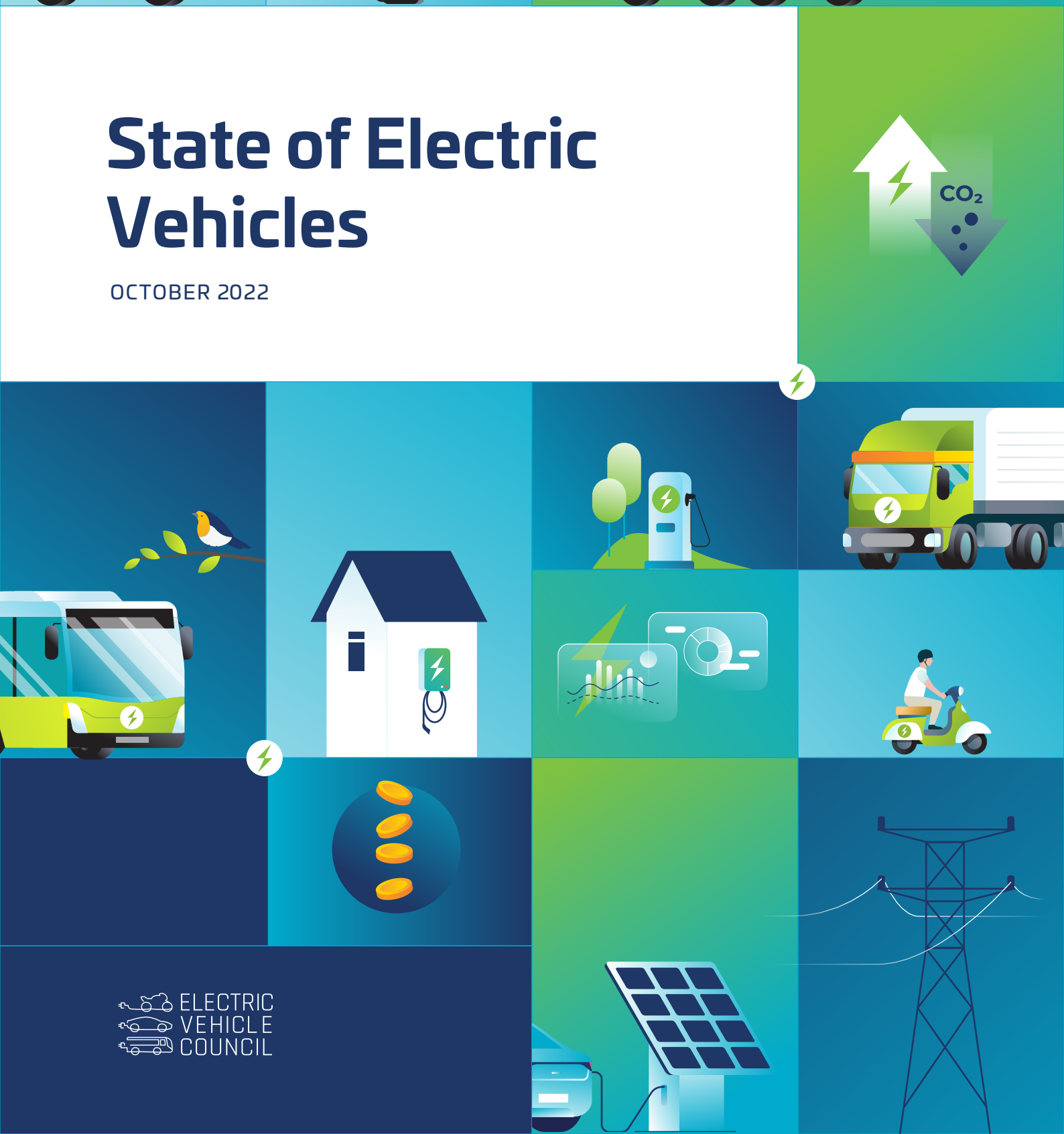
State of Electric Vehicles

OCTOBER 2022



ELECTRIC VEHICLE COUNCIL

Contents

Introduction

Demand for electric vehicles (EVs) in Australia has grown again, with the EV market share increasing by 65% in 2022 to 3.39% of new light vehicle (car) sales. While this is another significant milestone, further acceleration of EV adoption is a necessary prerequisite to achieving Australia's emission reduction targets. The primary barrier to EV adoption remains a lack of vehicle supply. To address this challenge there is an urgent need for a strong and serious national EV strategy.

