

Submission to the Queensland Government on the development of the New Zero Emissions Vehicle strategy.



The Electric Vehicle Council (EVC) is the peak body representing the electric vehicle industry in Australia. Our members include companies involved in providing, powering, and supporting electric vehicles.

We welcome the opportunity to make this submission to the Queensland Government on the Development of the New Zero Emissions Vehicle (ZEV) Strategy.

The need for stronger electric vehicle policy in Queensland

Once sold; vehicles stay on the road for an average of 15-17 years. Consequently, in order for Queensland to meet its net-zero by 2050 emissions target policy must accelerate uptake immediately.

Given that many other sectors (agriculture, aviation, mining, shipping) will be relying on offsets to meet net-zero by 2050 commitments, attention should be paid to zero emissions transport technology, as it is available now, and essential to the success of the Queensland Government's climate change transition strategy: Pathways to a clean growth economy.

Particularly where:

- Transport is the second largest contributor of emissions to Queensland – accounting for 22% in 2016¹ (the latest available data).
- Queensland has emissions reduction targets of 30% by 2030 (on 2005 levels) and 100% by 2050.

¹ Queensland Government (2016) State of the Environment – Transport Sector and Greenhouse gas emissions

Under existing market conditions, Bloomberg projects that electric vehicle market share will only account for 18% of sales by 2030 and up to 64% by 2040.²

Therefore, in order to reach its own targets, the Queensland Government must put in place actions to accelerate uptake **five times beyond** where the market is currently headed.

The lack of formative electric vehicle policy in Australia continues to have a devastating impact on electric vehicle uptake. This is despite that fuel efficiency standards and financial incentives are recognised as the most effective means to encourage uptake of electric vehicle uptake.¹⁰ In fact, no successful electric vehicle market exists globally without having provided financial incentives to lower the upfront cost for consumers.

Electric vehicles bring a variety of benefits to the markets that encourage them:

- Environmental: carbon emission reductions will reduce the impacts of climate change and the associated extreme weather events and biodiversity devastation.
- Health: Research by the Electric Vehicle Council and Asthma Australia has found that in NSW, 60% more people die from vehicle emissions than car crashes.³ Additionally, that each electric vehicle on NSW roads will save \$2,400 in health costs. Moving to zero emissions vehicles will improve air quality, saves lives, and put money back into the health sector.
- Economic: electric vehicles powered by renewable energy will create new jobs and industries to support Queenslanders in regional and metro areas. Individuals and companies will save money from reduced fuel and maintenance costs and from more efficient vehicles

Queensland is well placed to benefit from an accelerated approach to electric vehicle transition.

² Bloomberg (2021) Even Tesla can't overcome Australian hostility to electric cars
<https://www.bloomberg.com/news/articles/2021-04-12/even-tesla-can-t-overcome-australian-hostility-to-electric-cars>

³ In 2017, 649 people died from vehicle emissions deaths compared to 389 crash deaths.

An integrated approach will see Queensland capitalise on its renewable energy generation, low carbon industries, critical minerals supply, skilled workforce, research industry and innovative manufacturing sector.

The consequences of not acting now will see Queensland risk jobs, tourism, property, environment, community, and future generations.

Global electric vehicle policy

Globally, to demonstrate commitment to electrification with strong electric vehicle policy, that includes plans to phase out petrol and diesel vehicle sales. National and sub-national jurisdictions with plans to ban internal combustion engine vehicle sales include:⁴

- **By 2030:** Barcelona, Cape Town, Denmark, Iceland, Ireland, Israel, London, the Netherlands, Slovenia, Sweden, the United Kingdom and Vancouver.
- **By 2035:** Japan, California,
- **By 2040:** France, Sri Lanka, and Singapore.

