



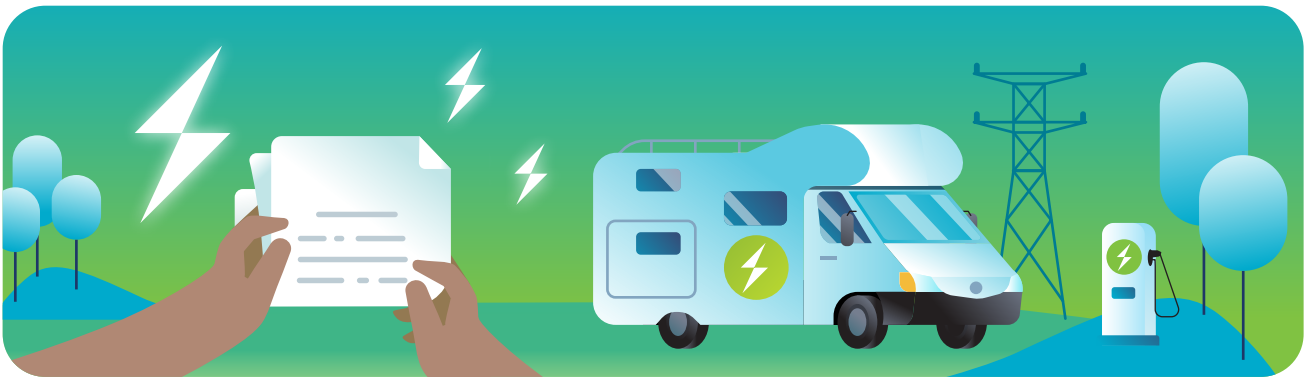
State of Electric Vehicles

JULY 2023



Contents

Introduction	3
Our Team at the EV Council	6
2023 Highlights	7
Electric car sales	8
Australia's electric car fleet	10
Top-selling electric car models	11
Electric car sales across Australian States and Territories	12
Electric Vehicle Model Availability	14
Electric cars, vans and utes (light vehicles)	15
Electric trucks	16
Electric buses	16
Electric motorcycles and scooters	16
Charging Infrastructure	17
Energy policy related to Electric Vehicles	21
Public high power EV charger availability	21
Accelerating the deployment of high-power fast charging sites	21
Destination charging	24
Smart Charging	24
Regulations	25
Apartment complexes	26
On the horizon – V2G!	27
Electric Vehicle Policy	28
Priority Area – A Comprehensive Strategy for Heavy Vehicle Electrification within the National EV Strategy Framework	29
A globally competitive New Vehicle Efficiency Standard	30
Light EV Incentives Across Australia	33
Electric Vehicle Policy Scorecard	36
Local Government	52
Appendix A – Explanation of Policy Assessment Metrics	55
Appendix B – Electric Vehicle Sales	62
Appendix C – Electric Vehicle Model Availability	63
Electric cars available to order	63
Electric cars expected to be available in Australia in the future	68
Electric utes and vans (available today and coming soon)	69
Electric trucks	70
Electric buses	71
Electric two and three-wheelers	72



Introduction

Over the past 12 months interest in electric vehicles has significantly expanded. While Australia still has some way to go in ensuring local EV adoption aligns with our emission reduction targets, at least in the light vehicle market we are seeing early, positive signs that demand is trending in the right direction.

8.4 % of all new cars sold in 2023 so far have been EVs. This is more than a 120% increase compared to all of 2022. While this trend is encouraging, it is important to note that the vast majority of EV sales is made up of only 3 models (Tesla Model Y, Tesla Model 3, BYD Atto 3), representing over 68% of the EV market.

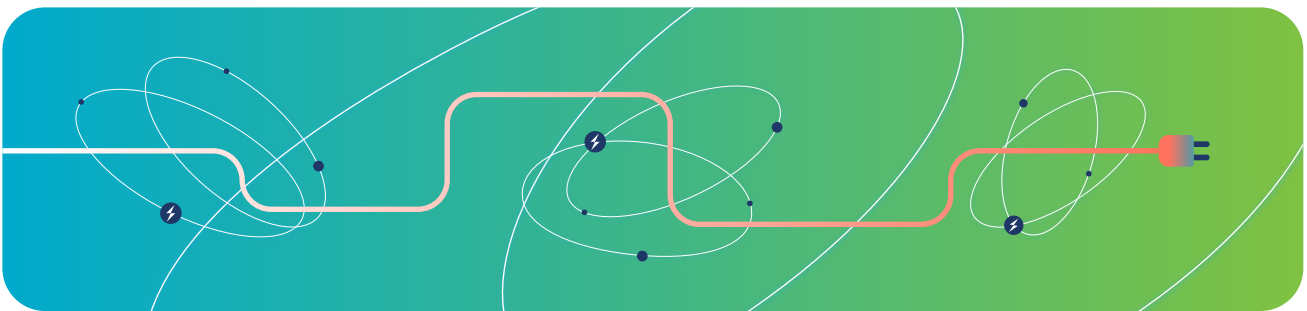
While there are now 91 electric car, van and ute models available in Australia, most of these are only being supplied in small volumes. This is a consequence of Australia not having a New Vehicle Efficiency Standard to ensure car manufacturers increase the supply of EVs to our country. The Electric Vehicle Council prepared a detailed submission to the Australian Government's consultation on the design of a standard specifically for Australia¹.



¹ <https://electricvehiclecouncil.com.au/submissions/evc-submission-to-fuel-efficiency-standard-cleaner-cheaper-to-run-cars-for-australia/>

The EVC continues to call on the government to ensure a globally-competitive New Vehicle Efficiency Standard is introduced to parliament before the end of this year, and started as soon as possible. This is not only necessary for supporting our nation's emission reduction targets, but important for securing a wide range of affordable EVs, of all shapes and sizes, to enable Australian households and businesses to slash their fuel bills.

Although Australia has a lot of work to do to catch up with leading EV countries, every state, territory, and the federal government is now actively supporting the uptake of zero-emission technology. Early 2023 also saw the Australian Government release its first national EV strategy, which is a step in the right direction – but more needs to be done.



Unfortunately, the local adoption of heavy EVs, including buses and trucks, is still lagging – in large part due to a lack of regulatory reform by government to enable uptake. While there is strong interest from industry to make the switch to electric heavy vehicles, this transition is being held back by a lack of suitable vehicles. This is a result of Australian governments imposing restrictive vehicle mass and width requirements that increase costs and limit the range of electric buses and trucks that can be sold in Australia. Without immediate action, the decarbonisation of Australia's 800,000 buses and trucks will continue to be delayed, leaving consumers paying more for goods, and communities breathing in more vehicle pollution.

Importantly, Australia also needs to realise the long-term opportunities presented by the transition to EVs and support the creation of thousands of jobs through development of Australian critical minerals, batteries, components, chargers, and vehicles of all shapes and sizes.

The Electric Vehicle Council's priority for 2023 continues to be the introduction of policies to increase the supply of both light and heavy EVs. This includes advocating for the introduction of an ambitious and globally-competitive New Vehicle Efficiency Standard that will support Australia in achieving its net-zero target by 2050 and encourage manufacturers to introduce more affordable EV models to the local market. It also includes advocating for the revision of mass and width restrictions for electric trucks and buses to enable and accelerate local adoption.

The 2023 State of EVs report provides our latest annual assessment of Australian federal, state and territory government's performance with respect to electric vehicle policy, combined with a mid-year local market update on light EV sales, model availability and charging infrastructure deployment.

This edition builds on our 2022 Australian Electric Vehicle Industry Recap, released in February 2023. Moving forward, we will continue to release full-year industry recaps in February each year, with our 2023 recap to be released in February 2024. The State of EVs report will continue to be published in July each year.

The Electric Vehicle Council looks forward to continuing to work with Australian governments, industry and consumers to champion Australia's transition to an electrified transport sector.



Our Team at the EV Council



Behyad Jafari
**Chief Executive
Officer**



Ross De Rango
**Head of Energy and
Infrastructure**



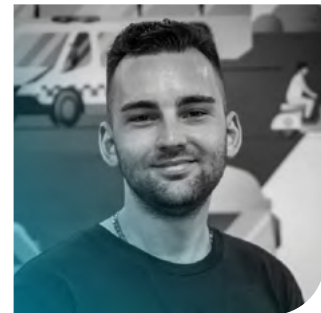
Jake Whitehead
Head of Policy



Natalie Thompson
**Senior Manager -
Policy**



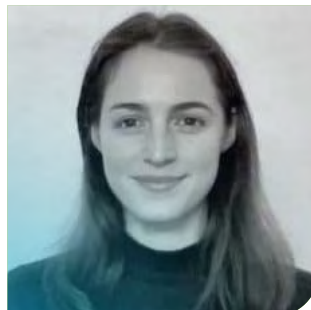
Umair Afzal
**Programs and
Insights Officer**



Bailey Sievwright
**Administrative &
Communications Officer**



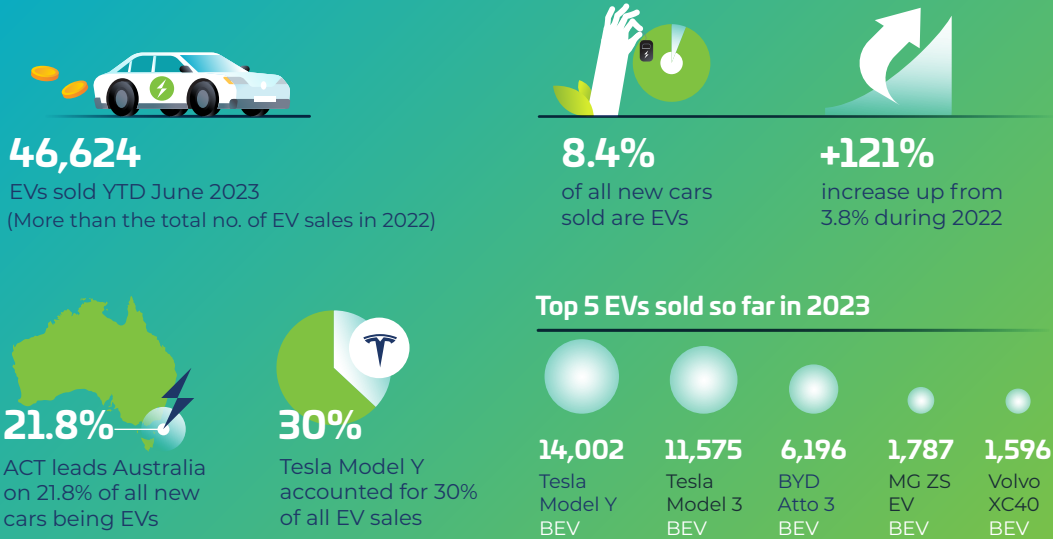
Adam Macmillan
Technical Officer



Annika Ernest
Policy Intern

2023 Highlights

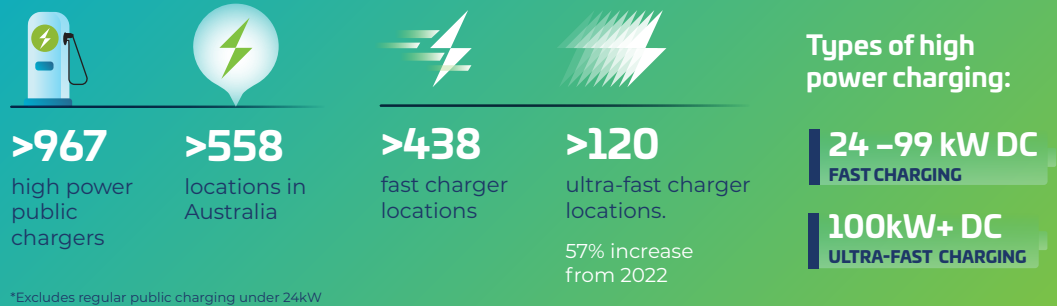
Sales Highlights



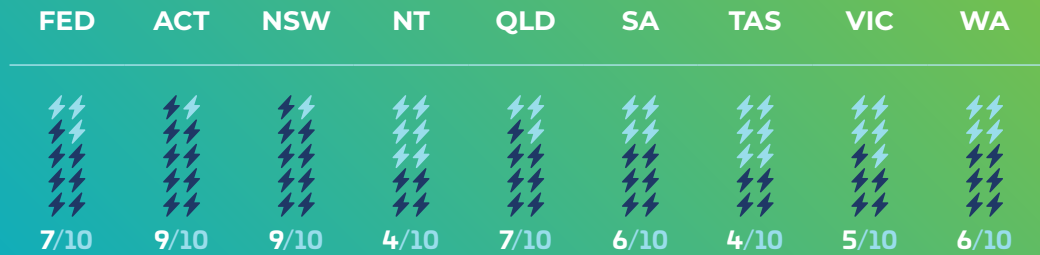
Model Availability Highlights

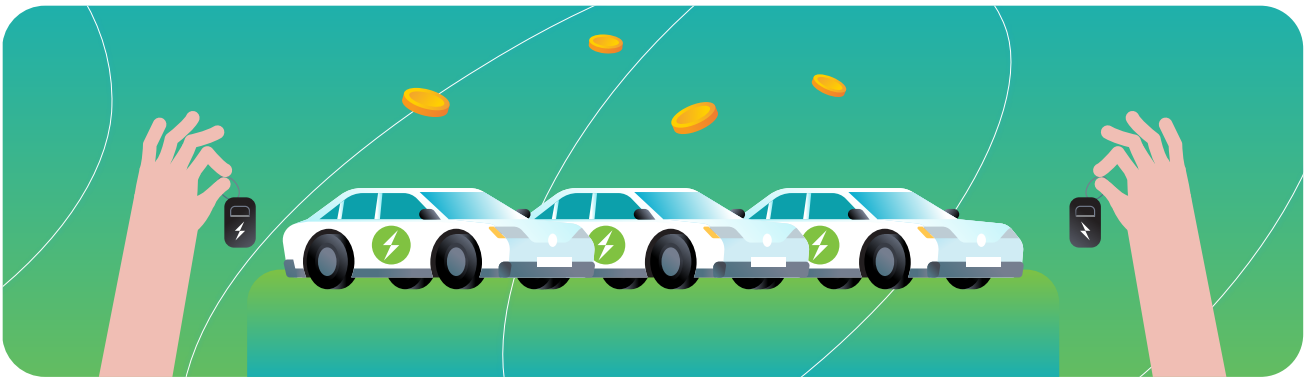


Charging Highlights



Electric Vehicle Policy Scorecard



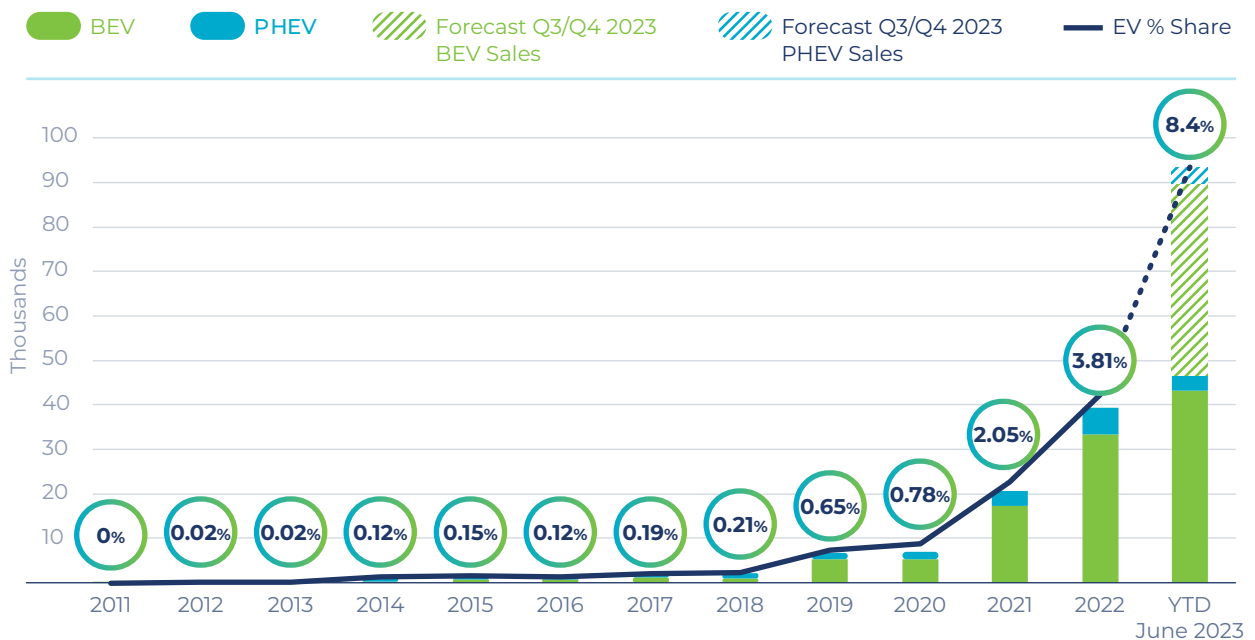


Electric car sales

Sales of electric cars in Australia have continued to increase, with the total volume of sales in the first half of 2023 so far beating the total for 2022. As of the end of June, 2023, 46,624 EVs had been sold in Australia – almost 3 times higher than the same period in 2022 (a 269% increase).

Taking the total number of new electric cars sold, EVs now represent 8.4% of all new cars sold in Australia. This is a 120.5% increase compared to all of 2022.

