time, battery costs will fall, people will be convinced that EVs can meet the majority of their needs, and then the LCT can apply to the true 'luxury' EV cars, and all ICE 'luxury' cars.

Customs Duties of 5% could be waived for EVs if the Government's intention is to lower the up-front cost of EVs for consumers. Additionally, how GST is calculated could ease the pressure on prices, as at the moment it is a tax on a tax. The 10% GST is paid on the Value of Taxable Importation. This value is calculated from total of the customs value + freight and insurance + customs duty amounts.²

h. Other Federal barriers to EV uptake, cost and availability of EVs, including fuel efficiency standards, impact of EV uptake on existing motor and service industry sectors including possible transition assistance, equity and just-transition issues for people on lower incomes

Fuel Efficiency Standards

Fuel efficiency standards are critical to the uptake, cost and availability of EVs. Fuel efficiency standards are a lever to improve fleet fuel economy and to decrease emissions. Manufacturers must meet the standards or suffer severe penalties. Australia does not currently have mandatory fuel efficiency standards and is still operating on a voluntary scheme which has us years behind the rest of the world. Current proposals languishing in the Federal Parliament are for fuel quality to be gradually improved to existing world standards by 2027 and then move to Euro 6d standards after that. This results in Australia being a dumping ground for dirty inefficient vehicles, as manufacturers suffer penalties in other markets if they do not meet the standards, whereas they get a free pass to dump these dirty vehicles in Australia. Having to meet the standards means the manufacturers deliver more EVs and more models of EVs to our market. This must be a first level priority for the Federal Government if it wants to increase the range of models available and to also lower the price of new models in the market.

I am particularly disturbed by a report in the *Sydney Morning Herald* on Monday 8 August 2022³ that drew attention to a plan by the car industry to slow electric vehicle take up.

² Worldwide Customs and Forwarding Agents. "Importing Motor Vehicles into Australia". https://www.wwcf.com.au/importing-motor-vehicles/

³ Cubby, B (2022). "Revealed: Car industry's secret emissions plan would slow electric vehicle uptake." Sydney Morning Herald. (https://www.smh.com.au/national/revealed-car-industry-s-secret-emissions-plan-would-slow-electric-vehicle-uptake-20220805-p5b7pe.html)

This is an egregious situation where the leading industry body, the Federal Chamber of Automotive Industries (FCAI), the powerful peak body representing 39 auto brands, has taken it upon itself to pretend to the public that it is doing all it can to promote a reduction in emissions by the industry, while at the same time scheming behind the scenes to lobby governments and Ministers and other decision-makers, to actually thwart the move to a cleaner, greener transport sector. While claiming to be the 'good guys' by calling for standards to be tightened, they are duplicitous because they ask for the industry's own weak standard to be applied. Meantime, they are seeking to delay as long as possible the introduction of Euro 6 and 7 fuel efficiency standards so that their members can dump dirty cars in Australia and make enormous profit at the expense of the health of both the people and the planet.

The report says that adopting the industry's existing, voluntary emissions scheme as the national standard ".... would mean new passenger cars sold in 2030 would still pump out an average of at least 98 grams of CO2 per kilometre, leaked documents show. By comparison, European standards in place now specify 95 grams of CO2 per kilometre, with a ban on almost all new petrol and diesel vehicles including hybrids in 13 years. Britain plans to ban the sale of most new petrol and hybrid cars from 2030."

The leaked documents ".... outline a timeline of public relations efforts to take place from now until October, with a program of targeted briefings, a green paper for government, a "thought leadership roadshow" consisting of roundtables, keynote speeches, newspaper opinion pieces and a "targeted media campaign".

Further, "The documents paint an insider's picture of those in the petrol and hybrid car industry fighting a rear-guard action against fuel emissions regulation as a wave of new, more affordable electric cars is about to hit the market."

The strategy mirrors aspects of the approach used overseas by car manufacturers such as Toyota, which combines public statements about environmental stewardship with behind-the-scenes pressure on policymakers to weaken regulation of car emissions⁴.

Now that these disgraceful plans have been publicly revealed, it is important to take no notice of the FCAI, and to listen instead to the vast majority of Australians who want strict fuel efficiency standards introduced so that we protect our health and that of the planet. It appears that a 'stick' approach may be needed for the industry as it has been clearly revealed by this exposé that the industry cannot be trusted to do the right thing. We need more zero-emission vehicles, not more polluting ICE vehicles.

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⁴ Cubby, B. op.cit

Transitional Plans for Workers

There should be transition assistance required for workers in fossil fuel industries and workers servicing and repairing ICEVs, but this should not extend to fossil fuel companies themselves, which if anything should be taxed heavily on their recent windfall profits to help pay for the transition.

Equity

There are certainly equity issues and just-transition issues for people on lower incomes. Some of these will be met by recent changes to fleet arrangements for EVs, the fine details of which I am not familiar with, but which should lead to a large number of EVs entering the second-hand market in the next two to three years. Assistance schemes similar to the Territory's \$15K interest free loans could also be considered at a national level. Other rebates or purchase incentives for low-income people could also be considered.

Any other matter relevant to this issue.

I note that there is a significant submission from Canberra Bike suggesting that the Committee is concentrating on the wrong issues, when it should be more focussed on active travel, walking, bike riding, skateboarding and public transport. I support much of their submission, and strongly support active travel and public transport use wherever possible. I agree that spending more money on regular, fast, reliable public transport is preferable to continually constructing new roads to accommodate new cars. However, it is a fact that there were 20.1 million cars registered in Australia as at January 2021⁵ most of them passenger vehicles spewing emissions into the atmosphere. While I agree we do not want to replace all these vehicles with EVs, until such time as we achieve a much better public transport system across the country, we will need to replace a large percentage of them with EVs in order to reduce the emissions of those vehicles. Additionally, for many people, the elderly, or those with a disability such as in my case having to use a wheelchair all the time, public transport, particularly in Canberra is not suitable, and they, and I, rely heavily on cars to attend to daily living.

In conclusion, I think we are at, or have just reached, the tipping point⁶ in the transition to EVs. The biggest problem at the moment is not lack of demand but lack of supply. Much of this is due to supply chain issues around the world, but I note that a ship has just arrived with a supply of Teslas from Giga Shanghai⁷, and a

⁵ Australian Bureau of Statistics (2021). Motor Vehicle Census, Australia. https://www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-census-australia/latest-release#:~:text=There%20were%2020.1%20million%20registered,1.7%25%20from%202020%20to%202021.

⁶ Waterworth, David (2022). "Bloomberg Declares That The Tipping Point Has Been Reached!" CleanTechnica. https://cleantechnica.com/2022/07/25/bloomberg-declares-that-the-tipping-point-has-been-reached/?fbclid=lwAR2iFwYFEh6fl9h3OAper54zdfqBEysd6rrGSs5gU 47cw5JARcL7WuarR4

⁷ Akhtar, Riz (2022), "First Tesla Model Ys for customers land in Australia". The Driven. https://thedriven.io/2022/08/02/first-tesla-model-ys-for-customers-land-in-australia/

shipment of 1,000 BYD Atto 3 has just been reported in the last week or so⁸. The shift is now inevitable, but it is up to governments and industry and society to ensure that the transition is as smooth and equitable as possible.

Thank you again for the opportunity to make a submission on this important topic.

Yours sincerely



⁸ EVDirect.com.au (2022). "Committed to helping make the world greener and cleaner, #BYD is stoked with the successful shipment of the first 1,000 ATTO 3 all-electric SUVs on Australian shores". https://www.facebook.com/EVDirectAUS