In addition, vehicle manufacturers are investing billions towards electrification via new product lines, and setting targets:

Recent commitments include:⁵

- Audi commits \$15.4 billion to electrification with 20 electric vehicles by 2025
- BMW plans over 7 million electric vehicles globally by 2030
- Daimler announces \$85 billion investment in electric vehicle
- Ford commits to 100% all-electric passenger vehicle range in Europe by 2030
- General Motors commits to all electric by 2035
- Hyundai plans 23 electric cars by 2025
- Jaguar Land Rover commits to all electric by 2025
- Nissan plans to electrify all new models in Japan, China, the US, and Europe from the early 2030s.

⁴ This is not an exhaustive list

⁵ Additional commitments can be found in: EVC (2020) State of Electric Vehicles 2020 appendix.

- Renault announces 24 new models by 2025
- Volkswagen invests \$142 billion in electrification over the next 5 years

Projected uptake of electric vehicles in Australia

In a report commissioned by Commonwealth Government agencies the ARENA and the CEFC, Energeia demonstrates the impact of a business-as-usual approach to electric vehicles in Australia, compared to uptake as a result of policy actions in various scenarios.⁹

It finds that Australia’s electric vehicle market stagnates over seven to nine years, compared to global markets, due to policy inaction.

Since this study was published, other markets have increased their policy support for electric vehicles, resulting in further lost investment for Australia.

We are currently falling short of the low / business as usual projections.

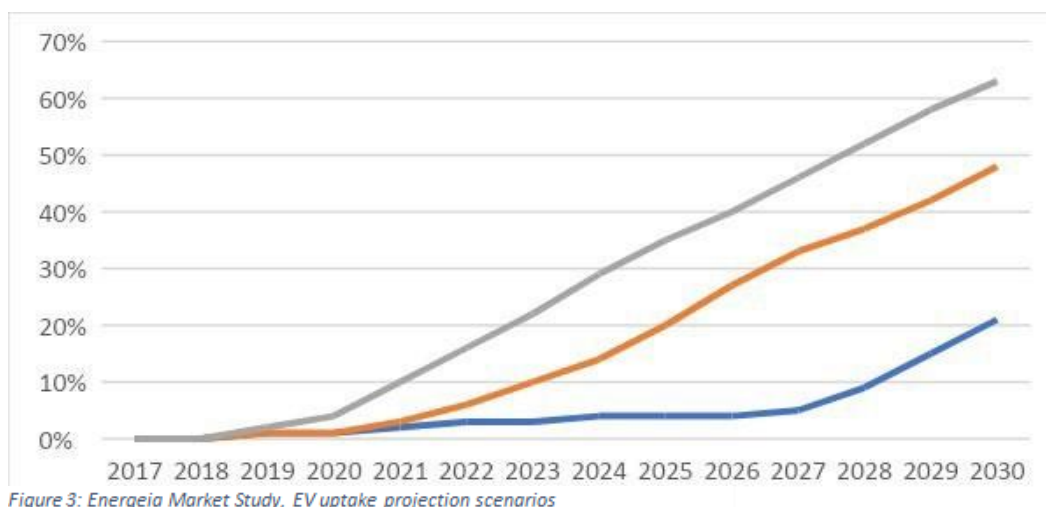


Figure 3: Energeia Market Study, EV uptake projection scenarios

Despite this, the Federal Government recently updated their 2020 emissions projections report - increasing its forecast to 26% electric vehicle penetration by 2030⁶ - while failing to present any argument as to how that will be achieved.

⁶ Australia Government (2020) Australia’s emissions projections 2020 <https://www.industry.gov.au/data-and-publications/australias-emissions-projections-2020>

The Federal Government's emissions modelling also did not consider the new state taxes, which studies indicate could decrease electric vehicle uptake by between 25 and 38 per cent.⁷

How does policy affect the automotive sector?