EV SALES IN AUSTRALIA: 2011-2023



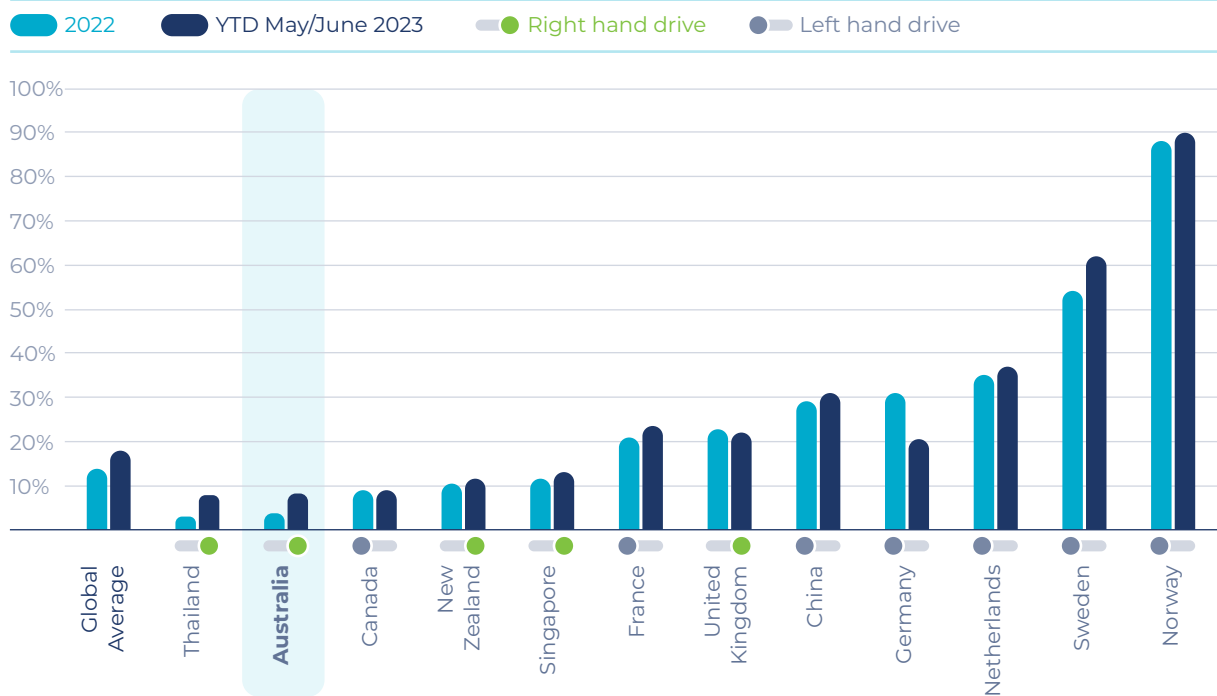
Sources: VFACTs, OEM-supplied data, government sources and EVC database.

While these most recent sales figures are encouraging, in order for Australia to achieve its climate targets, it is expected that more than 50% of all new cars sold in 2030 will need to be EVs. This means Australia will need to aim for around 1 million EVs on our roads by the end of 2027.

In order to achieve this, Australia needs to see a significant increase in the supply of EV models. This will only happen if the Australian Government implements an ambitious and globally-competitive New Vehicle Efficiency Standard that brings us into line with comparable overseas markets, like the US, EU and New Zealand.

From reviewing global EV adoption rates for 2022 we can see that Australia continues to lag the global average, and is significantly behind many EU markets, the UK and China. Even Thailand - another right hand drive vehicle market - is now seeing a rapid expansion in the adoption EVs thanks to supportive EV policy introduced by the Thai Government.

EV MARKET SHARE BY COUNTRY: YTD 2023 VS 2022



Only June 2023 data available for Australia, New Zealand, Norway. All other countries are YTD May 2023. Global average is based on IEA forecast for 2023.

Sources: International Energy Agency, New Zealand Ministry of Transport, China Association of Automobile Manufacturers, Thai Department of Land Transport, InsideEVs, Cleantechnica, EVVolumes, Electric Autonomy Canada, EV Database NZ, VFACTS.

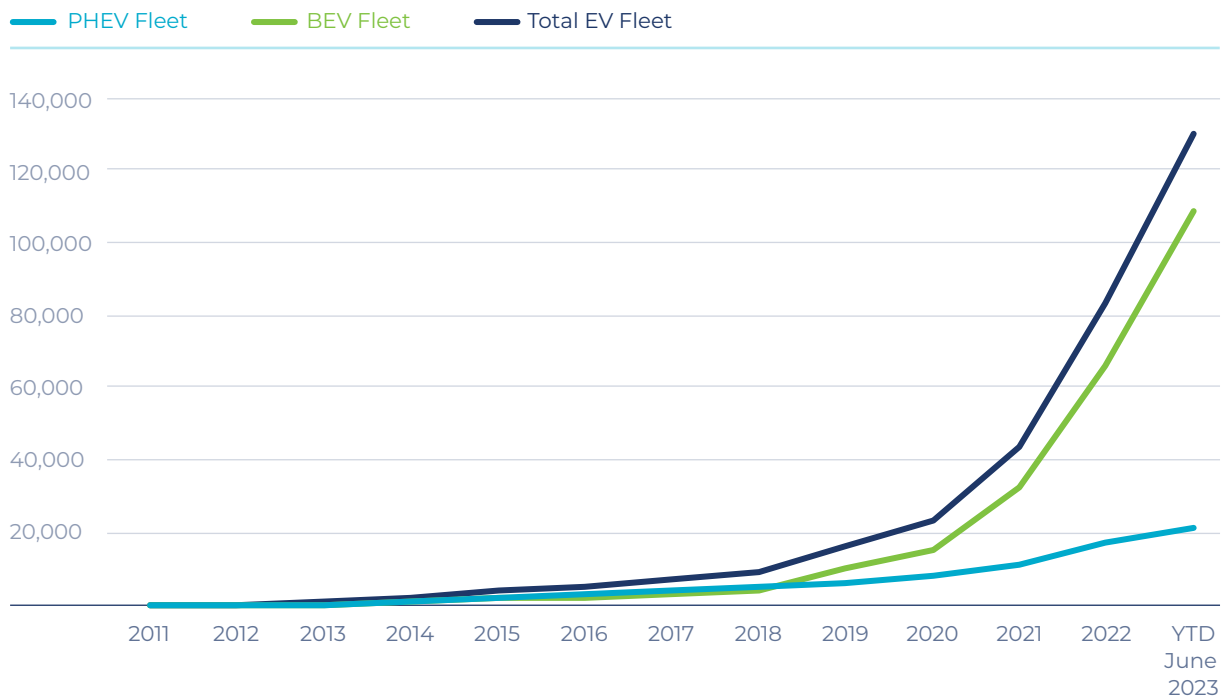
While not all countries have published YTD 2023 figures yet, from those that have, we can see that Australia's increase in EV sales is heading in the right direction, but again, we are still lagging many comparable countries.

Australia's electric car fleet



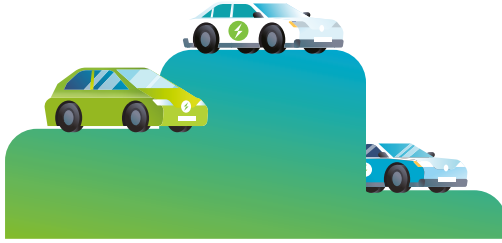
We estimated that there are now approximately 130,000 EVs on Australia's roads, made up of around 109,000 BEVs and 21,000 PHEVs. If EV sales continue at the same rate for the remainder of 2023, the fleet should reach close to 180,000 by year's end.

AUSTRALIA'S GROWING ELECTRIC CAR FLEET



Sources: VFACTs, OEM-supplied data, government sources and EVC database.

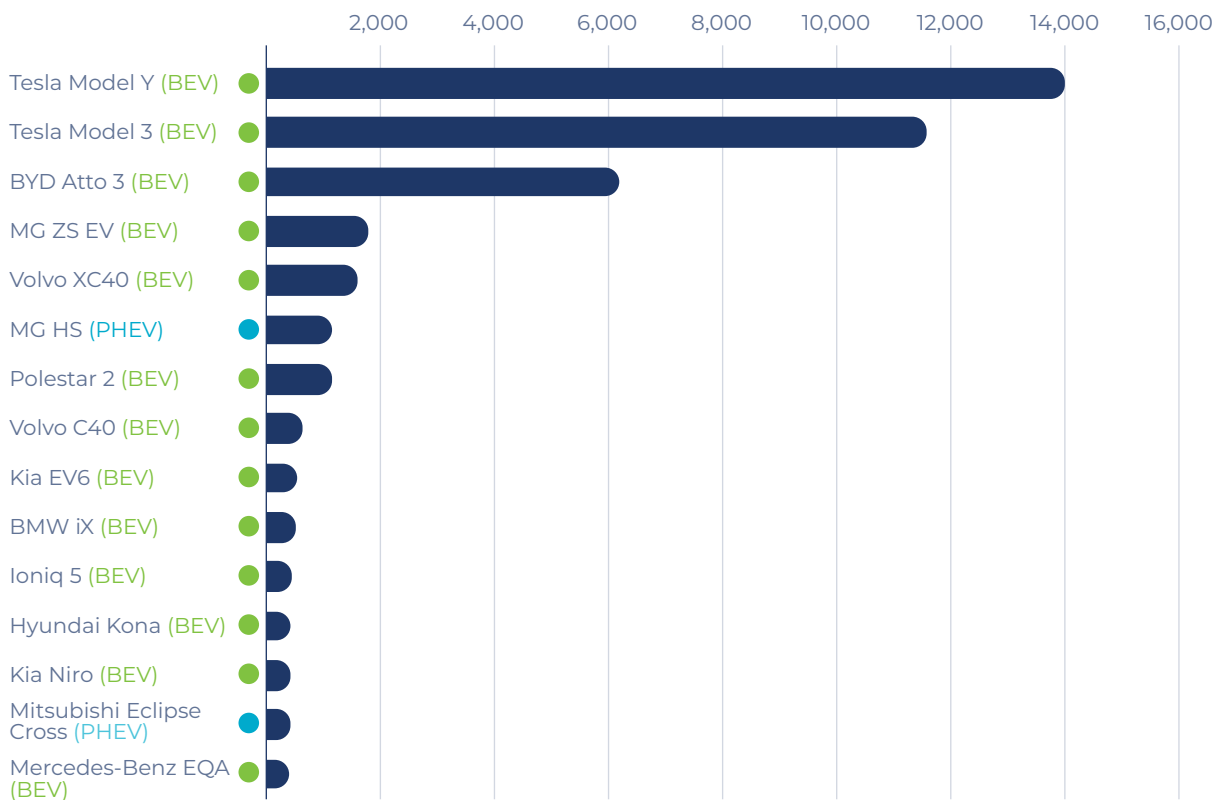
Top-selling electric car models



Australia EV sales so far in 2023 have been dominated by 3 models, with the Tesla Model Y, Tesla Model 3, and BYD Atto 3, representing 68.1% of Australia's EV market.

The top 15 EV models sold in Australia so far in 2023 have been included below:

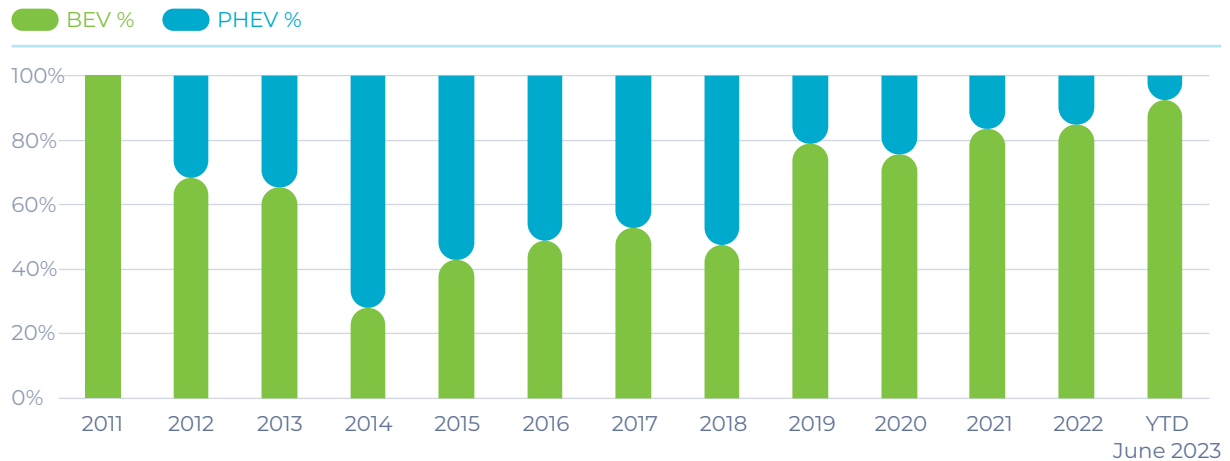
TOP 15 EV MODELS IN AUSTRALIA: YTD JUNE 2023



Source: VFACTs

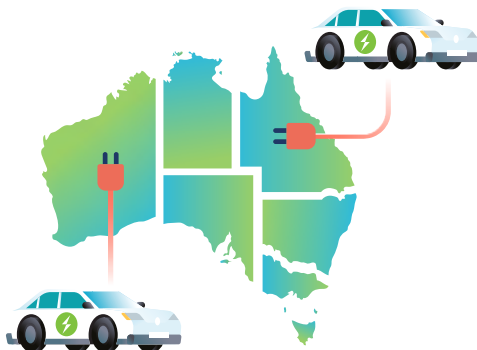
There has been a continuing shift towards consumers preferring battery-electric vehicles (BEVs), over plug-in hybrid electric vehicles (PHEVs). BEVs now represent over 90% of Australia's EV market.

BEV VS PHEV SPLIT



Sources: VFACTs, OEM-supplied data, government sources and EVC database.

Electric car sales across Australian States and Territories



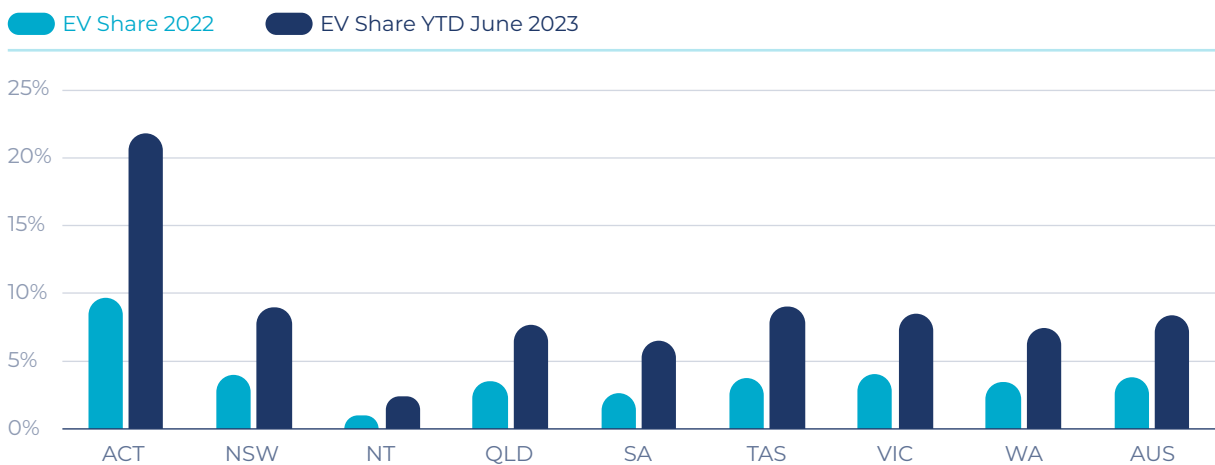
All state and territory governments have implemented a range of incentives to encourage the purchase of electric vehicles, including rebates to reduce the upfront purchase price, zero-interest loans, and discounts on stamp duty and registration fees.

In 2022, the Australian Government also introduced its fringe-benefit tax (FBT) exemption for EVs. This incentive benefits fleets and those consumers that can purchase an EV through salary sacrifice arrangements. The Australian Government also removed import duty for EVs made in countries without FTA agreements (namely EU and UK).

As shown on page 13, the ACT continues to lead the country on EV sales (as a proportion of new vehicle sales) at 21.8%, followed by Tasmania (9.0%), New South Wales (9.0%), Victoria (8.5%), Queensland (7.7%), Western Australia (7.5%), South Australia (6.5%), and the Northern Territory (2.4%).

Every state and territory has seen their share of EV sales more than double in 2023 so far, compared to all of 2022. The Northern Territory's EV market increased by 147%, followed by a 143% increase in South Australia and a 142% increase in Tasmania. In percentage terms, the ACT had the largest increase in market share by 12.2% in 2023 so far compared to 2022. This was followed by a 5.3% jump in Tasmania and a 5% jump in New South Wales.

NEW EV SALES SHARE BY STATE/TERRITORY: 2022 VS YTD JUNE 2023



Note: State/territory market share is an estimate based on total light vehicles sales after subtracting the estimated heavy vehicles sales in each jurisdiction.

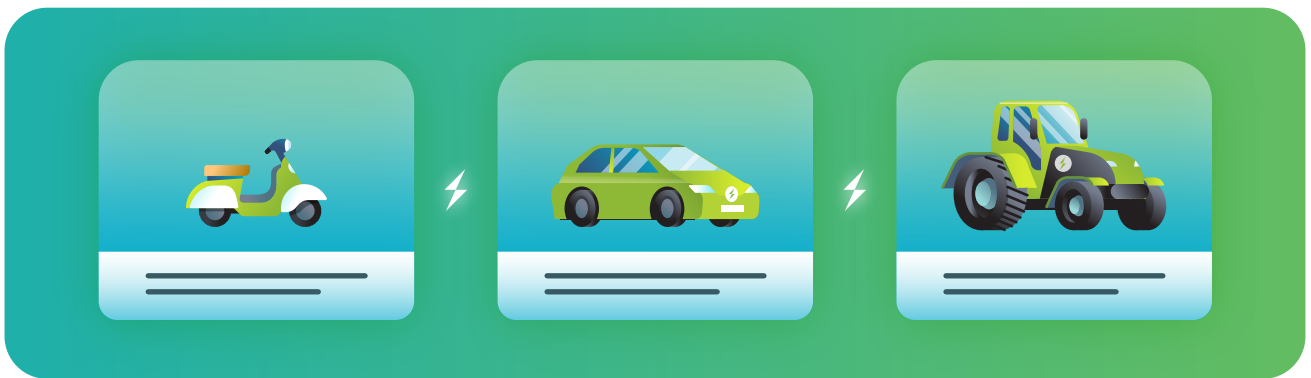
Source: VFACTs

Disappointingly, the Victorian Government has prematurely withdrawn its EV incentive, with minimal notice to consumers, no phase-out period, and no modelling to understand the impact of this decision.

While it is too early to estimate the impact of this negative decision by the Victorian Government, if Australia does introduce a globally-competitive New Vehicle Efficiency Standard, and as a result sees an increase in the supply of EVs, Victoria's approach will see it at the back of the queue for this supply. Ultimately this approach, in addition to already having the world's worst EV policy with respect to taxing EVs, risks jeopardising Victoria's ability to achieve its own emission reduction targets.

At the very least, the Electric Vehicle Council are calling on the Victorian Government to pause its EV tax to minimise the negative impact of this policy, combined with the premature withdrawal of the EV incentive, on Victorian consumers.



