



31 July 2018

Senator Tim Storer  
Department of the Senate  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Dear Senator Storer,

**RE: Submission to Select Committee on Electric Vehicles - inquiry into the use and manufacture of electric vehicles in Australia**

Infrastructure Partnerships Australia is pleased to provide this submission to the Select Committee on Electric Vehicles and its inquiry into the use and manufacture of electric vehicles (EVs) in Australia.

Infrastructure Partnerships Australia is an independent think tank dedicated to shaping public debate about infrastructure and driving policy reform for the benefit of the national interest. EVs offer a once in a generation opportunity to deliver a fairer, more efficient transport market. By aligning reform to the rise of EVs, Australia has the opportunity to lead the world in EV uptake and to deliver a modern, fairer way to pay for transport infrastructure.

**EVs are coming, and that's a good thing**

EVs are set to become the dominant drivetrain in the new light vehicle market over the coming decade. While liquid fuel vehicles will continue to make up a substantial proportion of the existing fleet, the declining cost, increasing efficiency, ease of maintenance and reliability of EVs will make them the preferred consumer option (particularly for urban markets) in the near term. Put simply, EVs will become a better solution for personal mobility, relative to combustion engine vehicles, for the overwhelming majority of Australians.

The 2018-19 financial year will likely see between 8,000 and 12,000 full plug-in EVs sold in Australia. The growth pathway is exponential and compounding. Within the next few months, the electric Hyundai Kona is set to enter the Australian market, placing pressure on other major car manufacturers to accelerate the deployment of electric cars and the broader electrification of the private vehicle transport market.

**However, the current approach to charging for roads is increasingly unsustainable – and this trend will be accelerated by EVs**

While the uptake of EVs and more fuel-efficient vehicles is undoubtedly a good thing, this trend is driving a rapid and terminal decline in Fuel Excise revenue, making the case to act swiftly on road reform an urgent concern for all Australians.

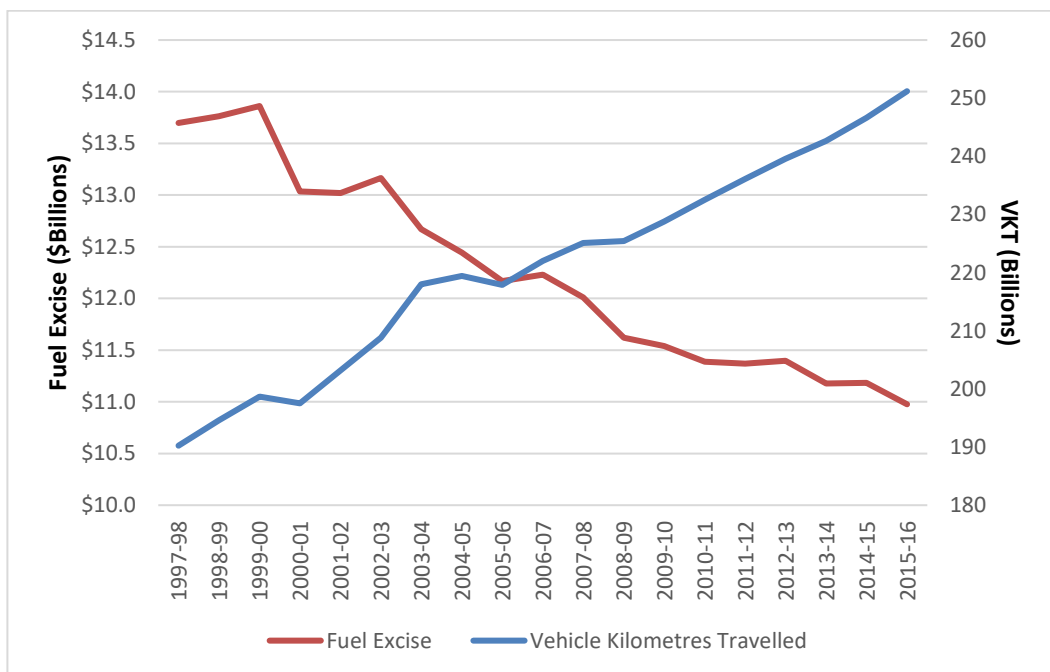




Indeed, the Parliamentary Budget Office's latest report '*Trends affecting the sustainability of Commonwealth taxes*' cites declining Fuel Excise as the most significant threat to the Commonwealth's revenue base. According to the PBO, Fuel Excise as a proportion of the overall economy has declined by 30 per cent since 2001-02 from around 2.8 per cent, to 1.9 per cent in 2016-17.

As demonstrated in Figure 1 below, this represents a \$1.1 billion real decline in Fuel Excise receipts over the last decade (from 2005-06 to 2015-16). Over the same period, the number of total vehicle kilometres travelled on Australian roads has surged, from 217 million to more than 250 million. This means demand for roads has been increasing as the population and economy grows, while the revenue needed to support investment has declined.

