

Minister for Transport and Main Roads Minister for Digital Services

Our ref: PET 50496 Your ref: A1147853

19 September 2023

Mr Neil Laurie The Clerk of the Parliament Parliament House George Street BRISBANE QLD 4000 1 William Street Brisbane 4000 GPO Box 2644 Brisbane Queensland 4001 Australia Telephone +617 3719 7300 Email transportandmainroads@ministerial.qld.gov.au Website www.tmr.qld.gov.au

Dear Mr Laurie

I refer to petition 3911-23, lodged with the Legislative Assembly on 22 August 2023 about banning electric vehicles (EVs) until they are charged without the need of the electricity grid.

As petitioners might be aware, in March 2022, the *Queensland Zero Emission Vehicle Strategy 2022–2032* (ZEV Strategy) and *Action Plan 2022–2024* was released. The ZEV Strategy sets a vision for a cleaner, greener, integrated transport and energy network that encourages zero emission transport solutions. The Palaszczuk Government is investing \$55 million across ZEV purchase incentives, ZEV charging infrastructure and ZEV fleet support.

The Palaszczuk Government remains committed towards reducing emissions and protecting our environment. Increasing ZEV uptake will continue to play an important role in contributing to the Palaszczuk Government's target of net zero emissions by 2050, with an interim target of 30 per cent below 2005 levels by 2030. A greater uptake of ZEVs delivers improved environmental outcomes and supports industries to create more sustainable jobs. The ZEV Strategy considers the future of transport, our travel needs, how we use energy and ways to capitalise on new technologies that will become available to us over the next 10 years.

Consumer interest in replacing conventional internal combustion engine vehicles (ICEV) to EVs is increasing. There are multiple benefits from EVs, such as cheaper operational costs, easier maintenance, lower emissions and improved health outcomes. While driving, EVs produce zero exhaust emissions, emitting no harmful emissions. EV technology assists to reduce air and noise pollution, leading to improved public and environmental health and amenity.

Emissions relating to EV charging are attributed to the energy requirements of the battery use, typically measured in kilowatt hours (kWh), whereas comparable ICEV tail pipe emissions are attributed to the energy required for petrol, or diesel fuel burn. Electric motors are far more efficient than internal combustion engines, with the energy required to drive an EV being significantly less than that for an equivalent ICEV. Other modelling, such as the National Roads and Motorists Association modelling, does not align with the Australian Broadcasting Corporation's findings and instead provides countering data, which indicates that average new EVs emit almost half the average emissions of new ICEVs, even if charged via the grid.

EVs can also maximise their emissions reduction potential by charging from renewable energy sources, and Queensland is already a leader in rooftop solar with around 770,000 residential systems as at July 2023.

The energy used to charge EVs from the grid is continuing to become greener and more sustainable under the Queensland SuperGrid, as outlined in the *Queensland Energy and Jobs Plan* (QEJP). The SuperGrid covers all of the elements in the electricity system, including the poles, wires, solar, wind and storage that will provide Queenslanders with clean, reliable and affordable power for generations. The Queensland energy system is continuing to transform, with more renewable energy powering homes and businesses contributing to the Palaszczuk Government's renewable energy targets of 50 per cent by 2030, 70 per cent by 2032 and 80 per cent by 2035.

By 2035, Queensland will have an additional 22 gigawatts of renewable energy, which will mean we can power more of our households, businesses and industry with clean, low emissions power. EV owners will be able to make the most of this and charge their vehicles with low-cost renewable energy, lowering their emissions footprint. The QEJP commits \$42 million, including \$30 million to make government buildings ZEV ready and \$12 million towards public EV infrastructure charging trials supporting EV customers' ability to charge outside their home.

While Australia is highly reliant on imported liquid fossil fuels for most of its transport needs, Queensland is completely self-reliant in terms of electricity production. Through increasing the proportion of the transport sector, which is powered by electricity (including renewable energy), EVs will help reduce the Queensland economy's dependency on fossil fuels, while supporting the use of renewable and locally produced energy.

EVs can also present opportunities for the electricity grid, if households and businesses that have solar systems put their vehicles on charge during daytime hours, they can utilise their self-generated solar power without needing to draw from the grid, which can also save on energy costs. Overnight off-peak charging will increasingly use wind power as well as hydro and other forms of stored renewable energy. Further, most EV owners do not need to charge their vehicle every day as daily travel needs can often be met with only a few hours of charging or none at all, depending on EVs residual battery charge.

Noting the positive impact that EVs have on reducing emissions, the Palaszczuk Government will not ban EVs. The Palaszczuk Government is committed to delivering multiple initiatives to support the transport sector decarbonisation, with the inclusion of EVs within the transport network playing role.

I trust this information is of assistance.

Yours sincerely

MARK BAILEY MP

Minister for Transport and Main Roads

Minister for Digital Services