Please note that we continue to explore opportunities to include information on electric bus and truck sales in our future reports. If you would like to support the Electric Vehicle Council in obtaining relevant electric bus and electric truck data, please contact: office@evc.org.au.



Electric Vehicle Model Availability

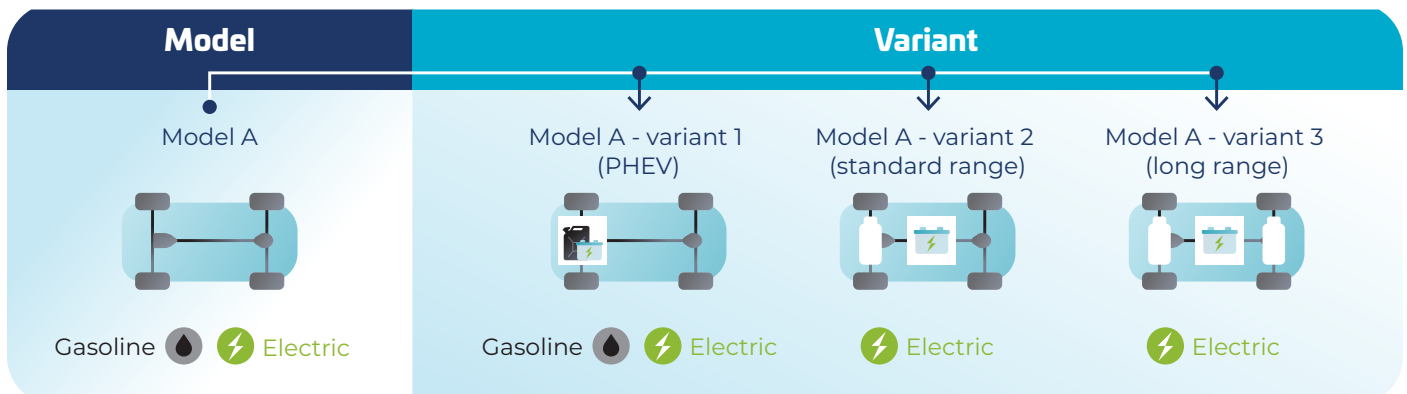
Global and local supply constraints continue to restrict availability of all types of EVs in Australia.

Australia lags behind similar right-hand drive markets like the United Kingdom in EV sales, with only around 8% of new light vehicles sold in Australia being EVs. The lack of an ambitious New Vehicle Efficiency Standard and nationally-consistent EV policy is a major contributing factor to the limited availability of EVs in Australia, which is hindering the transition to EVs.

 <p>BEV Battery electric vehicle A BEV is 100% powered by a battery 100% of the time.</p>	 <p>PHEV Plug-in hybrid electric vehicle A PHEV has two power trains – a battery and an internal combustion engine vehicle. The driver can choose to drive on the battery to a certain range or use the engine.</p>
--	--

An ambitious and globally-competitive New Vehicle Efficiency Standard will help to resolve the supply issue for light electric vehicles in coming years and increase model availability and supply of more affordable vehicles into the country.

Additionally, a strategic approach needs to be taken to reduce the regulatory barriers that are slowing the adoption of electric trucks, buses and other vehicles. Governments must move quicker to resolve these issues so that fleets can gain access to a greater range of EV options.



Please note that figures on model availability across vehicle segments are based on industry submissions and desktop research.



Electric cars, vans and utes (light vehicles)

The number of EVs available on the Australian market has continued to increase into 2023. There are now 74 electric car models, 7 electric ute models (including conversions) and 10 electric van models. This includes both BEVs and PHEVs.

In total, there are 91 light electric vehicle models now available in Australia, and 148 variants of these models. This is a 56% increase in variants compared to 2022.

While it is encouraging to see the number of models continue to increase, it should be noted that many of these models are only supplied in low volumes – in large part due to the lack of a New Vehicle Efficiency Standard in Australia. This issue can be resolved in the near future, if the Australian Government introduces this standard to parliament before the end of 2023.



Electric trucks

There are approximately 12 different electric trucks currently available on the Australian market. Unfortunately, we have been unable to report sales figures for these vehicles due to unavailability of data. What we do know is that there is considerable interest from fleets in this technology due to the significant potential to reduce the total cost of ownership of heavy vehicle operations, as well as reduce emissions.

Unfortunately, the Australian electric truck market is being held back by a lack of action by the Australian Government in expediting the relaxation of mass and width limit restrictions on these vehicles. Without these changes, supply of this important technology to Australia will continue to be constrained.

State and Territory Governments also have a key role to play in advocating for the acceleration of the regulatory reforms required to support electric truck adoption, as well as to enable permitting of these vehicles for use on their roads.



Electric buses

There are approximately 22 electric buses available on the Australian market. With state and territory governments accelerating efforts to electrify Australia's public transport systems, we can expect the bus vehicle segment to continue steady year on year growth. Similar to trucks, supply of electric buses will remain constrained until regulatory barriers related to vehicle width and mass are resolved.



Electric motorcycles and scooters

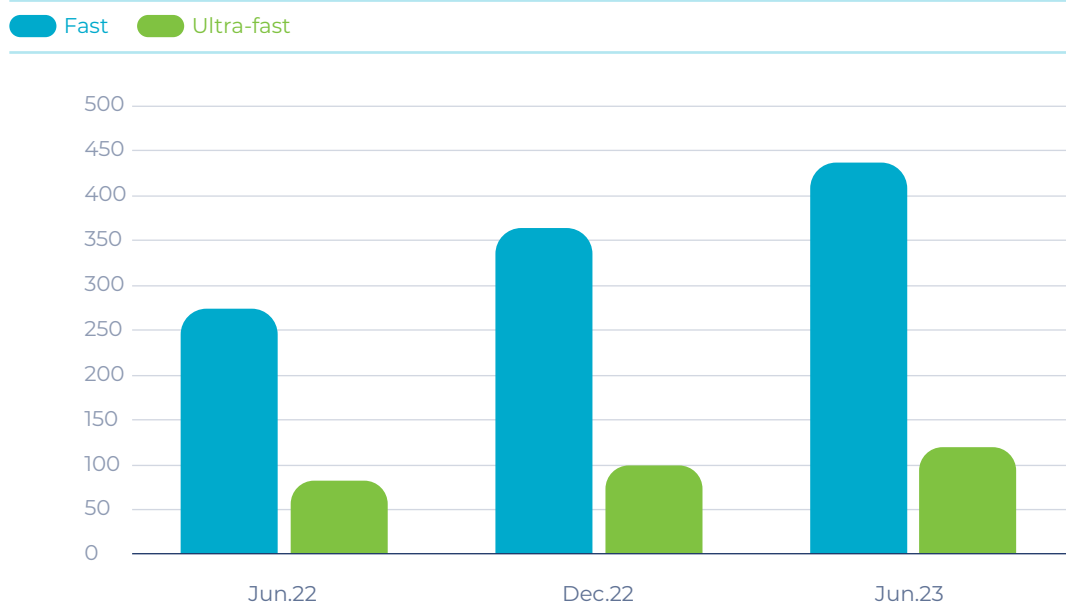
There are currently approximately 42 models of electric motorcycles and scooters (mopeds) available in Australia. Encouragingly, we are also seeing a continuing expansion of shared and private electric bikes and stand-up scooters (micro-mobility) through trials, and broader regulatory changes across Australia, all aimed at ensuring safe usage and minimising risks to pedestrians and riders.



Charging Infrastructure

Public charging equipment in Australia continues to expand. As at 30 June 2023, the number of high-power public charging locations was 558, while the number of individual high power public EV chargers in service was 967. This is a 57% increase in high-power charging locations compared to the same time last year. Note that many of these locations have multiple charging bays in place, to support multiple cars charging simultaneously.

FAST AND ULTRA-FAST PUBLIC CHARGING LOCATIONS OVER TIME

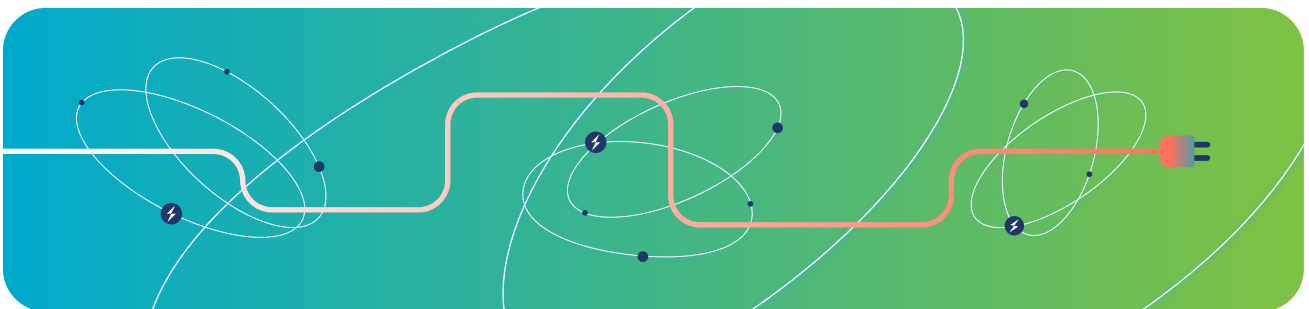


The data included above is drawn from a range of sources to inform this report. The Electric Vehicle Council has made reasonable efforts to ensure accuracy, but we have not independently verified every location.

Public charging locations by region and power level as at 30 June 2023:

State / Territory	Fast (24kW - 99kW DC)	Ultrafast (100kW DC and above)	Total
ACT	6	3	9
NSW	131	43	174
NT	3	0	3
QLD	93	16	109
SA	42	9	51
TAS	31	5	36
VIC	97	32	129
WA	36	12	48
Grand Total	438	120	558

The data included above is drawn from a range of sources to inform this report. The Electric Vehicle Council has made reasonable efforts to ensure accuracy, but we have not independently verified every location.



Plans for the continued rollout of high-power public charging continue to be announced. Hundreds of locations have already been deployed, and hundreds more are planned for deployment in the coming years to fill the gaps.

Current deployment of high-power DC EV charging locations as of June 2023:



Source: [Plugshare](#)

Future planned DC charging locations, under various state and federal government programs*

Western Australia

Electric Vehicle Charger Map

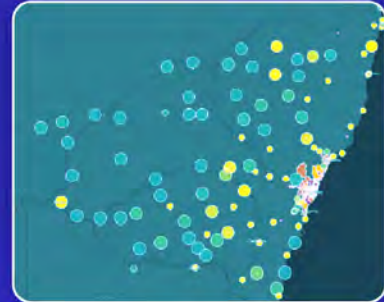


Queensland

Electric Vehicle Charger Site

New South Wales

EV Fast Charging Master Plan



- Planned sites with Federal Partnership contribution with some locations identified
- Planned sites
- Operational sites



ACT

Planned Charging Points



South Australia

EV Charging Network



Tasmania

EV Charging Stations



Victoria

Current and Planned EV Charging Stations

*The information above is drawn from a range of sources. Please note that the locations displayed could consist of both AC and DC charging stations, and there may be additional planned stations that are not yet listed.



Energy policy related to Electric Vehicles

Public high-power EV charger availability

The availability of public high-power EV charging continues to be top of mind for the EV industry, and for motorists. The EVC published a report on this recently, identifying the causal factors that can lead to non-availability, and the steps that industry and government can take to reach a future where a driver no longer needs to consider whether the EV charger they choose to stop at will be available.

This report is available for download [here](#).

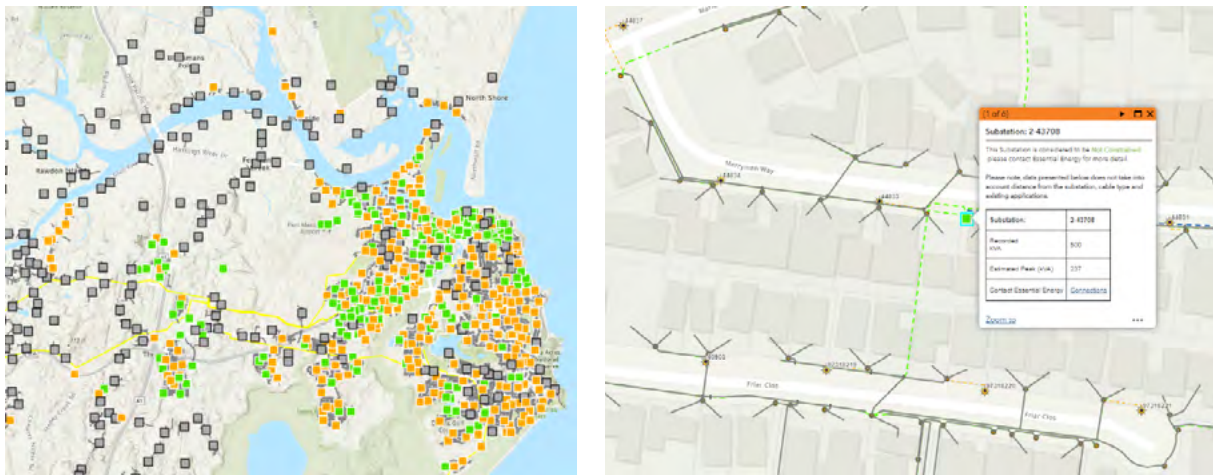
Accelerating the deployment of high-power fast charging sites

While we have seen substantial growth in the number of high-power charging sites deployed, there is potential for greater progress in the national high-power charging roll-out. There are a couple of easy ways to accelerate deployment (see next page):

Visibility of network capacity information

Improving visibility of network capacity information offers a multitude of benefits for the planning and deployment of charging infrastructure. It can save substantial time for organisations planning deployments, make it easier for infrastructure planners and electricity utilities to do business, and allow the industry to collectively shape the future of an electrified transport system.

Essential Energy has released a great tool that provides insights into the estimated capacity on their low voltage network. Given many variables determine if a network has capacity for electric vehicle load, the tool doesn't replace a formal connection application process. However, it does allow organisations to rapidly assess a geographic area against their equipment deployment plans. For Essential Energy, this potentially reduces the number of individual applications needed for a business planning multiple EV infrastructure sites, with a higher probability that the selected sites will be fit-for-purpose.



Source: [Essential Energy](#).

This is currently the gold standard in Australia demonstrating the potential of sharing existing data in an accessible way. We encourage all DNSPs to stand up something similar to Essential Energy's tool, to allow organisations to leverage network capacity information and expedite the deployment of EV charging across the country.

Second lines of connection

At established commercial premises like shopping centres and retail locations, the deployment of high-power charging equipment is often impeded by the need to upgrade the existing site connection and main switchboard. This can be costly and disruptive, slowing down the rate of charging installation.

A more efficient and cost-effective approach being taken around the world is to implement a second connection from the distribution network to the premises, specifically for the high-power charging equipment. Support for this approach varies across jurisdictions in Australia, with some DNSPs and regulators more supportive than others.

The EVC encourages government, DNSPs, regulators, and industry to come together and develop a nationally consistent, principles-based approach to approving second lines of connection to commercial premises for the purpose of supporting high power charging. This would fall within the priorities announced under the National EV Strategy earlier this year.



Destination charging

Complementing high power public charging, destination charging is being rolled out across the country, providing EV owners with convenient charging options while staying in hotels, motels, and other accommodation providers. The deployment of destination charging at key tourism hotspots also allows travellers to top up while visiting popular destinations, improving the overall experience of driving EVs in the regions.

NSW is running one of the most effective programs of this kind in the world, as shown by the success of Round 1 of the NSW Electric Vehicle Destination Charging Grants Program which ran from May to November 2022. The program has so far provided \$1.7m of \$20m allocated state government funding, securing the deployment of over 500 charging points at almost 200 locations across regional NSW. Critical to the success of this program was close engagement between government and industry – together, we do better!

Round 2 funding opens soon, and will fund hundreds, possibly thousands, of additional destination chargers. If you're in regional NSW, and you'd like to participate in this program, find out more information [here](#).

We encourage other State and Territory governments, along with local governments in states other than NSW, to closely examine and consider emulating the success of this program, to cost-effectively support the national transition to EVs.

Smart Charging

Significant amounts of work have been done in Australia testing the viability of orchestrating EV charging in domestic homes.² Recent ARENA funded trials have included:

- [AGL EV Orchestration Trial](#)
- [Jemena Dynamic EV Charging Trial](#)
- [Origin Energy EV Smart Charging Trial](#)

These trials have proven locally at a technical level that orchestration of EV charging in the home is possible, and can be delivered through collaboration between a variety of industry participants. It's also become clear that the energy system benefits of orchestration can largely be achieved by setting appropriate price signals, and leaving the consumers in control – which, by and large, is what the consumers prefer. It's been determined that if

² Including the South Australian government which is investing \$3.2 million in [EV Smart Charging Trials](#) to address integration risks and optimise charging with renewable energy.

consumers are exposed to relatively modest pricing nudges, they'll self-manage their EV charging towards using their own solar, or charging off-peak, most of the time.

In the long term, consumers may wish to opt for external orchestration of their charging – so, we recommend that consumers installing mode 3 EV chargers (EVSE) in their homes consider choosing a product with OCPP 1.6J (or higher) communications capability.

More detail on this topic is available in our report [Home EV Charging and the grid: impact to 2030 in Australia](#).

Regulations

The National Electric Vehicle Strategy includes an objective for harmonisation of service and installation rules. In plain English, this means making the requirements related to charging equipment installation consistent across the country. Regrettably, some don't seem to have gotten the memo.

South Australia's Office of the Technical Regulator has new requirements scheduled to come into effect in July 2024, which will apply unique requirements to the approval and installation of EV charging equipment. Lots of equipment that is allowed to be installed in the rest of the country will potentially become unlawful to install in South Australia, needlessly reducing consumer choice, and hindering broader efforts to support the EV transition. Energy Queensland has a rule on the books that forbids the installation of industry standard EV charging equipment on the general power circuit in a home. This means that an installer who is following the rules cannot install a typical EV charger in such a way that a consumer can use their own solar to charge their car.

In both of these states, there are concerns about the effectiveness of the electrical inspection regime. This means that some consumers are still able to get installations that do not comply with local rules through installers who are prepared to overlook these regulations. The problem with this is that the best, most competent installers will always follow the rules – and therefore be driven out of the market, leaving the market to those who don't follow the rules. Evidently, ill-conceived regulation, drafted without consideration for the consumer or operation of the market, results in unfavourable outcomes.