The automotive sector has repeatedly stated that model availability in Australia is restricted due to the absence of government regulations and supportive policies:

- **Nissan Australia - Chief Executive, Stephen Lester**, said a lack of leadership in embracing electrified cars was out of step with the world's leading economies and there was no reason the nation could not be a global leader in the uptake of the technology- "The manufacturers play a key role in bringing choice and availability to the market. The private sector can support the build-up of infrastructure and services. And we need the government as another arm of support by giving direction and confidence to consumers."⁸
- **Volkswagen Australia - Managing Director, Michael Bartsch** says he "cannot convince his German head office to supply Australians with the company's top-selling mid-range electronic vehicles because of "embarrassing" local laws." Additionally, that a lack of carbon standards means that the VW board will not allocate electric vehicles to the Australian market.⁹
- **SAIC, China's biggest car maker**, has criticised Australia's "unique" lack of policy incentives for the electric car industry, saying the policy black hole is preventing a healthy market for environmentally friendly vehicles from developing.¹⁰

⁷ Australian Financial Review (2021) Electric vehicle targets likely to fail
<https://www.afr.com/companies/transport/electric-vehicle-targets-likely-to-fail-20210221-p56p85>

⁸ SMH (2021) Maker of world's most popular electric car blasts Australia's lack of ambition
<https://www.smh.com.au/politics/federal/maker-of-world-s-most-popular-electric-car-blasts-australia-s-lack-of-ambition-20210302-p5772f.html>

⁹ SMH (2021) VW boss says 'embarrassing' rules stop cheap electric car imports:
<https://www.smh.com.au/business/consumer-affairs/vw-boss-says-embarrassing-rules-stop-cheap-electric-car-imports-20210322-p57d85.html>

¹⁰ Australian Financial Review (2019) Chinese car giant slams electric car black hole
<https://www.afr.com/companies/manufacturing/chinese-car-giant-slams-electric-car-black-hole-20191115-p53awi>

- **Toyota Motor Corporation Australia** has commented on its delays bringing lower priced electric vehicles to the Australian market, “I don't think it's people-readiness, I think it gets down the infrastructure, and I also think it gets down to affordability, and that's really critical here.”¹¹
- **BMW Australia** “This is the technology that all major manufacturers have subscribed to, that the majority have invested in, planned for, committed to and embraced — except Australia.”¹²
- **Kia Motor Company**, has explained its indefinite delay in bringing the award-winning e-Niro to Australia, “KMC policy is e-Niro goes to countries that have CO2 regulations and have legislation in place, that's the issue with us in relation to getting e-Niro.”¹³

What does this mean for price parity?

The confidence that electric vehicle uptake in Australia will increase exponentially to 2025 and beyond, regardless of policy support and/or new charges, is unjustified.

This is demonstrated today, where lower priced electric vehicle models are not bought to Australia, due to investor uncertainty for demand.

In the United Kingdom, for example there are:

- 8 models cheaper than Australia's cheapest EV at \$44,991.
- 29 models that are cheaper than \$60,000 – in Australia there are only four.
- A total of 43 EVs under \$100,000 compared to Australia's nine.

Without the introduction of supportive policies, the rest of the world will enjoy increasingly more affordable and accessible electric vehicles, while Australians miss out and transport emissions continue to rise.

¹¹ Car advice (2019) Toyota Australia looks to roll out EVs from around 2025

<https://www.caradvice.com.au/802835/toyota-australia-electric-vehicle/>

¹² Drive (2017) BMW slams Government over “inaction” for electric cars <https://www.motoring.com.au/bmw-calls-for-government-co2-action--again-107537/>

¹³ Cars Guide (2019) Kia Australia's EV plans delayed <https://www.carsguide.com.au/car-news/kia-australias-ev-plans-delayed-76580>

The increased model availability and declining prices forecast for electric vehicles and associated technologies will not be mirrored in Australia without the correct policy settings.

What does good electric vehicle policy look like?

A targeted electric vehicle strategy will accelerate the uptake of electric vehicles in Australia.

Successful electric vehicle policy includes a mix of financial, regulatory, and infrastructure actions to target the barriers associated with road transport electrification.

1. Financial policies:

Financial policies are those that help with the cost of buying, owning, or manufacturing an electric vehicle.