**Figure 1: Fuel Excise (\$Billions, 2015-16 prices) versus Vehicle Kilometres Travelled (Billions)**



Source: Infrastructure Partnerships Australia analysis of BITRE data, 2018

As the upfront and whole-of-life costs of EVs reach parity with and fall below that of combustion engine vehicles, this downward trend in revenue will accelerate. Equally, as the marginal cost of EV travel declines due to lower fuel and maintenance costs, there is likely to be additional upward pressure on demand for roads (as represented by total vehicle kilometres travelled in Figure 1). This will become a self-reinforcing cycle.

**The incumbent road funding system is unfair for road users and this inherent unfairness will intensify as more EVs enter the fleet**

Under the current regime, a motorist driving an electric car will only pay state-based road access charges





through registration and licence fees while making no direct contribution for their use of roads. Meanwhile, motorists driving combustion vehicles are left with the burden of paying Fuel Excise charges to fund our roads. In effect, motorists with combustion vehicles will increasingly cross-subsidise EV users.

This is set against a further perverse incentive where purchasers of EVs pay substantial upfront taxes (through Luxury Car Tax and import duties) which stifle the uptake of EVs as a mass market option and delay the broader benefits that electrification of the private mobility market will offer.

### **EVs are an opportunity, not a threat**

To date, most policy discussion about the rise of EVs has focussed on the negative impact mass market adoption will have on Fuel Excise revenue and the related decline in governments relative capacity to fund transport infrastructure. While this concern is legitimate, it is the wrong lens through which to consider what is in fact a positive market transition.

EVs present an opportunity to attach reform to the rise of an emerging but disruptive technology. As noted, while combustion engine vehicles attract Fuel Excise, there is no existing consumption-based charge applied to EVs which reflect their use of the road network.

While EV drivers pay substantial upfront acquisition costs, the lack of a user charging regime means that EV drivers do not make a fair contribution toward delivery and upkeep of the roads they consume – nor the provision of new infrastructure to support these new forms of mobility.

Therefore, we recommend that all EVs and other zero emission vehicles sold in Australia should fall under a new distance-based road user charging mechanism, ensuring EV users continue to make a fair contribution towards the provision and maintenance of transport infrastructure.

This new charging system should be supported by broader, whole-of-market, road reform over the medium term. However, this may prove unnecessary in a scenario where EV uptake accelerates rapidly. Further, all revenue raised from any EV charging regime should be re-invested in transport infrastructure to maintain our existing networks and develop additional capacity.

### **We should encourage EV uptake and remove upfront disincentives**

EVs offer a generational opportunity to reduce transport emissions, deliver a more sustainable transport future and deliver broader reform in the infrastructure sector.

In recognition of the substantial benefits EV's offer, we recommend the Australian Government investigate and implement policies to accelerate the transition to EVs in Australia.

Specifically, Infrastructure Partnerships Australia is advocating for all upfront disincentives to purchasing an EV (including Luxury Car Tax and vehicle import duties) to be reduced to zero. Furthermore, in consultation with industry and consumers, government should develop a national strategy to co-ordinate the transition to EVs.





**We have a once in a generation opportunity to introduce reform alongside a structural technology change, but the window of opportunity is rapidly closing**

Successive inquiries, reviews and reports have all pointed to the need to reform our road funding and user charging system. Each of these have drawn the same conclusion that the current system for funding and investing in our roads is inefficient, unfair and unsustainable. These include:

- Infrastructure Partnerships Australia's *Road Pricing and Transport Infrastructure Funding* (2014);
- The Productivity Commission's *Inquiry Report into Public Infrastructure* (2014);
- Harper's *Competition Policy Review* (2015); and
- Infrastructure Australia's *Australian Infrastructure Plan* (2016).

The Australian Government, in response to a recommendation from the *Australian Infrastructure Plan*, has committed to an inquiry into road market reform. The new road user charging regime for EVs represents an opportunity to progress a no regrets policy which should be pursued irrespective of the timeframe of the planned inquiry into broader market reform.

The Australian Government should also consider recasting its planned inquiry into road market reform to take a broader perspective on new technologies in mobility (including EVs), and how these structural changes can be leveraged to deliver a fairer and more sustainable transport market.

However, the window of opportunity to leverage the rise of EVs for a positive reform outcome is closing. We must act in the very near term, while EV sales are low, and before mass market uptake makes this sensible reform electorally unachievable.

For this reason, the Australian Government must enact a dual policy of reducing the upfront disincentives of EVs, while also implementing a fairer, consumption-based charging mechanism for new EVs.

**A classic no regrets policy**

Implementing a direct user charge on EV is a no regrets policy. Under any EV projection scenario this policy remains robust. Indeed, even if EV uptake is lower than currently projected implementing such as charge will mean that our road charging system will be in no worse position than it is currently. However, if Australia misses this once in a generation opportunity, then the ability to reform our road transport system will be lost.

Moreover, the continued decline of Fuel Excise receipts will further erode the Australian Government's fiscal capacity, and in turn it's available funding envelope for transport and other policy priorities. For this reason, we recommend the Australian Government act swiftly to enact this simple, yet fairer and sustainable user charge mechanism.

Thank you for your consideration of this submission. Should you require further information please contact Mr Nick Hudson, Director of Economics and Policy, on (02) 9152 6018 or [nick.hudson@infrastructure.org.au](mailto:nick.hudson@infrastructure.org.au).





Yours sincerely,



ADRIAN DWYER  
Chief Executive Officer