We encourage state-based regulators, DNSPs, governments and other rule-making bodies to consult with industry in the development of regulation, and align with nationally consistent approaches where possible. We do not need individual states going it alone.

Apartment complexes

In apartment complexes, EV charging installations can be tricky. The consumer may not have ready access to electricity where they park their car – and even if they do, it might be common property electricity, rather than electricity that turns up on their power bill. Typically, some common property electrical retrofitting of apartment complexes is needed in order to support apartment residents who want to install EV charging equipment.

Following updates to the National Construction Code, new apartment buildings around the country are increasingly going to be built 'EV ready'. This means that future installation of EV chargers in those buildings will generally be much, much easier than in apartment buildings where no EV readiness work has been undertaken. These measures don't cost much in the context of a new construction. They are aimed at requiring extra electrical distribution boards in the car parks, so that when the time comes and an apartment owner decides they want to install an EV charger at their own cost in their own parking space, it is easy to do. These measures don't require big increases in electrical capacity, because the new requirements allow for EV charging to happen off-peak in a scheduled manner.

In existing apartment buildings today, we are seeing individuals who have either already bought, or who want to buy an EV, engaging with their owners' corporation to get EV chargers installed in shared parking spaces in the building or in their allocated space. Forward-thinking owners' corporations are using these requests as a prompt to plan out how they're going to serve their residents in a future when almost everyone driving a car is driving an EV and wants to be able to charge it at home. They're using resources like those provided by the NSW State Government's 'EV ready buildings' initiative to help them plan the transition.

In future, we expect that apartment buildings that do not adequately plan for this transition will experience some negative commercial outcomes. Renters will increasingly be looking for convenient EV charging as a feature of the building in which they're renting. Prospective buyers will increasingly consider EV charging facilities and EV readiness when they're making a buying decision.

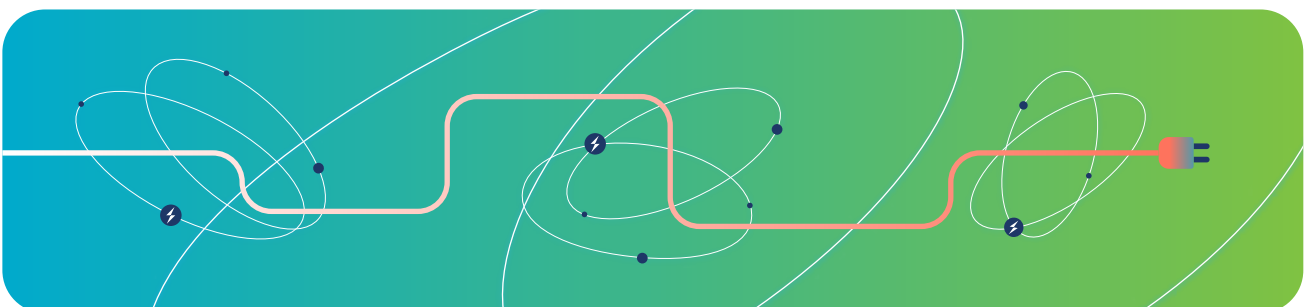
On the horizon – V2G!

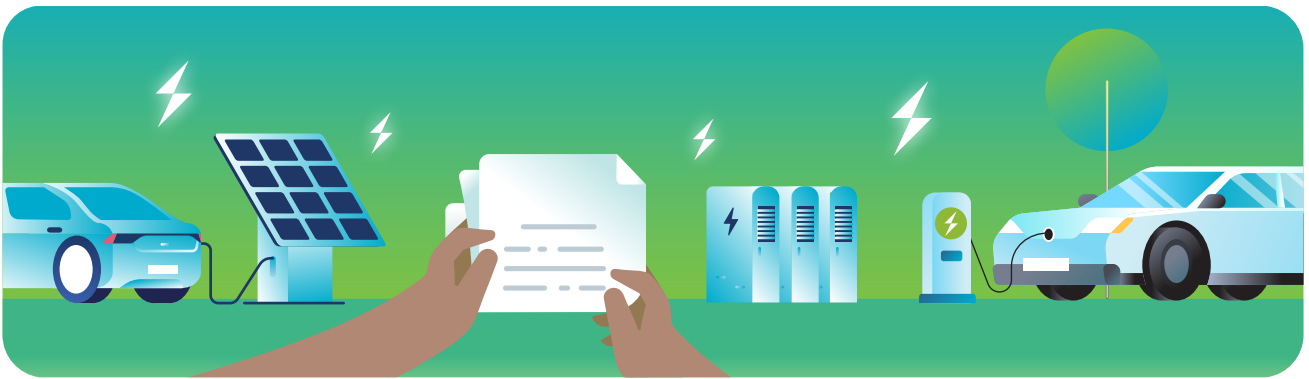
Right now, if you're an Australian driver and you want to feed electricity back into the grid from your car, you can do if you're a South Australian, with a Nissan, and you're willing to install a Vehicle to Grid (V2G) inverter from one specific manufacturer. Very, very early days!

We're working on the technical standards (AS4777) so that in the next couple of years, Australian drivers all over the country will be able to engage in V2G, with a variety of different vehicles, using equipment available from a range of suppliers competing with each other to drive down costs.

These standards will be open for public comment later in the year. If you're an industry player interested in this area, please reach out to us at office@evc.org.au.

V2G is going to take a few years to get to scale – but like solar, once it gets there, it's going to be huge. A future that involves millions of cars, exporting into the grid during the evening peak, is a future where our electricity grids could be powered by up to 100% renewable energy.





Electric Vehicle Policy

National consistency in policy is important to attract a wide supply of EV models and stimulate consumer demand. After a lost decade, the Electric Vehicle Council welcomes the Australian Government's leadership in developing our country's first National EV Strategy.

The National EV Strategy aims to:

- Increase the uptake of EVs to reduce our emissions and improve the wellbeing of Australians
- Increase the supply of affordable and accessible EVs
- Establish the resources, systems and infrastructure to enable rapid EV uptake
- Encourage increase in EV demand.

The Government has also committed to the introduction of a New Vehicle Efficiency Standard (otherwise known as a fuel efficiency standard) for light vehicles, which will be a key policy lever to achieve climate targets and increase the supply of low emission and electric vehicles into the country.

While the development of a National EV Strategy is a positive step in the right direction, more needs to be done. Australia needs a national strategy that sets long-term policy targets and goals, which includes comprehensive measures to accelerate EV adoption across all segments of transport.

As a nation we still have a long way to go. While Australia's light vehicle fleet is slowly starting to decarbonise, a globally competitive New Vehicle Efficiency Standard is critical for decarbonising this segment of the fleet (see page 30).

Unfortunately, other segments of the transport sector are even further behind light vehicles. The decarbonisation of other segments, such as buses and trucks, so far has largely been ignored and/or delayed by most Australian governments. This must be urgently addressed given these segments are also critical for achieving net zero by 2050, but also to achieve a minimum 43% reduction by 2030.

Priority Area – A Comprehensive Strategy for Heavy Vehicle Electrification within the National EV Strategy Framework

While the National EV Strategy is a welcome development, there remain notable gaps with respect to key issues requiring prioritisation to achieve emission reductions across the transport sector. This includes a clear absence of national leadership to support transitioning heavy vehicle fleets to EVs, including through regulatory reform to assist with supply, alongside demand and infrastructure initiatives.

While light vehicles make up around 62% of transport emissions, heavy vehicles such as trucks, buses and rail, make up a further 26%. In order for Australia to have a reasonable chance of achieving a 43% reduction in emissions by 2030, and net zero by 2050, efforts must be doubled to decarbonise all transport segments.

Changes to Australian Design Rules

Regulatory harmonisation with international standards will be integral to our ability to decarbonise Australian freight. Australian Design Rules that limit the mass and width of heavy vehicles are inconsistent with major global markets like the EU and US. Until this is rectified, it remains challenging to increase model availability and accelerate the adoption of electric trucks, despite high levels of demand.

This is a key responsibility of the Australian Government, and one for which it has so far kicked the can down the road. Industry is calling on government to at least provide temporary exemptions from these rules, in the short-term, to kick-start a domestic market for electric heavy vehicles, particularly trucks.

Incentives and Infrastructure

To date we have seen fragmented, piecemeal approaches undertaken across different regions, including a range of trials and pilot projects. This is a broadly inefficient approach – particularly given Australia can take lessons from international players that are already adopting electric trucks and buses into their transport systems.³

Funding to electrify buses for public transit has been the major focus of States and Territories to date. Support is needed to scale up existing efforts to electrify trucks (and private bus fleets) where solutions already exist.

See our joint report with the Australian Trucking Association (ATA) on measures to support the update of electric trucks [here](#).

A globally competitive New Vehicle Efficiency Standard

Australia needs a globally competitive New Vehicle Efficiency Standard that enables our nation to catch up to comparable international markets like the US, EU and New Zealand by 2030 – at the latest.

Implementation of a competitive standard as soon as possible will be necessary to ensure that Australian transport emissions start to fall, and that the government meets its legislated emission reduction targets.

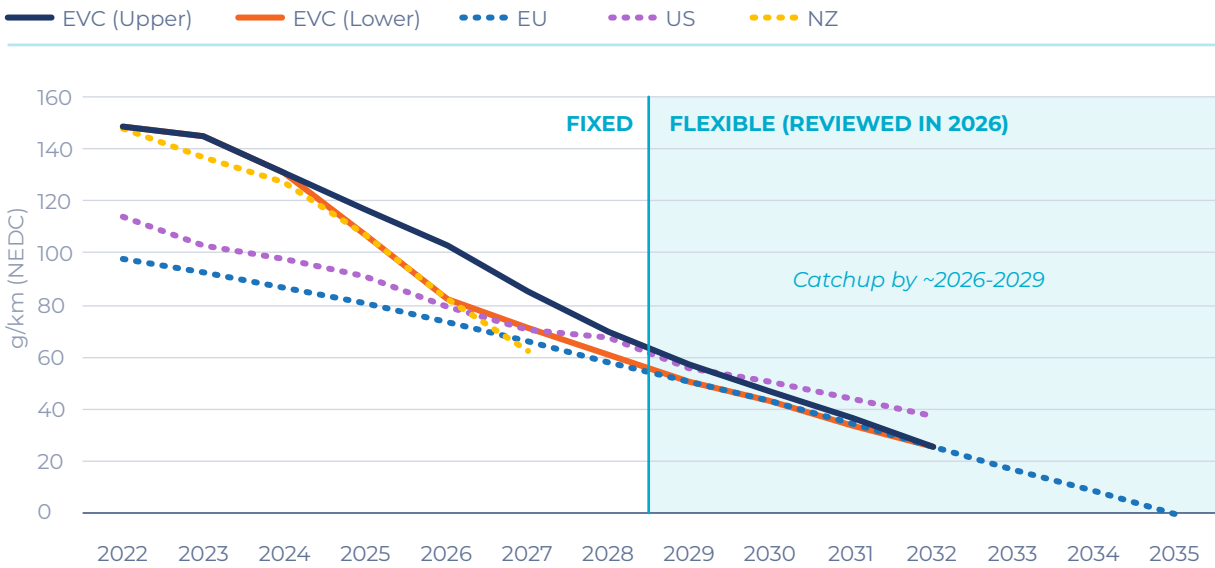
The Electric Vehicle Council provided a comprehensive submission as part of the Australian Government’s consultation on a standard. Our recommended key principles are:

- Targets included in the standard must support Australia in achieving its emission reduction targets of a 43% reduction by 2030 and net zero by 2050
- The scheme should be as simple as possible, with few to no concessions
- In order to ensure all Australians get access to suitable EVs as soon as possible, the Australian standard must aim to catch up to similar global markets, like the US, EU and New Zealand, by 2030 – at the latest. The longer we remain behind, the longer Australians will be stuck paying high fuel bills and dependent on foreign oil.

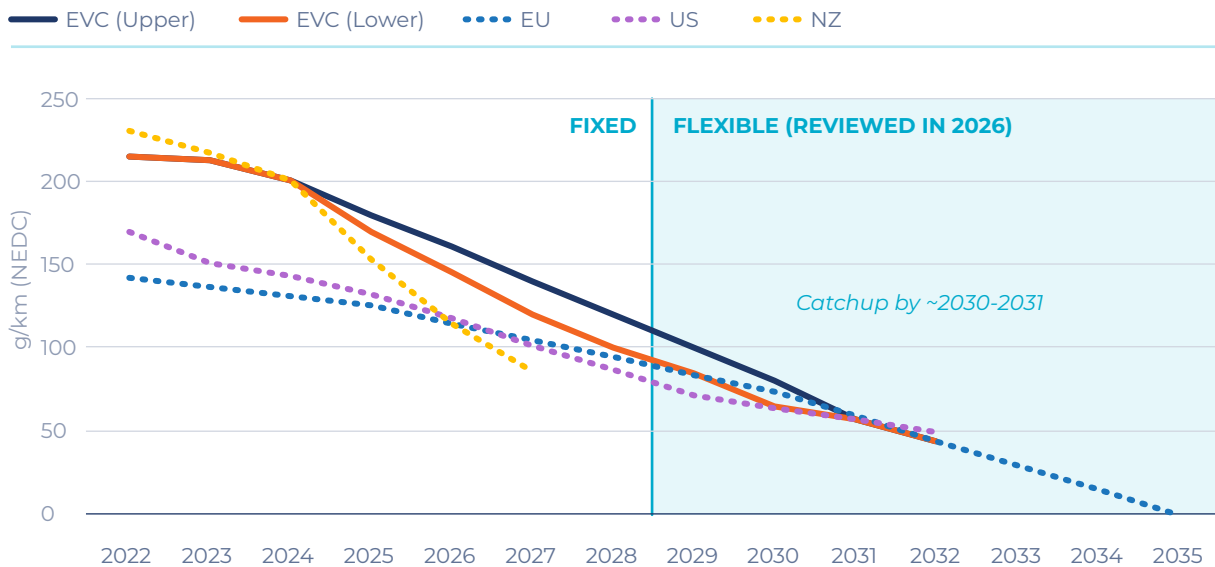
³ <https://www.iea.org/reports/global-ev-outlook-2023/trends-in-electric-heavy-duty-vehicles>

The range of targets proposed by the Electric Vehicle Council are shown below, with the upper threshold representing a scheme with no concessions, and the lower threshold representing a scheme that includes some concessions.

PROPOSED EFFICIENCY TARGETS FOR NEW PASSENGER CARS



PROPOSED EFFICIENCY TARGETS FOR LIGHT COMMERCIAL VEHICLES AND OFF-ROAD SUVs



Strong and sustained supply and demand policies are necessary to drive EV adoption across all segments:

Supply-side measures

- Supply-side measures lead to increases in model availability by strengthening policy signals, with vehicle manufacturers prioritising the Australian market with vehicles of all shapes and sizes.
- Without supply regulation, such as new vehicle efficiency standards for light vehicles, Australia will continue to miss out on the choice of EV models being provided elsewhere.
- Strong policy signals for all transport segments, including long-term targets for the electrification of trucks and buses, and alignment/harmonisation with international regulations, also serve to prioritise supply for the Australian market.

Demand-side measures

- Governments have implemented a range of policies and programs to bring down costs of EVs and drive demand from consumers and businesses transitioning their fleets.
- A gold standard incentive program for light vehicles would include an upfront rebate or zero interest loan (of at least \$3000), full exemption from stamp duty, and at least 2 years' free vehicle registration. Incentives are intended to be temporary, but should not be turned off overnight. Instead they should be gradually phased out after the market achieves 30% EV sales.
- Given upfront costs and considerations for switching to electric buses and trucks, financial incentives to support freight decarbonisation and deployment of enabling infrastructure will be crucial to accelerate the transition.

Light EV Incentives Across Australia

Wondering which incentives are available to help with purchasing an electric vehicle? Currently, each Australian State and Territory has its own set of policies with different features and eligibility rules, making it challenging to understand.

Below we have provided an overview of what incentives you could be eligible for in each State and Territory, when purchasing an electric vehicle for \$50,000 (as at July 2023):



Government	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Party	Labor/ Greens	Labor	Labor	Labor	Labor	Liberal	Labor	Labor
Registration discount over 5 years	\$2,013.30	\$0	\$990	~\$388	\$423	\$0	\$500	\$0
Stamp duty discount	\$1,626	\$1,500 (3.0%)	\$1,500 (3.0%)	\$500 (1.0%)	\$0	\$0	\$0	\$0
Rebate	\$0	\$3,000	\$0	\$6,000	\$3,000	\$0*	\$0	\$3,500
Zero interest loan interest savings	\$4,092	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Road User Tax over 5 years	None	Not yet charged	None	None	Removed	Not yet charged	-\$1,612.00	Not yet charged
Approximate total incentive value	<u>\$7,731.30</u>	<u>\$4,500</u>	<u>\$2,465</u>	<u>\$6,888</u>	<u>\$3,423</u>	<u>\$0</u>	<u>-\$1,112</u>	<u>\$3,500</u>
No. of Subsidies Currently Committed	0	25,000	0	Unable to determine	7,000	0	0*	10,000
Rebate / zero interest loan vehicle price limit	\$89,332 Fuel Efficient Luxury Car Tax Limit	\$68,750	N/A	\$68,000	\$68,750	N/A	N/A	\$70,000
Rebate available to businesses		Yes	N/A	Yes	Yes	Yes	N/A	Yes
Rebate available under a novated lease		N/A	N/A		Yes	N/A	N/A	Yes

Supplementary notes:

ACT	Registration discount based on two-years free registration (\$1200.60) plus three years of the lowest weight-based fee relative to the current fee (\$812.70). Limited to two-years free registration and transition to emission-based registration system fees. Find out more on the Climate Choices website .
	Stamp duty discount based on savings from ZEV duty waiver compared to duty payable on vehicle with average environmental performance.
	Zero-interest loan savings assumes 5% interest rate on a normal car loan; noting most car loan interest rates are significantly above this at present.
NSW	Stamp duty in NSW has been permanently phased out for EVs in exchange for the future introduction of a road user tax. Visit the NSW Government website for more information on the EV rebate.
NT	Registration discount limited to 5 years. Find out more on the NT Government website .
	Stamp duty discount available for all vehicles up to \$50,000. If the sale price/market value of the vehicle is over \$50,000, stamp duty is payable on the amount over \$50,000.
QLD	Registration discount ongoing.
	\$6000 purchase rebate only for eligible households with an annual taxable household income equal to or less than \$180,000 per year. Learn more about the rebate scheme here .
	Applicants who have an annual taxable house income greater than this, in addition to Queensland businesses, remain eligible to receive a \$3000 rebate.
	\$45 million funding pool allocated under Zero Emission Vehicle Strategy will be available until exhausted.
SA	SA registration discount limited to 3 years. Visit the SA Government website for more information about the purchase subsidy.
TAS	Historic duty waiver only applicable for vehicles purchased prior to May 2023. Purchase incentive pending announcement. Learn more about the Tasmanian Government's Climate Change Action Plan here .
VIC	Victorian registration discount ongoing.
	End of Victorian subsidy announced in June 2023. 9,000 subsidies were previously allocated under the program prior to phase out from 1 July 2023.
	Road User Charge penalty assumes an average of 12,400 km travelled p.a.
	Visit the VicRoads website for more information.
WA	Visit the Zero Emission Vehicle Rebate FAQs for more information on the purchase incentive.