Financial incentives are considered the most effective policy drivers in accelerating electric vehicle uptake, with incentives that reduce the upfront sticker price of buying an electric vehicle having the most impact.

Financial incentives include tax credits/exemptions, rebate schemes, registration discounts/exemptions, stamp duty discounts/exemptions, interest free loans, fleet acquisition incentives, financing programs for fleets, manufacturing incentives, tax exemptions, and toll road exemptions.

2. Regulatory policies:

Regulatory policies are those which require stakeholders to commit to electrification and/or signal to industry and investors government's commitment to electrification.

Regulatory policies include zero emission vehicle mandates, fuel efficiency standards, phase out dates for internal combustion engine vehicles, sales/fleet targets, government fleet targets, greenhouse gas emissions targets, consumer awareness campaigns, electric vehicle ready building regulation, public transport electrification targets, energy efficiency laws, 'green' license plates for ZEV drive zones, and free access to bus lanes.

3. Infrastructure policies:

Infrastructure policies include those that help with the deployment of charging infrastructure. They are an important policy driver to alleviate range anxiety of consumers, assist the private sector with investment, support renters and apartment dwellers, and familiarise the community with charging technology.

Infrastructure policies include investment in charging infrastructure, co-financed charging stations, grants for private sector investment, infrastructure deployment targets, interoperability standards development, electric vehicle ready provisions, and incentives for building and depot electricity upgrades.

The following table provides a breakdown of the policies that Queensland Government should include in their zero emissions vehicles strategy.

Policy	Explainer	EVC recommendation
<p>EV purchase incentive/ EV tax incentive (registration/motor [stamp] duty)</p>	<p>Providing a financial incentive for the purchase of an electric vehicle helps address the higher upfront cost of an electric vehicle and helps stimulate market development.</p> <p>By providing a financial incentive, governments signal to automakers, energy companies, and infrastructure providers that they are committed to electrification. This confidence results in increased model availability, investment in public charging infrastructure, and time to prepare the electricity grid.</p> <p>A tax incentive is a form of financial incentive that provides a discount to electric vehicle consumers through existing tax/government revenue stream, such as registration costs and stamp duty.</p> <p>A tax incentive sends a signal to the electric vehicle industry that the Australian market is ready because government is guaranteeing demand.</p>	<p>The Electric Vehicle Council advocates for an upfront purchase incentive that is in line with other G7 EV purchase incentives. The Electric Vehicle Council recommends an incentive of between \$5,000 and \$10,000.</p> <p>The Queensland Government should consider the recent NSW program of \$3000 for 25,000 vehicles and stamp duty exemptions for electric vehicles (approx. \$2,000 depending on vehicle price) as the baseline for financial incentives in Australia.</p> <p>Targeted tax incentives include electric vehicle exemptions to the Fringe Benefits Tax, Luxury Car Tax and State charges such as Stamp Duty and Registration.</p>
<p>EV sales or uptake target</p>	<p>Electric vehicle sales targets or uptake targets demonstrate commitment to vehicle manufacturers that the Government supports the technology and is preparing for it. By signaling Australia will no longer accept internal combustion engine vehicles by a certain year, vehicle manufacturers will allocate</p>	<p>The Electric Vehicle Council recommends a sales target of 100% of sales by 2030, or 2035 at the latest.</p>