We welcome the Federal Government's approach to prioritising the development of an EV strategy early in its first term. The National EV Strategy must ensure that Australians are able to access and capture the benefits of electric vehicles, while getting Australia on track to achieving our 43% emissions reduction target by 2030, and net zero emissions by 2050.

For too long Australia has been a dumping ground for some of the world's most inefficient vehicles. The time has come for a strong signal to be sent to the market that Australia is making the switch to a net zero transport system.

Australians want clean vehicles that do not fill their children's lungs with carcinogenic pollution, that don't cost tens of thousands of dollars to service and fuel over their lifetime, and that can be powered using cheap, Australian-made energy.

The US, New Zealand, Canada, the European Union and most of the OECD have gotten on with the job. Now, it's Australia's turn.

To catch up to the rest of the world, Australia must introduce a robust and ambitious fuel efficiency standard to provide consumers with greater choice in EV models, reduce fuel bills, and reduce emissions.

A weak fuel efficiency standard would be worse than doing nothing, and would not increase the supply of EVs to our country.

The Electric Vehicle Council's immediate priority is to continue to advocate for this necessary policy action, while continuing our work with all Australian governments to support the roll-out and integration of charging infrastructure into the electricity grid, the use of temporary incentives to support the purchase of EVs of all shapes and sizes, and commitments to future EV sales targets aligned with net zero emissions.

Encouragingly, already in 2022, we have seen one Australian government announce an end date for the sale of new petrol and diesel cars by 2035. The ACT Government has led Australia on EV and emissions policy for many years, and continues to implement initiatives that are consistent with our international partners in moving towards a net zero transport system. The ACT's approach is aligned with what the International Energy Agency has outlined as necessary for the world to achieve net zero by 2050. Even the former Federal Government's net zero plan has highlighted the need for almost every car, ute, van, bus and truck to be zero emission by 2050 in order to achieve net zero. To align with international targets and ensure this transformation can be achieved, Australia cannot afford to continue to sell new petrol and diesel cars beyond 2035.

The Electric Vehicle Council welcomes other Australian Governments to follow the ACT's lead. With the right policy action, EVs can soon be the default choice for Australians wanting to adopt cheap, affordable vehicles, powered using the solar energy collected from their roofs.

While Australia still has a long way to go to catch up to leading EV countries, with every Australian government now actively supporting the uptake of this innovative, zero emission technology, we have the opportunity to not only make this switch, but economically benefit from the transition.

The Electric Vehicle Council encourages governments to refocus their efforts on ensuring Australia not only transforms its own vehicle fleet, but economically benefits from the key role we have to play in supporting the decarbonisation of the world's vehicle fleet using Australian minerals, batteries, components, chargers and potentially even locally-manufactured vehicles. This opportunity can support the creation of thousands of jobs for Australians.

This State of EVs report provides the Electric Vehicle Council's latest assessment of Australian federal, state and territory governments with respect to electric vehicle policy. It also includes a local market update on EV sales, model availability and charging infrastructure deployment.

This edition builds on our March 2022 State of EVs report that focused on cataloguing EV policies introduced around Australia.

The Electric Vehicle Council looks forward to continuing to work with Australian governments, industry and consumers to champion the need for Australia's transition to a net zero transport sector.