Please note, while every effort has been made to provide accurate information above, figures should be treated as indicative only.

Additional incentive at Federal level – FBT Exemption

The fringe benefits tax exemption introduced last year removes the tax for EVs under the LCT threshold for fuel efficient vehicles (\$89,332 for 2023-24),⁴ which makes EVs more affordable and attractive for fleets and eligible individuals through salary packaging. This policy helps reduce the cost of an EV to be at parity with an equivalent petrol or diesel car, and is already generating significant demand for EVs in the near term.

Over time, we will see further benefits of increased supply to the second-hand market in coming years, increasing the availability of affordable EVs. However, this can only be achieved if there is sufficient supply of EVs to meet the increased demand, which highlights the importance of introducing an ambitious New Vehicle Efficiency Standard.

LIST OF ELECTRIC VEHICLES ELIGIBLE FOR FBT EXEMPTION:

BYD Atto 3	Hyundai Ioniq 5	Mercedes-Benz EQA	Nissan Leaf
BYD Dolphin	Hyundai Ioniq 6	Mercedes-Benz EQB	Peugeot 308 (PHEV)
Cupra Born	Hyundai Kona	MG 4	Peugeot 508 (PHEV)
Cupra Leon (PHEV)	Kia Niro	MG HS Plus (PHEV)	Peugeot 3008 (PHEV)
Cupra Formentor (PHEV)	Kia EV6	MG ZS EV	Polestar 2
Fiat 500e	Kia Sorento (PHEV)	Mini Cooper SE	Tesla Model 3
Ford Escape (PHEV)	Lexus ux300e	Mini Countryman (PHEV)	Tesla Model Y
Ford Mustang Mach-e	Mazda MX-30	Mitsubishi Eclipse Cross (PHEV)	Volvo C40
GMW Ora	Mazda CX-60 (PHEV)	Mitsubishi Outlander (PHEV)	Volvo XC40

Note, only variants for which no luxury car tax is charged are eligible for the FBT exemption. Please confirm this with your fleet manager, lease provider, vehicle distributor.

PHEVs are not eligible from 1 April 2025. The effectiveness of the Electric Car Discount which include the FBT exemption will be reviewed after 3 years of operation.

⁴ <https://www.ato.gov.au/Rates/Luxury-car-tax-rate-and-thresholds/>

Electric Vehicle Policy Scorecard

The following section of this report details our assessment of how governments are tracking on EV policy. As per our 2022 report, the assessment is split into core policy areas and segments. To date, the majority of EV policy has been focussed on light vehicles, which presents the largest percentage of transport sector emissions. In this report we continue to track the performance of each jurisdiction across all areas, including heavy vehicles, to ensure appropriate attention is directed towards decarbonisation of all transport segments.

To provide guidance to governments in terms of how they are tracking against different EV policy issues, here we provide a breakdown of how we rate their performance on a scale of 0% - 100% for 49 metrics. Each of these metrics are then weighted to provide subcategory scores out of 10, and in turn, an overall summary policy score out of 10. An explanation of each of the metrics assessed can be found in Appendix A.

Dedicated Electric Vehicle Strategy

A dedicated electric vehicle strategy is a key policy lever to signal forward commitment to supporting the EV transition. A strategy sends a clear message to industry and consumers that EVs are a priority, and that concerted efforts are being taken to drive both EV uptake and expansion of enabling infrastructure.

With the exception of Tasmania, every state, territory and the federal government have an electric vehicle strategy in place. While this metric is not captured in our scorecard, we wanted to highlight the growing momentum across Australia to accelerate the electrification of transport in support of our emission reduction targets.

FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
✓	✓	✓	✓	✓	✓	✗	✓	✓

While an EV strategy can be a clear signal of intent – merely having a strategy in place is not the only indicator of success. A truly effective strategy is backed up by a range of clear actions to support both supply and demand to prepare the future transport system through regulatory measures, financial and behavioural incentives, deployment of infrastructure and awareness initiatives.

Summary of EV Policy Scores

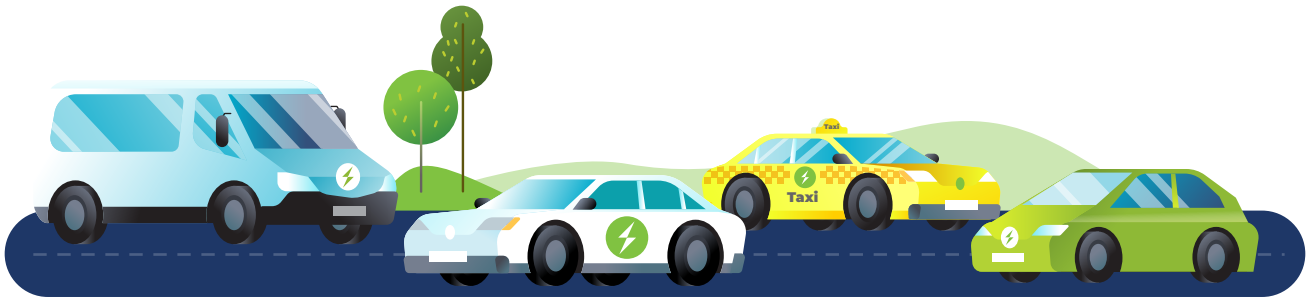
Below is a summary of the EV policy scores given to each Australian government. As you can see, progress has been made across the country - though there is still significant room for improvement in all areas. We urge Australian governments to collaborate and work towards a set of nationally consistent EV policies that aim to achieve the following objectives:

- Meeting our national emission reduction targets
- Eliminating carcinogenic air pollution from our communities and towns
- Providing Australian households and businesses with more choices when transitioning to EVs
- Enhancing our national security by using locally-sourced energy to power our transport
- Seizing the significant economic opportunities presented by this transition, such as redirecting billions of dollars each year in overseas fossil fuel spending to Australian-made energy, and creating thousands of new jobs across the full EV value chain - from mining to manufacturing and recycling.

The opportunity is still there for Australia to accelerate the EV transition and capture the enormous benefits it offers.

However, decisive action is needed from all Australian governments in the near-term to fully realise the full potential of EVs in Australia and secure a prosperous, sustainable future.

Policy Area	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Light Vehicles	7/10	9/10	9/10	4/10	8/10	7/10	4/10	3/10	5/10
Trucks	2/10	1/10	0/10	1/10	2/10	1/10	0/10	4/10	0/10
Buses	4/10	7/10	8/10	1/10	4/10	1/10	3/10	6/10	7/10
Micro-mobility	0/10	8/10	3/10	5/10	8/10	5/10	9/10	5/10	8/10
Industry Development	7/10	4/10	7/10	5/10	6/10	4/10	3/10	5/10	6/10
Data	1/10	3/10	6/10	2/10	3/10	1/10	1/10	2/10	3/10
Other EV Policy Issues	8/10	7/10	8/10	5/10	5/10	5/10	6/10	4/10	7/10
Overall EV Policy Scorecard	 7/10	 9/10	 9/10	 4/10	 7/10	 6/10	 4/10	 5/10	 6/10



Light Vehicles

The majority of transport emissions come from light vehicles – cars, utes and vans, which makes this a critical transport segment to decarbonise.⁵ Fortunately, unlike other hard-to-abate sectors of the economy, the solutions for reducing the emissions of Australia’s light vehicle fleet are already here. Below we provide insight into how different governments across Australia are supporting the electrification of light vehicles, including through their own fleet transitions.

REGULATION

As demand for EVs outstrips supply into the country, the lack of supply regulation is the biggest barrier to EV uptake in Australia. Fortunately, the Australian Government has committed to the introduction of a New Vehicle Efficiency Standard (NVES) for light vehicles, with consultation taking place in the first half of 2023. Strong support for an ambitious NVES has been shown by State and Territory Governments.

In this report we are not grading States and Territories for the supply regulation of light vehicles, but commend those States and Territories that have advocated for a strong FES in combination with ambitious sales targets. In particular, the ACT continues to lead the nation with its target of 80-90% zero-emission vehicle sales by 2030 and a phase-out of new petrol and diesel cars by 2035.

Several jurisdictions have also introduced strong government fleet commitments, which will help to stimulate the second-hand EV market through accelerated vehicle turnover. To send a strong market signal, governments can strategically plan the phase-out of polluting ICE vehicles within their fleets. The gold standard for government fleet targets requires the establishment of clear future procurement targets specifically for the government fleet that demonstrate leadership in electric vehicle adoption. The targets should aim for a high percentage (closer to 100%) of electric vehicle sales by 2027 and should consider the entire fleet, rather than just a small proportion of vehicles.

⁵ <https://www.dcceew.gov.au/energy/transport>.

SELECTED GOVERNMENT FLEET TARGETS

AUSTRALIAN CAPITAL TERRITORY

The commitment to 100% fleet leases being zero-emissions vehicles where fit for purpose. Currently, select passenger vehicles excluded include 6+ seaters and those with specialised operational requirements, such as long, varied, and remote routes.

NEW SOUTH WALES

The target of 50% EVs procurement in the NSW Government fleet by 2026, increasing to 100% by 2030. This target applies to passenger vehicles only and covers approximately 58% of the light vehicle fleet.

SOUTH AUSTRALIA

The commitment to transition the fleet to electric vehicles by 2030, if fit-for-purpose. All vehicle replacements are assessed against a "Plug-in Electric Vehicle Opt-out Policy" to determine if a vehicle cannot be replaced with an EV due to specific reasons.

TASMANIA

Plan to transition the government vehicle fleet to 100% electric by 2030, encompassing all government fleet vehicles. The target includes battery electric, plug-in hybrid and hydrogen vehicles.

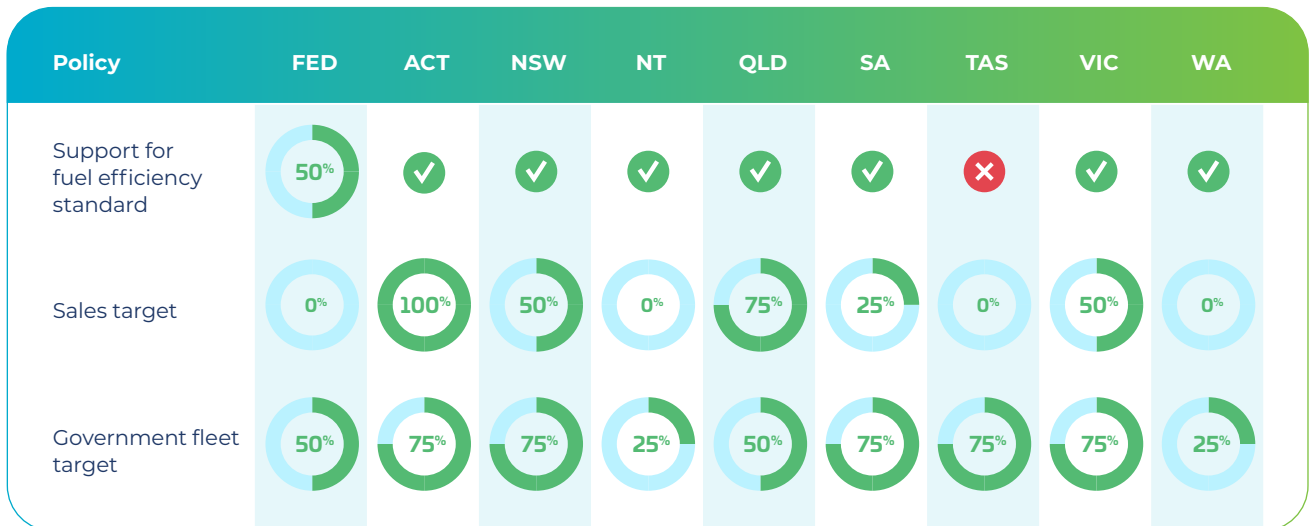
VICTORIA

Commitment to transition the fleet to zero-emissions vehicles by 2035. The Victorian Government does not exclude any vehicles from the zero-emissions vehicle transition based on being deemed not "fit-for-purpose."

QUEENSLAND

Goal of transitioning all eligible passenger vehicles in the government fleet to zero-emission vehicles by 2026. This target applies to passenger vehicles only, and a significant portion of the QFleet fleet that consists of light commercial vehicles is currently considered out of scope due to the limited availability of suitable options.

The inconsistent approaches to define 'eligible' vehicles under these targets demonstrates there is room for improvement across the board to provide better clarity for government procurement teams about the targets they are working towards. In particular, governments should be transparent about what proportion of their fleet is not covered by a fleet target, and in turn, what is the strategy to decarbonise these remaining vehicles over the medium-term.



For States and Territories, support for fuel efficiency standard shown in submission to Federal Government consultation. As noted this does not impact the policy scorecard as we are not assessing States and Territories for the supply regulation of light vehicles.

INCENTIVES

All Australian governments have implemented incentives to support the adoption of electric vehicles (EVs). The primary focus of these incentives is to reduce upfront costs and provide ongoing cost savings. Notably, the Queensland (QLD) Government has recently doubled their rebate incentive to \$6,000 for eligible households with an annual taxable income equal to or less than \$180,000 per year. This increased incentive aims to make EVs more affordable and accessible to a broader range of individuals and families.

At the federal level, the Fringe Benefit Tax (FBT) exemption has also been instrumental in reducing the overall cost of EVs, making them more cost-competitive with equivalent petrol or diesel vehicles. This exemption has already generated significant demand for EVs in the near term, eliminating a potential barrier for businesses and organisations considering EV fleet adoption.

In addition to incentives that promote EV uptake, governments need to facilitate the phasing out of older, polluting vehicles from the national fleet. This will be essential to

achieve substantial reductions in transport emissions. Unlike the energy sector, where retirement timeframes for coal plants can be established as a long-term signal for the future, road transport presents challenges in setting specific retirement schedules due to variable operational timeframes and technological differences across the industry. Instead, governments need to consider implementing measures that encourage the accelerated retirement of older, high-polluting vehicles, while also addressing equity and affordability considerations of the shift to EVs.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Upfront cost	75%	100%	100%	25%	100%	50%	25%	0%	50%
Operating Cost	0%	50%	0%	50%	25%	25%	25%	25%	0%
Targeted fleet incentive	75%	0%	100%	25%	25%	50%	25%	25%	25%
Novated leases (rebate eligible or separate)	100%	0%	0%	0%	0%	100%	0%	0%	100%
Accelerating fleet turnover	0%	0%	0%	0%	0%	0%	0%	0%	0%
Behavioural incentives	0%	50%	50%	0%	25%	0%	0%	0%	0%

CHARGING INFRASTRUCTURE

Governments have made significant progress in building public charging infrastructure for light vehicles, although substantial support to deploy public infrastructure is still necessary to keep up with the accelerating adoption of EVs and future-proofing the transport system.

In addition to expanding public charging networks, governments need to focus on supporting workplace charging to ensure convenient access to charging facilities for commuters, including those who may rely on connection to public transport through “Park and Ride” carparks. This not only supports the adoption of EVs but also contributes to

reducing congestion and promoting the use of public transportation.

While it is encouraging that changes were made last year to the National Construction Code to mandate new buildings to be EV-ready,⁶ further support is needed to address the rollout of charging infrastructure in existing multi-level dwellings. This is particularly important as it presents an equity issue for renters and individuals without off-street parking. To promote equal access to charging infrastructure, governments should provide targeted assistance through guidance and incentives to retrofit existing residential complexes with charging capabilities.

Currently, New South Wales and the Australian Capital Territory are leading the way in deployment of infrastructure and providing support for multi-level dwellings. Their approach serves as a prime example that other jurisdictions can learn from when developing their own charging infrastructure strategies and co-funding programs. Queensland should also be commended for its successful co-fund program, and we look forward to seeing many further rounds of similar programs across the nation.


Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Public regular charging	50%	100%	100%	25%	25%	100%	25%	50%	75%
Public fast charging	100%	75%	100%	25%	100%	50%	50%	25%	75%
Workplace charging	50%	25%	75%	50%	50%	75%	50%	75%	100%
EV readiness in building development	100%	100%	100%	100%	100%	100%	100%	100%	75%
Retrofit programs (electrical infrastructure)	25%	100%	100%	0%	0%	0%	0%	0%	25%
Enabling charging for rentals / strata	25%	50%	75%	25%	0%	0%	0%	25%	25%

6 With the exception of WA, with mandatory application of the NCC provisions from 1 May 2025.

AWARENESS

Building awareness of the benefits of EVs is crucial for building confidence and garnering community support for the transition to an electrified transport system. It is essential that the real advantages of Australia's shift towards EVs are communicated clearly and effectively to both businesses and the general public:

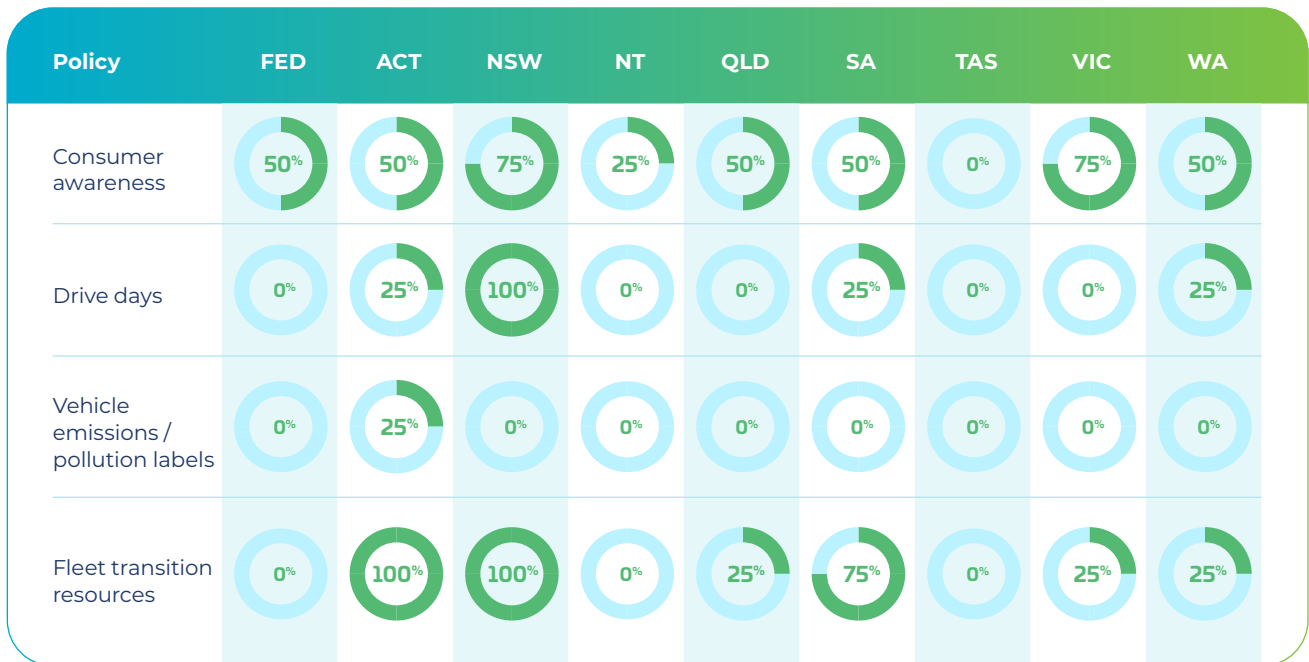
- Clear and accessible resources should be made available to businesses and the general public, outlining the financial incentives, such as rebates and tax exemptions that are on offer.
- Guidance on charging infrastructure should include details on the availability and accessibility of public charging stations and home charging options for different EV drivers.
- In-person drive days or events where individuals can experience EVs firsthand can be highly effective in dispelling misconceptions and showcasing the advantages of electric vehicles, including personal suitability, performance, and environmental benefits.



Governments have a key role to ensure that accurate and up-to-date information reaches a wide audience, actively dispelling myths and encouraging the adoption of EVs.

In addition to promoting the positive aspects of EVs, the EVC recommends the adoption of clear vehicle pollution labels to help increase awareness about the detrimental impacts of existing petrol and diesel vehicles. By highlighting the environmental and health consequences associated with conventional vehicles, individuals will be better informed and motivated to embrace more sustainable transport options.

To reflect the significance of fleets in supplying the second-hand car market and accelerating the EV transition, a new awareness category centred on fleet transition resources has been added in the 2023 report. This acknowledges the pivotal role played by fleets in the EV transition, given their contribution to the broader adoption of EVs in Australia through supply to a second-hand car market.



ROAD USER CHARGE

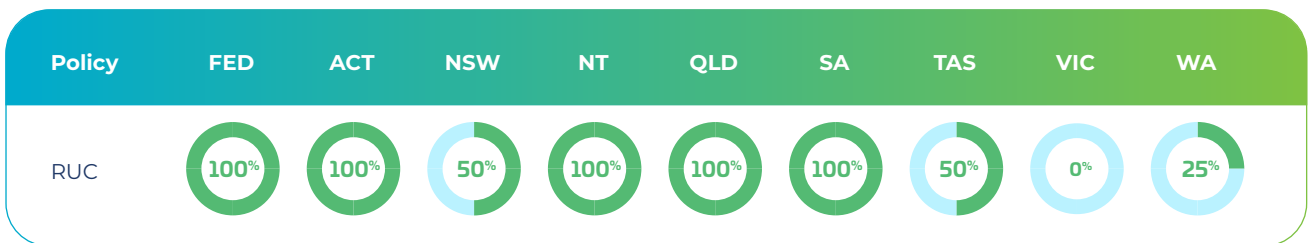
The Electric Vehicle Council supports a national enquiry into road taxation measures that considers the full economic costs and benefits of all vehicles, regardless of fuel type. Short-sighted solutions such as per kilometre fees do not address the major costs of transport, unfairly penalise regional communities and discourage EV adoption.

Australians should not be unfairly or prematurely taxed for embracing zero-emission technology which will be critical to achieving emissions reduction targets. The Electric Vehicle Council awaits the outcome of the challenge brought in the High Court to the validity of the Victorian Government's Zero and Low Emission Vehicle Distance-based Charge in late 2023. The outcome will impact the ability of States to impose regional EV taxes equivalent to the Victorian Road User Charge.

The South Australia Government's repeal of its EV tax is welcomed. Other states are encouraged to follow suit in support of a national process, led by the Federal Government, to consider broader reform of the road tax system to set Australia up for a low-emissions transport sector.

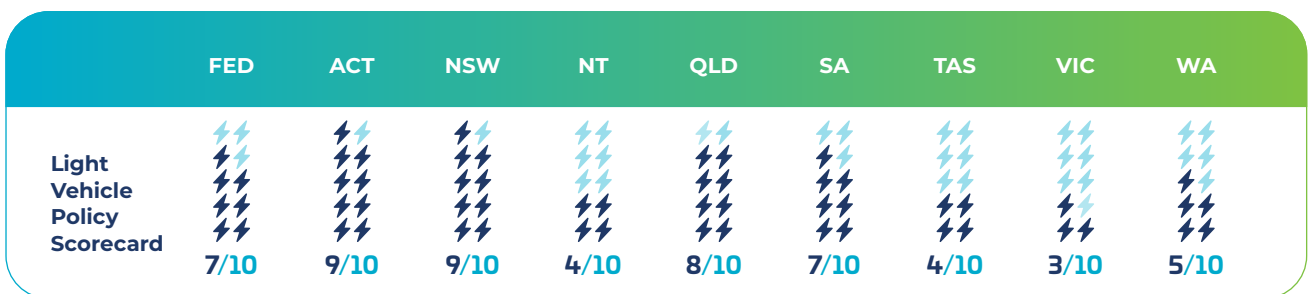
The concern over reduced fuel excise revenue due to EV uptake is frequently exaggerated and overlooks two crucial factors: the slow rate of retirement across the national fleet, ensuring petrol and diesel vehicles will persist on Australian roads for a considerable period, and the necessity for comprehensive tax system reform as a long-term solution.

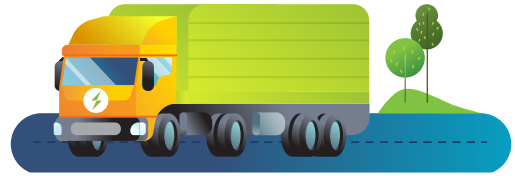
The Electric Vehicle Council recommends Governments avoid imposing short-sighted, band-aid solutions that fail to resolve the core challenges, and instead work to ensure a fair and sustainable tax system that aligns with the evolving transportation landscape and supports the adoption of zero-emission technologies.



Light Vehicle Summary

The ACT and NSW lead Australia on EV policy for light vehicles, followed by Queensland, South Australia and the Federal Government.





Trucks

Trucks are a significant contributor to Australia’s emissions but receive little government attention. The key barrier to electrification of freight in Australia remains in regulatory settings under the Australian Design Rules (ADRs) that are not aligned with international standards for width and steer axle mass limits.

While the Queensland Government has given the Volvo Group Australia permits to trial heavy duty battery electric heavy vehicles in Queensland, a long-term open permitting system and national action to change existing ADRs is needed urgently to accelerate freight decarbonisation. Victoria has also provided financial support to commercial vehicle and logistics sector participants through grants made under the Commercial Sector Innovation Fund, and has announced a \$15 million grants program to help truck operators transition their fleet, in addition to planned relaxation of heavy vehicle mass regulations for electric trucks.

To date, the Federal Government’s response to industry appeals for assistance in aligning ADRs with international standards has been inadequate, indicating a lack of prioritisation for the decarbonisation of trucks. This is despite the availability of clear solutions and the willingness of the industry to embrace electrification in the freight sector.

Greater government support is also needed to drive demand for electrified trucks, including through financial incentives and deployment of dedicated charging infrastructure for larger vehicles to alleviate challenges with range along major freight routes.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Regulation / Electric HV Strategy	0%	25%	0%	0%	50%	25%	0%	50%	0%
Financial support	25%	0%	0%	25%	0%	0%	0%	50%	0%
Charging infrastructure	0%	0%	0%	0%	0%	0%	0%	0%	0%
Awareness	25%	0%	25%	0%	25%	25%	0%	25%	0%
Electric Truck Policy Scorecard	⚡⚡⚡⚡⚡ 2/10	⚡⚡⚡⚡ 1/10	⚡⚡⚡⚡⚡ 0/10	⚡⚡⚡⚡ 1/10	⚡⚡⚡⚡⚡ 2/10	⚡⚡⚡⚡ 1/10	⚡⚡⚡⚡ 0/10	⚡⚡⚡⚡⚡ 4/10	⚡⚡⚡⚡⚡ 0/10



Buses

All jurisdictions are making progress in their public transport decarbonisation efforts, with significant funding being directed towards this in several states, which is promising.

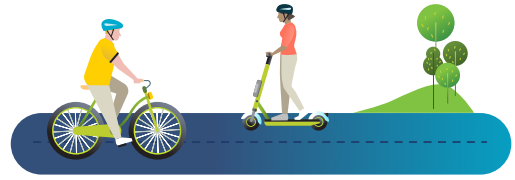
To support this transition, the NSW Government has approved a substantial budget of \$3 billion, which will be utilised for the initial stage of the Zero Emission Buses (ZEBs) program, including establishment of charging infrastructure and manufacture of more than 1,200 new buses. This will assist NSW to achieve its target of transitioning over 4,000 buses in Greater Sydney by 2035.

The Federal Government and WA Government are each contributing \$125 million in funding for electric bus charging infrastructure and grid infrastructure upgrades in WA, where 130 buses will be locally manufactured to transition the Perth bus network.

Victoria is also making real progress, with 44 ZEBs in operation as of June 2023, including 27 trial buses currently on the road and 16 buses in the Metropolitan Bus Franchise and an existing ZEB already operational since 2021.

Despite these encouraging steps, several jurisdictions are yet to set a specific phase-out plan for diesel buses and develop a clear strategy for a zero-emissions bus fleet. The Electric Vehicle Council is urging the federal government to collaborate with states to accelerate support for electric buses, including private operators, to expedite the transition to more sustainable public transport solutions.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Public transport transition plan	0%	50%	50%	25%	50%	25%	0%	75%	25%
Financial support	50%	25%	75%	0%	0%	0%	25%	25%	75%
Charging infrastructure	25%	100%	50%	0%	50%	0%	25%	50%	50%
Awareness	25%	50%	50%	0%	50%	0%	25%	50%	50%
Electric Bus Policy Scorecard	 4/10	 7/10	 8/10	 1/10	 4/10	 1/10	 3/10	 6/10	 7/10



Micro-mobility

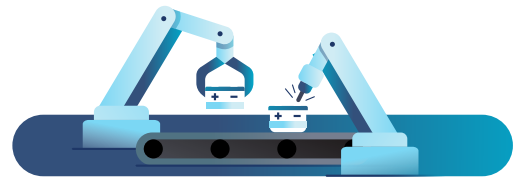
Micro-mobility has a crucial role to play in Australian cities to reduce private car use and address road congestion and associated air pollution. In addition, providing the enabling infrastructure to improve connectivity in our cities helps to support multi-modal transport, linking individual commuters to public transport systems more effectively.

Electrified micro-mobility offers real advantages including increasing accessibility and efficiency for those who might otherwise avoid using conventional micro-mobility devices due to range limitations or the physical exertion required.

The ACT, Queensland, Tasmania and WA have taken a sensible approach to support the safe deployment of electric micro-mobility in cities. Tasmania has taken this a step further, recently announcing a grant program to support the purchase of e-bikes and e-scooters. Several jurisdictions have shared e-scooter trials underway in selected urban locations, including Victoria, NT, NSW, SA, and WA.

While the role of the Federal Government is somewhat limited here, at a national level Australia can do more to invest in infrastructure to better provide for safe alternatives to private car use, particularly in inner cities. This would promote the adoption of micro-mobility and contribute to a range of positive outcomes including reduced congestion and air pollution.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Regulation	0%	100%	25%	75%	100%	50%	100%	50%	100%
Financial incentives	0%	25%	0%	0%	0%	0%	100%	0%	0%
Infrastructure	0%	50%	50%	50%	50%	25%	50%	25%	50%
Awareness	0%	50%	25%	25%	75%	50%	50%	50%	75%
Micro-mobility Policy Scorecard	0/10	8/10	3/10	5/10	8/10	5/10	9/10	5/10	8/10



Industry Development

Australia has the potential to participate in the entire EV value chain, which encompasses critical minerals extraction, refining, and processing, battery and vehicle component manufacturing, EV assembly, operation and maintenance, and the eventual repurposing and recycling of batteries and components.

Inroads have been made in particular in WA, NSW, and Queensland, with each state implementing measures and providing funding to develop domestic battery industries and clean technology manufacturing. The Federal Government has demonstrated significant interest in expanding across the clean energy and battery supply chain, with initiatives under the National Critical Minerals Strategy, upcoming Battery Strategy and National Reconstruction Fund all aimed at stimulating industry growth and development.

To ensure Australia can fully capitalise on this opportunity, strategic coordination across the country is essential. Australia needs to display greater ambition beyond just the global supply of raw minerals and establish strategic partnerships with regional allies to attract investments in downstream processing and manufacturing.

Developing skills and providing training support for employment opportunities across the entire EV value chain will be crucial for the sustained growth of the industry. By fostering a skilled workforce, Australia can strengthen its position as a serious player in the EV value chain and foster long-term industry development.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Skills and training	50%	50%	50%	25%	25%	50%	25%	75%	25%
Critical Minerals	50%	0%	50%	50%	100%	50%	50%	25%	100%
Refining/ Processing	75%	0%	50%	50%	50%	25%	0%	0%	25%
Manufacturing	50%	0%	75%	0%	25%	0%	0%	50%	25%
Battery reuse/ recycling	50%	0%	0%	0%	25%	25%	0%	50%	0%
Clean energy transition	100%	100%	100%	75%	100%	100%	100%	100%	100%
Industry Development Scorecard	7/10	4/10	7/10	5/10	6/10	4/10	3/10	5/10	6/10



Data

Effective data sharing is vital to support informed decision-making by policymakers, industry and consumers alike. Australia’s current data-sharing practices related to EVs, including vehicle registrations, grid capacity, and charging infrastructure usage, remain subpar compared to international approaches. One key issue faced by Australian Governments is the lack of an independent and public source of the number of electric vehicles in the country, which prevents the availability of publicly accessible data and accurate modelling of transport sector emissions. Addressing this will also be crucial to facilitate the introduction and ongoing monitoring of a robust and ambitious New Vehicle Efficiency Standard.

Limited data sharing hinders the development of EV modelling and evidence-based policy implementation. The Electric Vehicle Council encourages a continued national dialogue to resolve these challenges and establish a national portal for information sharing on key EV related data.

The NSW government is setting a positive example by providing EV registration data to the [national map](#), a practice that other states should emulate.

As a commitment under the National EV Strategy, the Federal Government will develop a national mapping tool to support optimal investment and deployment of EV charging infrastructure across the country, similar to what has been delivered by the NSW Government.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Sharing vehicle registration data	0%	75%	100%	25%	75%	0%	50%	25%	50%
Sharing electricity grid capacity data	0%	0%	25%	0%	0%	0%	0%	25%	25%
Sharing charging infrastructure data	50%	0%	75%	0%	25%	0%	0%	0%	0%
Sharing EV driving/ charging patterns	25%	0%	0%	0%	25%	25%	0%	0%	0%
EV modelling	25%	25%	75%	50%	25%	50%	0%	25%	50%
Data Policy Scorecard	⚡⚡⚡⚡ 1/10	⚡⚡⚡⚡⚡ 3/10	⚡⚡⚡⚡⚡⚡ 6/10	⚡⚡⚡⚡ 2/10	⚡⚡⚡⚡ 3/10	⚡⚡⚡⚡ 1/10	⚡⚡⚡⚡ 1/10	⚡⚡⚡⚡ 2/10	⚡⚡⚡⚡ 3/10

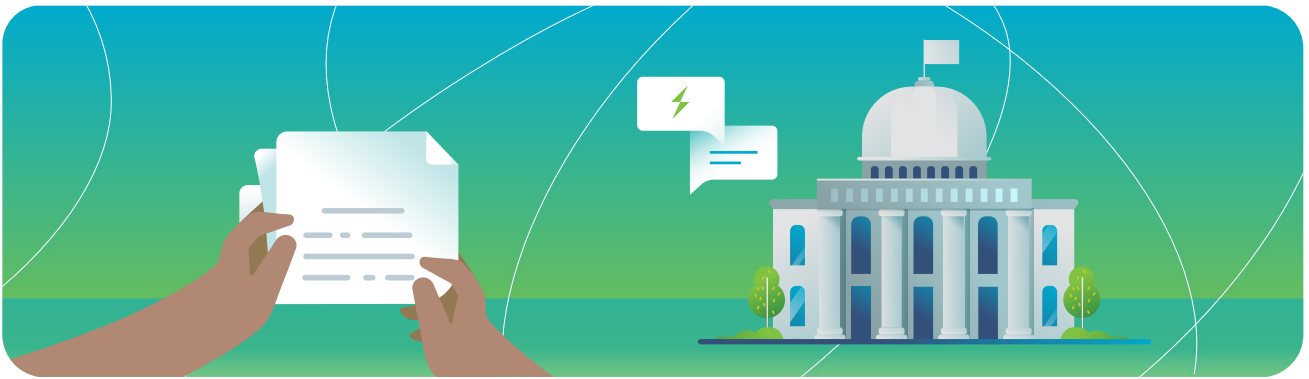


Other EV Policy Issues

As set out below, there are several important EV policy issues that the Electric Vehicle Council wishes to highlight:

- All Australian governments have committed to achieving net zero emissions by 2050, which is the minimum acceptable target. The Federal Government, Tasmania and Western Australia deserve specific commendation for their commitment to developing sectoral emission reduction strategies, ensuring the transport sector does its fair share in achieving climate objectives. Additionally, the ACT Government’s plan to phase out internal combustion engine (ICE) light vehicle sales by 2035 deserves recognition for its ambitious approach to accelerating the transition to electric vehicles and reducing transport emissions.
- While progress has been made through inter-jurisdictional working groups following the National EV Strategy, further cooperation and harmonisation of regulations are needed.
- The Electric Vehicle Council advocates for sensible and nationally consistent approaches to energy policies relating to EV integration. Overly restrictive measures that make charging installation challenging and remove consumers’ charging decisions, as observed in QLD and SA, are short-sighted and hinder EV adoption.
- While some jurisdictions have made strides in EV funding, there is still ample room for improvement, particularly in supporting electric buses and trucks, which require significant attention to ensure Australia can achieve climate targets and deliver a sustainable, low-emission transport future.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Emission reductions target	100%	100%	75%	75%	75%	75%	100%	75%	100%
Energy policy related to EVs	50%	0%	25%	0%	0%	0%	25%	25%	25%
Inter-governmental cooperation	75%	75%	100%	75%	75%	75%	75%	75%	75%
Regulation harmonisation	50%	25%	25%	25%	0%	0%	25%	25%	25%
Total EV funding	75%	75%	100%	50%	50%	75%	50%	50%	75%
Other EV Issues Scorecard	⚡⚡⚡⚡ 8/10	⚡⚡⚡⚡ 7/10	⚡⚡⚡⚡ 8/10	⚡⚡⚡⚡ 5/10	⚡⚡⚡⚡ 5/10	⚡⚡⚡⚡ 5/10	⚡⚡⚡⚡ 6/10	⚡⚡⚡⚡ 4/10	⚡⚡⚡⚡ 7/10



Local Government

Local governments play a crucial role in the EV transition through planning and development policies, delivery of enabling infrastructure and community engagement. Below we provide an overview of what the EVC sees as the gold standard for local government EV policy. More detail will be included in the EVC's updated Local Government Resource Pack in late 2023.