	<p>electric vehicles to our market, in greater numbers, over markets that do not have targets.</p> <p>Counting back from 2050, with the average car staying on the road for 15 years, this means all new sales must be zero emissions by no later than 2035.</p>	
Government fleet target	<p>Government fleet targets demonstrate commitment to the EV industry that it is serious about electrification, resulting in more model availability. Government fleet targets will additionally provide equity of access to the technology, as they feed the second-hand market.</p>	<p>The Electric Vehicle Council advocates for government fleet targets of 100% by 2030.</p> <p>Milestone targets are an important to ensure pathways to achieving 100%, such as 50% by 2025 and 75% by 2028.</p>
Investment in public EV charging networks	<p>The availability and visibility of public electric vehicle charging infrastructure is necessary to alleviate range anxiety and provide confidence to consumers that they can recharge their vehicles as needed.</p> <p>Government investment is needed to:</p> <ul style="list-style-type: none"> • Stimulate investment in public fast-charging infrastructure to create electric vehicle highways • Deliver charging accessibility to electric vehicle drivers that do not own property or have off street parking • Provide investor confidence in the charging industry • Allow the energy sector to plan <p>Create visibility to alleviate range anxiety and increase consumer confidence.</p>	<p>The Electric Vehicle Council commends the Queensland Government for being the first state to invest in a fast-charging public network. This has paved the way for other states to follow.</p> <p>However, charging infrastructure investment must be complementary to financial incentives for electric vehicle uptake. A lack of complementary policy to drive uptake will result in an oversupply of public chargers and a lack of electric vehicles to utilise them.</p> <p>The Electric Vehicle Council recommends further investment in public charging infrastructure, through co investment or grant</p>

		programs. The infrastructure investment is in addition to financial incentives.
Fuel Efficiency standards	<p>Fuel efficiency standards measure the efficiency of fuel consumption (g) over a distance (km). International jurisdictions have introduced fuel efficiency standards to regulate the average emissions intensity of vehicles sold by a vehicle manufacturer.</p> <p>New standards in Europe in 2020/2021 regulate that the average for new passenger vehicles is 105g/km. In Australia in 2018, the average emissions intensity for passenger vehicles was 169.8g/km.</p> <p>By regulating fuel efficiency standards, OEMs must bring more electric vehicle models to market to avoid financial penalties for not meeting emissions regulations.</p>	<p>The Electric Vehicle Council advocates for the introduction of fuel efficiency standards, in line with other leading electric vehicle markets.</p> <p>These standards should be complemented by electric vehicle purchase incentives and ‘super credits’ to ensure they encourage the introduction of more electric vehicles, increasing choice for Australian consumers.</p> <p>The Queensland Government should advocate to the Federal Government to implement fuel efficiency standards. Where that fails, it should consider introducing them independently for the state.</p>
Heavy vehicles - buses	<p>In Australia, there are currently over 100,000 buses. Therefore, to reach net-zero by 2050, electrification needs to occur across the entire transport sector – including public transport, tourism operators and other bus fleets.</p> <p>Policies to encourage bus operators to make the switch to electric are two-fold:</p> <ol style="list-style-type: none"> 1. To increase model availability of buses 2. To reduce the purchase cost of buses 	<p>The Electric Vehicle Council recommends a 100% electric bus fleet target by 2030.</p>

	3. To support charging infrastructure	
EV readiness building requirements	<p>The prominence of public charging infrastructure is necessary to relieve range anxiety. Similarly, the availability of charging infrastructure in apartments and commercial buildings will provide visibility of charging infrastructure for potential consumers.</p> <p>When a building is being developed, the installation of cabling and distribution board to allow for the future installation of charging infrastructure is relatively cheap. However, the retrofit of charging infrastructure can be costly.</p> <p>Therefore, 'EV ready' building codes require developers to install the necessary infrastructure at the time of build, to avoid the need for costly retrofits in the future.</p>	<p>The Electric Vehicle Council recommends regulatory revisions to include electric vehicle ready updates in new and existing building developments.</p> <p>The Electric Vehicle Council supports the 2022 update to the National Construction Code.</p>
Consumer awareness initiatives	<p>A lack of understanding and misinformation about electric vehicles can stifle uptake, where consumers do not have the correct information to make informed purchase decisions.</p> <p>Public awareness campaigns are an important tool to accelerate uptake, as consumers learn about how to charge an electric vehicle, where to charge an electric vehicle, the range of an electric vehicle and other common questions.</p>	<p>The Electric Vehicle Council recommends consumer information campaigns that dispel misinformation, raises awareness on the benefits of electric vehicles, and educates consumers on the practicalities of owning an electric vehicle.</p> <p>Public awareness campaigns must be coupled with financial incentives to help consumers with the affordability of purchasing an electric vehicle.</p>

