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Date: 31st July 2020

To: Secretariat, Federal Financial Relations Review
Re: Fuel excise, electric vehicles and federal/state taxation

Dear Sir/Madam,

The Australian Electric Vehicle Association (AEVA) is a not-for-profit, volunteer-run organisation dedicated to promoting electric mobility for Australia. Formed in 1973, we represent the interests of electric vehicle (EV) owners and enthusiasts as well as many of the industries which support and by extension, prosper from electrified transport. On behalf of our 1000+ members, we make the following submission to the NSW Treasury Discussion Paper on future federal and state financial relations and the role EVs will play.

Electric vehicles offer enormous benefits to Australia. At the street level, EVs are quiet, clean running and produce no noxious emissions in operation. The electricity used to charge them may come from any source and renewable energy such as solar, wind and hydroelectricity allow for truly zero emissions travel. Additionally, electricity is generated securely right here in Australia, meaning tens of billions of dollars' worth of crude and refined oil products need not be imported to fuel our transport networks.

Electric vehicles – specifically cars, trucks, buses and motorcycles, all have one thing in common with internal combustion engine (ICE) vehicles. They all share the same roads. However, because they are not powered by petrol or diesel, they do not attract the fuel excise of $0.42 per litre currently collected at the pump. It has been erroneously argued that drivers of EVs "aren't paying their fair share" to use public roads because of this. The AEVA rejects this argument for the following reasons.

1. **Funding for road construction and maintenance comes from general revenue**. Income tax, payroll tax, resource royalties, tolls, levies, stamp duties and licensing fees all contribute to consolidated revenue, and is variously spent on a litany of important public services and amenities. **Fuel excise and road funding haven't been linked since the late 1950s.** Today, the two have about as much in common as iron ore royalties and the pharmaceutical benefits scheme; revenue and expenditure.

2. **Electric vehicle owners are already paying plenty of tax**. Due in part to the lack of federal EV policies, as well as Australia's small right-hand drive market, EVs are significantly more expensive than an equivalent ICE vehicle. For example, the Hyundai

Kona EV retails for about $67,000 while the petrol version retails for just $34,000. This high up-front cost attracts more GST and more stamp duty. Without any other financial incentives in place, **state and federal taxes already make up a larger proportion of the purchase cost of an EV than that of an ICE equivalent vehicle**.

3. **As a source of revenue, fuel excise had long been in structural decline**. Noted quite clearly in the discussion paper, the reduced take from fuel excise is primarily attributed to improved fuel efficiency of ICE vehicles, decreasing demand in general, and a 13 year period where the excise was not indexed against inflation. To suggest that only 18,000 plug-in vehicles (out of a fleet of more than 13 million) are responsible for a decade of declining revenue is disingenuous.

4. Much like alcohol and tobacco, **combustion of liquid fossil fuels is a bad idea for both health and climate reasons, so the fuel excise serves as a disincentive to consume it**. Drivers of EVs don't consume petrol or diesel, so it's hardly an injustice for everyone else. Non-smokers aren't singled out for shirking their civic responsibilities just because they don't pay tobacco excise, and nor should EV drivers be taken to task for not consuming petrol.

It should be noted that the air pollution produced by ICE vehicles, and the serious respiratory health problems caused by these emissions, are not being paid for by the drivers of these vehicles. These costs are borne by the entire population, including those who don't drive.

In short, road construction and maintenance should continue to be funded from the same source it has always been funded from – general taxation. This is a sound approach, as all Australians benefit from the existence of well maintained roads and highways – everything from emergency services to fresh produce relies on clear and efficient passage.

However, the AEVA also sees some merit in a "user-pays" scheme when it comes to road infrastructure, particularly since significant external costs are borne by the general population. Poor management of peak demand results in traffic congestion at peak times, while over-investment in road infrastructure is inefficient and unproductive. Urban air quality continues to suffer as long as ICE vehicles are cramming into our city streets. Australia should strive to minimize traffic density in populated areas, making our cities more liveable. While EVs relieve the air quality problem, they still contribute to gridlock and unproductive urban footprints through provision of parking space. Thus, it may be advantageous to implement financial motivators which are proportional to road use, and wear and tear on infrastructure due to vehicle mass.

To this extent, the AEVA is open to a Road User Charge (RUC) system, provided the revenue is hypothecated towards key transport infrastructure (including cycling infrastructure and public transport) and enhances quality of life for all Australians. We propose a model which embraces the following key attributes:

1. The RUC be an annual charge levied on distance travelled. It should start at 0 to 1 cent per kilometre for **all vehicles**, ICE or EV, bus, truck or motorcycle.

2. This rate should be **multiplied by the vehicle mass**, such that revenue collected is accurately apportioned to the vehicles which do the most damage (large SUVs, trucks and road trains).

3. **The petrol and diesel fuel excise is retained in its current form**.

4. Only increase the per-kilometre rate **as and when EVs make up more than a quarter of the fleet**. On current EV growth projections, it could be raised by 1c/km every 5 years.

5. **The maximum rate should be 4 c/km**, which is roughly equal to the average ICE passenger vehicle's fuel consumption (10 litres per 100 km) before the vehicle mass is applied.

Example RUC and fuel excise calculations:

A 2010 petrol sedan with a tare weight of 1.25 tons, travelling 14,000 km and averaging 10 l/100 km economy can expect to pay:
1c/km * 14,000 km * 1.25 = **$175 in RUC** and **$588 in fuel excise** per year.

A 2020 electric sedan weighing 1.8 tons travelling the same annual distance would pay:
1c/km * 14,000 km * 1.80 = **$252 in RUC** and obviously no fuel excise.

When EVs make up 100% of the vehicle fleet, this rate may be increased to 4c/km, meaning an equivalent EV would pay $1008 per year in RUC.

This is a fair proposal for the following reasons:

- It does not penalise Australians who choose to drive an EV. We should be removing disincentives to EVs, not creating new ones.
- It does not penalise Australians who cannot yet afford to buy an EV, at least initially; new ICE vehicles bought today will still be on the road in 15 years time.
- It includes a mechanism to discourage ICE vehicles; the fuel excise remains as is until EVs make up the entire fleet.
- An annual odometer reading at registration renewal time (or EOFY / tax time) is a very simple and inexpensive way to administer the charge. This is easy to enforce by police or road transit authorities through common roadside checks. Administration may be managed at either the state or federal level.
- The mass multiplier creates a disincentive to buy an excessively heavy passenger vehicle, and will drive innovation in the auto sector to reduce tare weights. Lighter vehicles are more efficient, and are safer for vulnerable road users like pedestrians and cyclists, and they inflict less wear and tear on roads and bridges. This applies to both ICE and EVs, light and heavy vehicles.
- It allows for a steady transformation of the vehicle fleet from ICE to EV without a sudden price shock.

- It actually funds critical mobility infrastructure development and maintenance which enhances quality of life in Australia, and concentrates the expense where it's needed most.

Once again, we should reiterate that critical transport infrastructure such as railways, ports, roads, bike paths and pedestrian malls should continue to be funded from centralised revenue as all Australians benefit from the services they provide. However owing to the harmful externalities intrinsic to road transport infrastructure, a usage-based revenue model may be able to drive positive change in the way Australians move themselves.

The benefits of EVs are nationally significant, but until there is a substantive EV policy enacted by the Commonwealth government which materially impacts the high upfront cost of EVs, a road user charge would simply be another impediment to uptake.

Now is not the time to be creating yet more barriers to EV uptake.

Sincerely,

Chris Nash
AEVA National President

Clive Attwater
AEV Vice President

Dr Chris Jones,
AEVA National Secretary