1

Setting sustainability targets

Development of a sustainability strategy / action plan that commits to supporting the achievement of net zero carbon emissions in Australia by 2050 at the latest (ideally with interim targets to achieve this end goal).

In line with achieving net zero by 2050, commitments to:

- 100% of new light vehicles purchased by council being EVs by 2028
- 100% of council's light vehicle fleet being electric by 2033
- 100% of new heavy vehicles purchased by council being EVs by 2040
- 100% of council's electric heavy vehicle fleet being by 2050
- Support national EV charging infrastructure targets of:
 - Multi-bay fast charging stations every 70 km along major highways, and every 5 km in urban areas by 2027 (taking into account chargers also deployed by private operators and other levels of government)
- Region-specific targets for the adoption of non-car transport for commuting trips – including micro-mobility e.g. 25% of all commuting trips by non-car transport in 2035 (targets will vary depending on the local infrastructure, services, and needs of the community)

Ongoing, public evaluation of progress towards achieving targets, and review of measures to accelerate progress.

2

Incentivising the adoption of electric vehicles

Consider opportunities to incentivise adoption of EVs at a local level, including:

- Future deployment of low emission zones
- Preferential parking treatment for EVs
- Enabling EVs in car-sharing fleets
- Procurement policies that preference external contractors transitioning to EVs

3

Future-proofing the built environment for EVs

In line with the EV-readiness provisions of the National Construction Code 2022:

- Incorporation of EV charging requirements as part of Development Control Plans and other planning regulations

4

Enabling the rollout of charging infrastructure

In line with achieving sustainability targets, councils should:

- Offer land for no cost on long-term leases to private charging operators to install infrastructure locally
- Consider opportunities to allow private charging operators to incorporate reasonable local advertising to help recover the cost of installing and operating infrastructure
- Work with partners to secure state and federal infrastructure co-funding for infrastructure

5

Supporting the vehicle fleet transition

In line with achieving sustainability targets, councils should develop:

- A fleet transition plan to achieve 100% EVs across council's light vehicle fleet by 2030
- A fleet transition plan to achieve 100% EVs across council's heavy vehicle fleet by 2050
- Procurement policies that favour EVs as a default option for the internal fleet, as well as external contractors
- Development of driver education training for using light and heavy EVs

6

Promoting shared micro-mobility

- Development of a micro-mobility plan
- Partnership with micro-mobility operators and state/territory government counterparts
- Incorporation of micro-mobility into infrastructure planning
- Micro-mobility education programs
- Ongoing evaluation of micro-mobility fleets to continue improving outcomes over time

7

Increasing awareness on electric vehicles

- Public EV awareness events e.g. EV drive days
- Promotion of council's EV initiatives in local community newsletters
- Signage promoting availability of local charging infrastructure and what to see in the area during charging stopovers for EV road tourists
- Online information resources for the community to learn about EVs



Appendix A – Explanation of Policy Assessment Metrics

Light Vehicles

REGULATION

Policy Metric	Explanation
Supply regulation (Fuel efficiency standard)	The gold standard for a fuel efficiency standard is the implementation of a federal standard that regulates and increases the availability of electric vehicles. It should also consider actions by states advocating for strong fuel efficiency standards.
Sales target	The gold standard for sales targets is the establishment of clear future targets for electric vehicle sales that align with emission reduction goals. This includes having measurable commitments, interim targets, and a firm commitment to a high percentage (over 90%) of electric vehicle sales by 2035.
Government fleet target	The gold standard for government fleet targets is the establishment of clear future procurement targets that demonstrate leadership in electric vehicle adoption. The targets should aim for a high percentage (closer to 100%) of electric vehicle sales by 2027 and should consider the entire fleet rather than just a small proportion of vehicles.

INCENTIVES

Policy Metric	Explanation
Upfront cost	The gold standard for a financial incentive to reduce the purchase cost of an electric vehicle is the provision of rebates, loans, or other incentives that effectively reduce the upfront cost of purchasing an electric vehicle. The eligibility threshold for these incentives should be pegged to the Luxury Car Tax (LCT) threshold.
Operating Cost	The gold standard for a financial incentive to reduce the operating cost of an electric vehicle is the implementation of tax exemptions, electricity credits, or other incentives that significantly lower the ongoing operating costs of electric vehicles. These incentives should be substantial and specifically targeted at electric vehicles, not hybrids.

Targeted fleet incentive	The gold standard for a fleet incentive is the provision of rebates, tax exemptions, or other targeted incentives specifically available for fleet vehicles to encourage early adoption of electric vehicles. These incentives should support the creation of a viable second-hand electric vehicle market.
Novated leases (rebate eligible or separate)	The gold standard for novated leases is the availability of rebates, tax exemptions, or other targeted incentives specifically for private and/or fleet vehicles purchased through a novated lease arrangement. These incentives should support the creation of a viable second-hand electric vehicle market.
Accelerating fleet turnover	The gold standard for accelerating fleet turnover is the implementation of a clear strategy that introduces rebates or other incentives to accelerate the electrification of the national vehicle fleet. The strategy should focus on incentivising the exchange of older, high-polluting petrol and diesel vehicles for new electric vehicles and increasing the rate of fleet turnover towards electric vehicles.
Behavioural incentives	The gold standard for behaviour incentives is the provision of non-monetary incentives to promote the uptake and usage of electric vehicles. This can include preferential lane access, introduction of zero-emission zones in urban centres, discounts, and exemptions from toll roads. The gold standard should include active campaigns and measures to address misinformation and misconceptions.

CHARGING INFRASTRUCTURE

Policy Metric	Explanation
Public regular charging	The gold standard for public regular charging is a substantive commitment to the deployment of regular charging infrastructure (below 24 kW, AC or DC) in public locations. This includes regional locations such as tourism destinations, shopping centres, and accommodation. Assessment includes consideration of performance / delivery of co-funding and approval processes.
Public fast charging	The gold standard for public fast charging is a substantive commitment to the deployment of fast charging infrastructure (24 kW or greater, DC) in public locations, including consideration of regional areas.
Workplace charging	The gold standard involves dedicated financial and/or regulatory support for the deployment of charging infrastructure at workplaces and commuter carparks, targeting commuter trips and supporting businesses to have EVs charging during the day on premises.
EV readiness	The gold standard entails targeted financial and/or regulatory support for retrofitting existing buildings to enable the installation of EV charging infrastructure.

Retrofit programs (electrical infrastructure)

The gold standard involves dedicated support through regulation, incentives, and guidance to enable EV charging installation for renters and apartment owners, emphasising equity. (Consolidation of 'home charging' and 'enabling strata' categories from 2022).

Enabling charging for rentals / strata

The gold standard for public regular charging is a substantive commitment to the deployment of regular charging infrastructure (below 24 kW, AC or DC) in public locations. This includes regional locations such as tourism destinations, shopping centres, and accommodation. Assessment includes consideration of performance / delivery of co-funding and approval processes.

AWARENESS**Policy Metric****Explanation****Consumer awareness**

The gold standard requires active campaigns and measures, including social media, to increase consumer awareness of the benefits of EV technology, address misconceptions and misinformation, and provide EV experience opportunities.

Drive days

The gold standard requires dedicated and ongoing support for drive days to demonstrate the benefits of EVs to consumers and fleet managers, providing opportunities to learn more about EV technology and trial different vehicles.

Vehicle emissions / pollution labels

The gold standard involves clear labelling, as part of vehicle registration, to outline the level of emissions and differentiate low emissions vehicles from higher polluting vehicles, supporting the future introduction of levies or schemes based on tailpipe emissions.

Fleet transition resources

The gold standard requires the provision of resources to facilitate the transition of fleets to electric vehicles, including information on benefits, available models, charging infrastructure, and financial incentives, along with educational events or webinars.

ROAD USER CHARGE**Policy Metric****Explanation****Road User Charge Disincentive**

Efforts to support a national discussion on road tax reform that considers the full economic costs of all fuel types, and does not specifically target electric vehicles. Efforts should also consider the equity impacts of different schemes on regional/rural residents. For this metric, 100% is provided to jurisdictions not actively introducing a road user charge specifically on EVs, and that are instead seeking a national discussion on broad road tax reform.

TRUCKS

Policy Metric	Explanation
Regulation (Supply)	The gold standard requires targeted commitments and/or actions to regulate an increase in electric truck supply/availability, such as sales mandates aligned with emission reduction targets and active efforts to modify Australian Design Rules to facilitate truck electrification.
Financial incentives	The gold standard requires targeted financial support, such as rebates, loans, tax exemptions, or other incentives, to reduce upfront and/or operating costs associated with electric trucks.
Charging infrastructure	The gold standard involves substantive financial and/or regulatory support for the deployment of depot and/or public charging infrastructure that can accommodate electric trucks.
Awareness	The gold standard entails programs to increase consumer and business awareness of the benefits of electric trucks, address misconceptions and misinformation, and support electric truck experience opportunities for businesses, potentially including vehicle pollution labels.

BUSES

Policy Metric	Explanation
Regulation (Supply)	The gold standard requires commitments and/or actions to regulate an increase in public and private electric bus supply/availability, aiming for the vast majority of buses to be electrified by the mid-2030s and no more purchases of diesel buses.
Financial support	The gold standard includes rebates, loans, tax exemptions, or other incentives to reduce upfront and/or operating costs associated with electric buses, with the timeline dependent on regional circumstances.
Charging infrastructure	The gold standard involves substantive financial and/or regulatory support for the deployment of dedicated charging infrastructure, including depots, to accommodate electric buses.
Awareness	The gold standard entails efforts to increase consumer and business awareness of the benefits of electric buses, address misconceptions and misinformation, and introduce vehicle pollution labels to raise awareness of emissions impacts.

MICRO-MOBILITY

Policy Metric	Explanation
Regulation	The gold standard requires commitments and/or actions to regulate an increase in safe electric micro-mobility device supply/availability, including permission for shared e-bikes and e-scooters with infrastructure support, prioritising societal and environmental benefit.
Financial incentives	The gold standard includes rebates, loans, tax exemptions, or other incentives to reduce upfront and/or operating costs associated with electric micro-mobility devices, incentivising reduced private car use and promoting active transport.
Infrastructure	The gold standard involves support for the deployment of public and/or workplace infrastructure to support electric micro-mobility devices, incentivising reduced private car use and promoting active transport.
Awareness	The gold standard entails programs to increase consumer awareness of the benefits of electric micro-mobility devices, address misconceptions and misinformation, and support electric micro-mobility experience opportunities for consumers.

INDUSTRY DEVELOPMENT

Policy Metric	Explanation
Skills and training	The gold standard involves efforts to develop new skills and training courses across the EV value chain, including upskilling programs and national consistency.
Critical Minerals	The gold standard includes financial and/or regulatory support to enable investment in and expansion of local critical mineral supply for both domestic and international use.
Refining/ Processing	The gold standard involves financial and/or regulatory support to enable investment in local refining and processing of critical minerals for both domestic and international use.
Manufacturing	The gold standard requires financial and/or regulatory support to enable investment in and expansion of local battery, component, and vehicle manufacturing for both domestic and international use, including the transition of existing manufacturing industry and consideration of future opportunities.
Battery reuse/ recycling	The gold standard involves financial and/or regulatory support to enable investment in and expansion of local battery reuse and recycling, capturing economic opportunities and working collaboratively with other Australian governments and industry to ensure harmonisation with global best practices.
Clean energy transition	The gold standard involves progress towards decarbonising the electricity grid by increasing the share of renewable energy sources to support the future of electrified transport and development across the EV value chain.

DATA

Policy Metric	Explanation
Sharing vehicle registration data	Publication of anonymised vehicle registration data at a suitable geographic level e.g. post-code level, to increase awareness of EV deployment and inform policy and planning, as well as future transport and energy modelling. The sharing of this data should be regular e.g. every month, and ideally accessible through a single, national portal e.g. National Map.
Sharing electricity grid capacity data	The gold standard requires an ongoing effort to share electricity grid capacity data with industry to inform EV charging infrastructure planning.
Sharing charging infrastructure data	The gold standard involves regular collection and sharing of charging infrastructure data (real-time availability, location, price, amenity, etc) to support infrastructure planning, increase consumer confidence, and increase overall visibility of charging infrastructure options across multiple networks/operators/providers
Sharing EV driving/charging patterns	The gold standard includes a commitment to the collection and sharing of anonymised EV driving and/or charging patterns to inform transport and energy planning and associated modelling.
EV modelling	The gold standard involves the development and/or procurement of qualitative and/or quantitative EV modelling resources, with transparent publication of findings, to inform policy, planning, and decision-making.

Other EV Policy Issues

Policy Metric	Explanation
Net zero commitment	The gold standard requires ambitious emission reduction targets aligned with climate science, including specific sectoral emission reduction targets/ strategies for transport.
Energy policy related to EVs	The gold standard entails focussed efforts on energy policy that enable EV uptake without disincentivising or creating artificial barriers to adoption.
Inter- governmental cooperation	The gold standard involves ongoing efforts to work with other federal, state, and territory governments to support nationally-consistent policy and regulation and enable widespread EV uptake across Australia.
Regulation harmonisation	The gold standard includes efforts to harmonise regulation of EVs and associated infrastructure across Australia, aligning with global standards and resisting implementation of unique standards that burden local consumers and industry.
Total EV funding	The gold standard requires a strong financial commitment to support the electrification of transport, considering the relative population and size of each jurisdiction.

Appendix B – Electric Vehicle Sales

Year	BEV Sales	PHEV Sales	Total EV Sales	EV Market Share
2011	49	0	49	0.00%
2012	173	80	253	0.02%
2013	191	102	293	0.02%
2014	371	951	1322	0.12%
2015	759	1012	1771	0.15%
2016	668	701	1369	0.12%
2017	1208	1076	2284	0.19%
2018	1053	1163	2216	0.21%
2019	5292	1426	6718	0.65%
2020	5215	1685	6900	0.78%
2021	17293	3372	20665	1.95%
2022	33416	5937	39353	3.81%
2023 (YTD June)	43092	3532	46624	8.40%

Appendix C – Electric Vehicle Model Availability

Electric cars available to order

Make	Model	Variant	BEV/ PHEV	Body Type	Approximate MLP excl. on- roads (\$AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
Audi	e-tron	55 quattro	BEV	SUV	\$132,980	95	436	5.7
		55 quattro Sportback	BEV	SUV	\$141,442	95	444	5.7
		S	BEV	SUV	\$147,980	95	413	4.5
		S Sportback	BEV	SUV	\$153,400	95	418	4.5
	e-tron GT	e-tron GT	BEV	Sedan	\$158,300	93	448	4.1
		RS e-tron GT	BEV	Sedan	\$210,500	93	433	3.3
	Q5	55 TFSI e	PHEV	SUV	\$98,750	14.4	55	5.3
55 Sportback TFSI e		PHEV	SUV	\$104,365	14.4	53	5.3	
BMW	i4	eDrive40	BEV	Gran Coupé	\$99,900	80	520	5.7
		M50	BEV	Gran Coupé	\$143,900	80	520	3.9
	i5	eDrive40	BEV	Sedan	\$124,900	84	582	6
		M60 xDrive	BEV	Sedan	\$130,000	84	516	3.8
	i7	M70	BEV	Sedan	\$344,900	106	560	3.7
		xDrive60	BEV	Sedan	\$232,430	106	625	4.7
	iX	xDrive40 Sport	BEV	SUV	\$141,900	77	425	6.1
		xDrive50 Sport	BEV	SUV	\$169,900	112	620	4.6
		M60	BEV	SUV	\$177,500	112	566	3.8
	iX1	xDrive30	BEV	SUV	\$82,900	66.5	440	5.6
	iX3		BEV	SUV	\$104,900	80	460	6.8
	3 Series	330e	PHEV	Sedan	\$97,400	12	62	5.9
	5 Series	530e	PHEV	Sedan	\$127,400	12	54	6.1
	XM		PHEV	SUV	\$229,143	25.7	82	4.3
	X5	xDrive50e	PHEV	SUV	\$143,900	24	110	4.8
	X3	xDrive30e	PHEV	SUV	\$105,000	12	43	6.4