	<p>Additionally, campaigns should raise awareness of the health, societal, environmental, and economic benefits, so that consumers can make informed choices about their next vehicle purchase.</p>	
<p>EV industry development plan and incentives for EV industry</p>	<p>Australia has a unique position to benefit from the uptake of electric vehicles – our skilled workforce, natural resources, manufacturing experience and research facilities mean we are positioned to become a global leader in the electric vehicle supply chain and lithium-ion battery circular economy. The attraction of both foreign and domestic investment will provide job security and economic growth for decades to come.</p>	<p>The Electric Vehicle Council recommends grants and incentives to unlock opportunities in domestic electric vehicle manufacturing industries.</p> <p>Targeted policy, such as grants to support research and development, go-to-market programs, and funding for manufacturing facilities, should be implemented to stimulate investment.</p>
<p>Road User Charges</p>	<p>The Electric Vehicle Council does not oppose the need to reform the road taxation system. However, the Electric Vehicle Council opposes the implementation of a tax that will stifle adoption of electric vehicles in an emerging market and create a net financial disincentive to electric vehicle uptake.</p>	<p>The Electric Vehicle Council recommends that a road user charge is delayed until greater uptake of electric vehicles is reached.</p>
<p>Standards</p>	<p>Early intervention by governments in standards development has the potential to setback the domestic electric vehicle industry.</p> <p>There is a genuine risk of stifling innovation, uptake, and industry growth with premature standards, as foreign manufacturers will not make specific products for Australia-only.</p>	<p>The Electric Vehicle Council recommends an industry-led approach to electric vehicle standards. There is no need for governments to be developing standards at this time.</p>

<p>Support for fleets</p>	<p>Fleets in Australia make up 52% of new vehicles sales annually. They feed the second-hand market, purchase new vehicle models, and measure vehicle efficiency over total cost of ownership.</p> <p>They are important to electric vehicle policy as they feed the second-hand market, familiarise drivers with electric vehicles, and reduce emissions for organisations and governments.</p> <p>However, fleets face their own challenges. The higher up-front purchase price of electric vehicles means they may not fit into fleet budgets, charging infrastructure installation adds to total cost-of-ownership, and understanding of electric vehicles for fleet managers is limited.</p>	<p>The Electric Vehicle Council recommends specific fleet programs that provide grant funding and education to encourage fleets to procure electric vehicles.</p>
<p>Skills development</p>	<p>In order to support the growth of jobs in the electric vehicle industry, training courses must be developed so that future generations are prepared for the skills required. Training will also provide job security to the current workforce, who will be able to access upskilling opportunities.</p>	<p>The Electric Vehicle Council recommends consulting with the electric vehicle industry to determine what skills gaps currently exist and what skills may be required in the future skills market.</p>
<p>Electricity generation and grid impacts</p>	<p>Electric vehicles represent a significant area of electricity demand growth, and the flexible nature of this load, as well as developing V2G capability, means that electric vehicles provide significant opportunities to increase network utilisation, be a provider of ancillary services, and ultimately lower energy costs amongst other benefits to the electricity system.</p>	<p>The Electric Vehicle Council recommends that the Queensland Government works with networks, the electric vehicle industry, and electric vehicle charging providers to understand the impact of electric vehicle uptake, how electric vehicles fit into the broader energy ecosystem, the need for tariff reform, and the opportunities electric vehicles can bring to the grid.</p>

	<p>However, these opportunities could be wasted and instead represent only costly challenges if we fail to manage this load or stifle electric vehicle uptake by implementing onerous regulations, neglecting to allow innovative solutions, and failing to bring along consumers.</p>	
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The Electric Vehicle Council encourages the Queensland Government to engage with the electric vehicle industry regularly during the development of the new zero emissions strategy. The Electric Vehicle Council is ready to work with the Queensland Government to accelerate the uptake of electric vehicles