Make	Model	Variant	BEV/ PHEV	Body Type	Approximate MLP excl. on- roads (\$AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
BYD	Atto 3	Standard Range	BEV	SUV	\$44,400	50	320	7.3
		Extended Range	BEV	SUV	\$47,400	60	420	7.3
	Dolphin	Dynamic	BEV	Hatch	\$38,890	44.9	340	12.3
		Premium	BEV	Hatch	\$44,890	60.5	427	7
		Sport (Limited Edition)	BEV	Hatch	\$49,990	60.5	TBC	<7
CUPRA	Born		BEV	Hatch	\$59,990	77	511	7
	Leon	VZe	PHEV	Hatch	\$66,200	11.5	60	5.7
	Formentor	VZe	PHEV	SUV	\$60,990	12.8	55	7
Ferrari	SF90	Stradale	PHEV	Sports	\$1,200,000	8	25	2.5
Fiat	500e		BEV	Hatch	\$52,500	42	311	9
Ford	Mustang Mach-E	Select RWD	BEV	SUV	\$79,990	71	470	6.9
		Premium RWD	BEV	SUV	\$92,990	91	600	7.0
		GT AWD	BEV	SUV	\$108,990	91	490	4.4
	Escape	ST-Line	PHEV	SUV	\$54,400	10.7	56	6
Genesis	GV60	Sport	BEV	SUV	\$103,700	74	470	5.5
	GV70 Electrified	Sport	BEV	SUV	\$127,800	77.4	455	4.2
	G80 Electrified	Premium	BEV	Sedan	\$145,000	82.5	440	4.9
GWM	Ora	Standard Range	BEV	Hatch	\$44,500	48	310	8.5
		Extended Range	BEV	Hatch	\$48,000	63	420	8.5
Hyundai	Ioniq 5	Dynamiq RWD	BEV	SUV	\$79,300	77.4	507	7.3
		Techniq AWD	BEV	SUV	\$88,000	77.4	430	5.1
		Epiq AWD	BEV	SUV	\$89,600	77.4	454	5.1
	Ioniq 6	Dynamiq RWD	BEV	Sedan	\$74,000	77.4	614	7.4
		Techniq AWD	BEV	Sedan	\$83,500	77.4	519	5.1
		Epiq AWD	BEV	Sedan	\$87,288	77.4	519	5.1
	Kona	Highlander SR	BEV	SUV	\$60,500	39	305	9.9
Highlander LR		BEV	SUV	\$66,000	64	557	7.6	
Jaguar	I-PACE	EV400 SE AWD	BEV	SUV	\$146,857	90	446	4.8
		I-PACE EV400 HSE AWD	BEV	SUV	\$160,217	90	446	4.8
Jeep	Grand Cherokee	Summit Reserve 4xe	PHEV	SUV	\$129,950	17.3	52	6.3

Make	Model	Variant	BEV/ PHEV	Body Type	Approximate MLP excl. on- roads (\$AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
Land Rover	Range Rover	P460e AWD Standard Wheelbase	PHEV	SUV	\$254,515	38.2	121	5.7
		P460e AWD Long Wheelbase	PHEV	SUV	\$263,100	38.2	120	5.8
	Range Rover Sport	P460e AWD	PHEV	SUV	\$178,650	38.2	123	5.5
	Range Rover Evoque	P300e AWD	PHEV	SUV	\$104,310	15	62	6.4
	Range Rover Velar	P400e AWD	PHEV	SUV	\$132,800	17.1	64	5.4
	Defender 110	P400e AWD	PHEV	SUV	\$127,600	19.2	51	5.6
Kia	Niro	S	BEV	SUV	\$72,300	64.8	460	7.8
		GT-Line	BEV	SUV	\$78,400	64.8	460	9.3
	EV6	Air RWD	BEV	SUV	\$72,590	77.4	528	7.3
		GT-Line RWD	BEV	SUV	\$79,590	77.4	504	7.3
		GT-Line AWD	BEV	SUV	\$87,590	77.4	484	5.2
		GT AWD	BEV	SUV	\$99,590	77.4	424	3.5
	Sorento		PHEV	SUV	\$81,080	14	68	8.4
LDV	Mifa 9		BEV	People Mover	\$106,000	90	440	6.5
Lexus	ux300e		BEV	SUV	\$82,515	54	360	7.5
	RZ450e		BEV	SUV	\$116,000	71.4	450	5.6
	NX450h+		PHEV	SUV	\$90,923	18.1	69	6.3
Mazda	MX-30 Electric		BEV	SUV	\$65,490	30	170	9.7
	CX-60		PHEV	SUV	\$79,990	17.8	76	5.9
Mercedes-Benz	EQA	250	BEV	SUV	\$78,513	66.5	524	8.6
		350 4MATIC	BEV	SUV	\$96,900	66.5	475	6
	EQB	350 4MATIC	BEV	SUV	\$106,700	66.5	445	6.2
		250	BEV	SUV	\$87,800	66.5	507	9.2
	EQC	400	BEV	SUV	\$128,000	80	370	5.1
	EQE	300	BEV	Sedan	\$134,900	89	626	7.3
		350 4MATIC	BEV	Sedan	\$154,900	90.5	590	6.3
		AMG 53 4MATIC+	BEV	Sedan	\$214,900	90.5	500	3.5
	EQS	AMG 53 4MATIC	BEV	Gran Coupe	\$328,400	120	610	3.4
	E-Class	E300e	PHEV	Sedan	\$126,200	14	50	5.8
	GLC300e	GLC300e	PHEV	SUV	\$95,700	14	46	5.7

Make	Model	Variant	BEV/ PHEV	Body Type	Approximate MLP excl. on- roads (\$AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
MG	4	51 Excite	BEV	Hatch	\$38,990	51	350	7.7
		64 Excite	BEV	Hatch	\$44,990	64	450	7.9
		64 Essence	BEV	Hatch	\$47,990	64	435	8.3
		77 Essence Long Range	BEV	Hatch	\$55,990	77	530	6.5
	ZS EV	Excite	BEV	Hatch	\$46,709	51.1	320	8.2
		Essence	BEV	Hatch	\$49,709	51.1	320	8.2
		Long Range	BEV	Hatch	\$55,990	72.6	440	8.5
	HS PLUS	Essence	PHEV	SUV	\$47,990	16.6	52	6.9
Excite		PHEV	SUV	\$49,690	16.6	52	6.9	
Mini	Cooper SE Electric Hatch Countryman Cooper SE		BEV	Hatch	\$69,800	74	460	6.8
			PHEV	Hatch	\$64,000	7.6	51	6.8
Mitsubishi	Eclipse Cross		PHEV	SUV	\$51,390	13.8	54	10.4
		Outlander	PHEV	SUV	\$61,440	20	85	7.3
Nissan	Leaf	Standard	BEV	Hatch	\$53,551	39	270	7.9
		e+	BEV	Hatch	\$64,051	59	385	7.3
Peugeot	308	GT SPORT PHEV	PHEV	Hatch	\$64,990	12.4	60	9.7
	508	GT HYBRID FASTBACK	PHEV	Sedan	\$81,610	11.8	55	8.3
	3008	GT SPORT HYBRID AWD	PHEV	SUV	\$84,790	13.2	60	5.9
Polestar	2	Standard Range Single motor	BEV	Sedan	\$71,600	69	440	7.4
		Long Range Single Motor	BEV	Sedan	\$74,800	78	515	7.4
		Long Range Dual Motor	BEV	Sedan	\$79,900	61	480	7.4

Make	Model	Variant	BEV/ PHEV	Body Type	Approximate MLP excl. on- roads (\$AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
Porsche	Taycan	Taycan	BEV	Sedan	\$182,100	71	403	5.4
		4S	BEV	Sedan	\$227,600	71	413	4
		4 Cross Turismo	BEV	Sedan	\$206,600	83.7	469	5.1
		4S Cross Turismo	BEV	Sedan	\$106,900	83.7	469	4.1
		GTS	BEV	Sedan	\$269,800	93.4	485	3.7
		Turbo S	BEV	Sedan	\$338,000	93.4	440	2.8
		Turbo Cross Turismo	BEV	Sedan	\$348,000	93	472	3.3
	Cayenne	E-Hybrid	PHEV	SUV	\$155,900	18	44	4.9
		4 E-Hybrid	PHEV	SUV	\$252,700	18	56	4.4
		4 E-Hybrid Platinum Edition	PHEV	SUV	\$270,900	18	56	4.4
	Panamera	4 E-Hybrid Executive	PHEV	SUV	\$280,400	17.9	55	4.5
Turbo S E-Hybrid		PHEV	Sedan	\$307,200	18	47	3.8	
Turbo S E-Hybrid Coupe		PHEV	SUV Coupe	\$311,100	18	47	3.8	
		4S E-Hybrid	PHEV	Sedan	\$244,400	17.9	54	3.7
Tesla	Model 3	Rear-Wheel Drive	BEV	Sedan	\$59,900	60	491	6.1
		Long Range	BEV	Sedan	\$74,300	82	602	4.4
		Performance	BEV	Sedan	\$87,300	82	547	3.3
	Model Y	Rear-Wheel drive	BEV	SUV	\$72,300	60	455	6.9
		Long Range	BEV	SUV	\$82,300	76	533	5
		Performance	BEV	SUV	\$96,700	76	514	3.7
Volvo	C40	Recharge Pure Electric	BEV	SUV	\$74,990	70	507	7.4
		Recharge Twin Pure Electric	BEV	SUV	\$82,490	78	467	4.7
	XC40	Recharge	BEV	SUV	\$72,990	78	460	7.4
		Recharge Twin Motor	BEV	SUV	\$79,990	78	500	4.9
	XC90	Recharge	PHEV	SUV	\$118,990	19	77	5.3
	XC60	Recharge Plug-in Hybrid	PHEV	SUV	\$97,990	19	77	4.8

Electric cars expected to be available in Australia in the future

Make	Model	Variant	BEV/PHEV	Body Type	Estimated RRP excl. on-roads (\$AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
Audi	Q8	TFSI e	PHEV	SUV	TBC			
		RWD Standard Range	BEV	SUV	TBC	76.1		8.2
Kia	EV9	RWD Long Range	BEV	SUV	TBC	99.8	541	9.4
		AWD Long Range	BEV	SUV	TBC	99.8		6.0
Lotus	Eletre		BEV	SUV	TBC	107	490	2.9
Maserati	Grecale Folgore		BEV	SUV	TBC	105	500	4.1
Peugeot	408		PHEV	Sedan	TBC	12.4	59	8.7
	e-2008		BEV	SUV	TBC	45	250	8.5
	e-208		BEV	Hatch	TBC	45	275	8.1
Polestar	3	Long Range Dual Motor	BEV	Sedan	\$132,900	111	610	5
	3	Long range Dual Motor with Performance pack	BEV	Sedan	\$131,900	111	560	4.7
	4	Long Range Dual Motor	BEV	SUV Coupe	TBC	75	480	4.7
Renault	Megane E-Tech		BEV	SUV	TBC	60	450	7.4
Rolls Royce	Spectre		BEV	Saloon	\$770,000+	100	520	4.5
Skoda	Enyak iV		BEV	SUV	TBC	77	500	8.7
	Enyaq Coupe iV		BEV	SUV Coupe	TBC	77	544	8.8
	Fabia iV		BEV	Hatch	TBC	55	340	9.3
Subaru	Solterra		BEV	SUV	TBC	65	460	7.7
Toyota	bZ4X		BEV	SUV	TBC	64	315	6.9
Volkswagen	ID.3		BEV	Hatch	TBC	58	420	7.3
	ID.4		BEV	SUV	TBC	77	522	8.5
	ID.5	GTX	BEV	SUV	TBC	77	500	6.3
	Golf	GTE	PHEV	Hatch	TBC	10.4	60	7.6
	Touareg R		PHEV	SUV	TBC	14.3	47	5.1
	Tiguan	eHybrid	PHEV	SUV	TBC	13	50	7.4
	Volvo	EX30		BEV	SUV	TBC	69	480
EX90			BEV	SUV	TBC	107	600	5.9

Electric utes and vans (available today and coming soon)

Make	Model	Segment	Battery size (kWh)	WLTP Range (km)	Availability
ACE	Ace Cargo	Van	30-50	200	Coming soon
	ACE Yewt	Utility	30-50	200	Coming soon
	V1 Transformer	Van	54.5	215-258	Coming soon
AUSEV	Atlas XT	Utility	200	645	Coming soon
BYD	T3	Van	45	300	Available now
EV Automotive	EC11 E-Cargo	Van	73.6	200	Available now
Ford	E-transit	Van	68	317	Available now
Foton	Eurise D11	Van	105.7	300	Available now
GB Auto	TEMBO 4x4 E-LV	Utility Conversion	72	50-100	Available now
LDV	eT60	Utility	75	330	Available now
	eDeliver 9	Van	88.55	280	Available now
	eVito Panel Van	Van	60	341	Available now
Mercedes-Benz	eVito Tourer	Van	90	420	Available now
	eSprinter	Van	47.6	350	Coming soon
	EQV	Van	90	418	Available now
Peugeot	e-PARTNER	Van	50	245	Coming soon
Renault	Kangoo Z.E.	Van	33	200	Available now
Renault	Kangoo E-Tech	Van	45	285	Coming soon
Safescape	Bortana EV	Utility	52	120	Available now
SEA Electric	E4V	Van	88	250	Available now
Volkswagen	ID.Buzz	Van			Coming soon
Voltra	e-cruiser	Utility Conversion	42.24	100	Available now
Zero automotive	ZED70	Utility Conversion	88	330	Available now
	ZED70 Ti	Utility Conversion	60	250	Available now
ROEV	Hilux / Ranger conversion	Utility Conversion	64-96	240-360	Available now

Electric trucks

Make	Model	Segment	Battery size (kWh)	Range (km)	Availability
AusEV	Zeus Z-16	Truck	210	350	Coming soon
	Zeus Z-19	Truck	210	350	Coming soon
	Zeus Z-22	Truck	210	350	Coming soon
	XOS MDXT	Truck	480	434	Coming soon
	XOS HDXT	Truck	480	370	Coming soon
Daimler	Fuso eCanter	Truck	82.8	100	Available now
	eCanter Next Gen	Truck			Coming soon
Foton	T5 Electric Truck	Truck	81	200	Available now
Hyundai	Mighty Electric	Truck	114.5	200	Available now
JAC motors	N55 EV truck	Truck	96.7	200	Available now
	N75	Truck	96.7	200	Coming soon
Janus Electric	Kenworth T403	Truck Conversion	120	400-500	Available now
Scania	25P	Truck	165	250	Available now
SEA Electric	SEA 300-85	Truck	100-136	220	Available now
	SEA 500-140	Truck	136	160	Available now
	SEA 500-225	Truck	136-250	200	Available now
	SEA 300-45	Truck	70	200	Available now
Volvo Trucks	FL	Truck	450-540	300	Available now
	FE	Truck	200-265	220	Available now

Electric buses

Make	Model	Range (km)	Seats + Standees
Bus and Coach International (BCI)	Citirider E	350	45
	Proma Low Floor E	300	28
Bus Stop	EVolution	350	53
BusTech Group	Proterra ZDI	350	70
BYD	K9RA (Gemilang chassis)	250	35 seats + 31 standees
Custom Denning	Element EV	400-500	70
Daimler Truck and Bus	Mercedes-Benz eCitaro	220	81
Ebusco	2.2	450	90
Foton Bus Australia	12.5m Electric City Bus	N/A	44 seats + 20 standees
Joylong	E6 Minibus	280	14
	ZE-B (12.5m City Bus)	300-600	46
	ZE-B 106 (10.6m City Bus)	250-350	36
Nexport Pty Ltd.	ZE-B 86 (8.6m Bus)	250-350	28
	ZE-B 75 (7.5m Bus)	300	22
	ZE-C125 (12.5m Coach)	600	60
Optare	MetroCity EV	210	44 seats + 16 standees
Proterra	ZX5	350	75
SEA Electric	E4B Minibus	250	15
Volgren Australia	Optimus E-Bus (Body)	250	90
Volvo Bus	BZL Electric Chassis	N/A	N/A
Yutong	E12 e-bus	320	40-44 seats + 30 standees
Zemtec	E-City	200-263	44 seats + 38 standees

Electric two and three-wheelers

Make	Model	Segment	Price (AUD)	Battery size (kWh)	All electric range (km)
Benzina Zero	Duo	Scooter	\$4,650	2.52	105
	Duo +	Scooter	\$5,250	2.52	90
	City	Scooter	\$4,250	2.1	80
	Sport	Scooter	\$7,250	2.1	90
BILITI	TASKMAN	Tricycle	\$15,000	9.8	80-100
braaap	MotoE	Motorbike	\$4,939	4.32	140
EMos	iTango	Tricycle	\$3,999	1.25	50-60
	iTank	Tricycle	\$5,999	1.56	50-70
	EH7	Scooter	\$5,999	2.16	70-160
Energica	Experia	Motorbike	\$47,408	22.5	250
	Ribelle	Motorbike	\$48,875	21.5	200
	Ego	Motorbike	\$51,655	21.5	200
	EsseEsse9	Motorbike	\$45,167	21.5	200
Evoke	Urban Classic	Motorbike	\$7,999	7.8	250
Fonz Moto	Arthur 1	Scooter	\$3,990	1.68	50
	Arthur 2	Scooter	\$4,990	2.2	65
	Arthur 3	Scooter	\$6,990	3.3	100
	X1	Scooter	\$10,990	3.3	80
	NKDa	Motorbike	\$7,715	N/A	50
	NKDs	Motorbike	\$10,715	N/A	100
	NKD+	Motorbike	\$13,215	N/A	150
	NKDx	Motorbike	\$15,715	N/A	200
Horwin	EK3	Scooter	\$6,999	2.88	60-80
	EK1	Scooter	\$5,499	2.88	70-90
	SK3	Scooter	\$6,499	2.88	60-80
	SK1	Scooter	\$4,999	2.88	70-90

KYBURZ	DXP	Tricycle		5.1-7.7	100-150
	DXC	Tricycle		5.1-15.4	80-230
Savic	Alpha	Motorbike	\$26,990	11	200
	Delta	Motorbike	\$19,990	9	150
Super Soco	TC CAFE	Motorbike	\$4,990	1.8	75
	TC MAX	Motorbike	\$8,290	N/A	110
	CPX	Scooter	\$7,690	N/A	75
	CUX SE DUCATI	Scooter	\$5,490	N/A	75
	CUX	Scooter	\$4,990	1.8	75
Switch	Escrambler	Motorbike	\$19,999	13	150
Vmoto	EVSI	Scooter	\$5,999	2.7	70-140
	G	Scooter	\$4,999	1.2	50
	T	Tricycle	\$4,999	1.2	50
WYLD	R	Motorbike	\$5,499	1.8	80
	THANG	Motorbike	\$5,499	1.8	50-60
	THANG PRO	Motorbike	\$9,999	6.1	90-130

State of Electric Vehicles

JULY 2023