We encourage all stakeholders to participate in the Federal Government's ongoing consultation on the National Electric Vehicle Strategy and to advocate for strong policy action to support the rapid uptake of electric vehicles of all shapes and sizes in Australia. To find out more, please visit our website at: www.electricvehiclecouncil.com.au

ELECTRIC VEHICLE COUNCIL

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The Electric Vehicle Council team would also like to acknowledge our former colleague Alexandra Kelly's support in preparing the content for this latest State of EVs report.

2022 Highlights

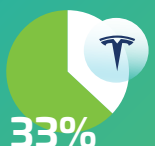
Sales Highlights

26,356
EVs sold YTD September 2022

3.39%
of all new cars sold are EVs

+65%
increase up from 2% during 2021

9.5%
ACT leads Australia on 9.5% of all new cars being EVs

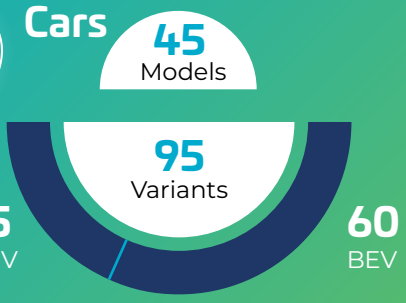


33%
Tesla Model 3 accounted for 33% of EV sales

Top 5 EVs sold so far in 2022

8,647	5,376	1,185	897	779
Tesla Model 3 BEV	Tesla Model Y BEV	MG HS PHEV	Hyundai Kona BEV	Polestar 2 BEV

Model Availability Highlights



18
models of electric trucks, vans and utlity vehicles

18
models of electric buses

Charging Highlights

3,669
public chargers across

2,147
locations in Australia

274
fast charger locations

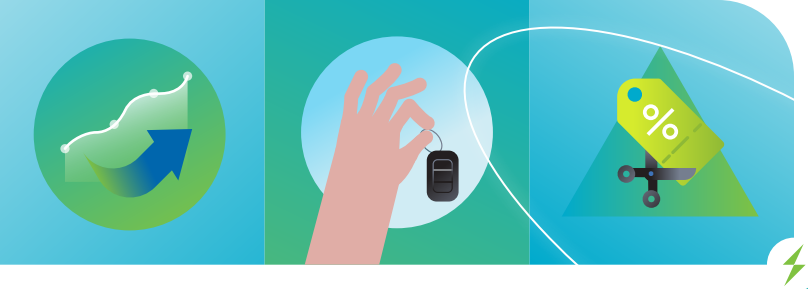
82
ultra-fast charger locations

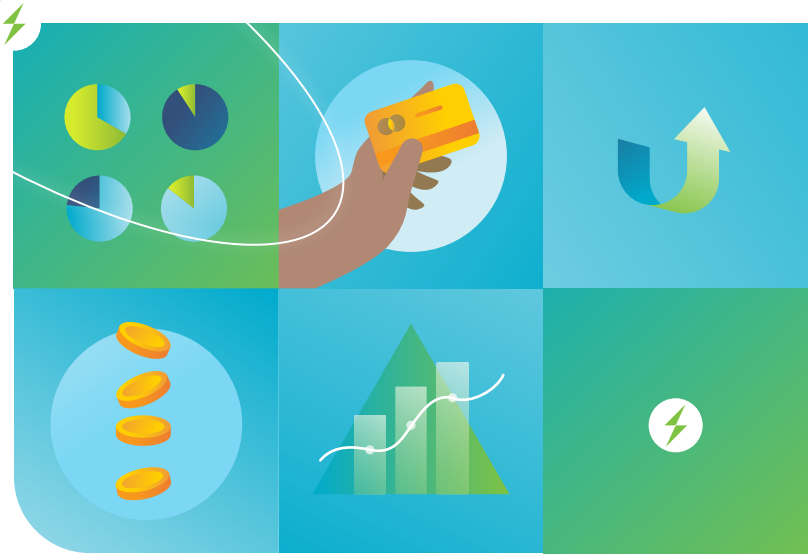
Types of charging:

up to 24 kW AC/DC
REGULAR CHARGING

24 –99 kW DC
FAST CHARGING

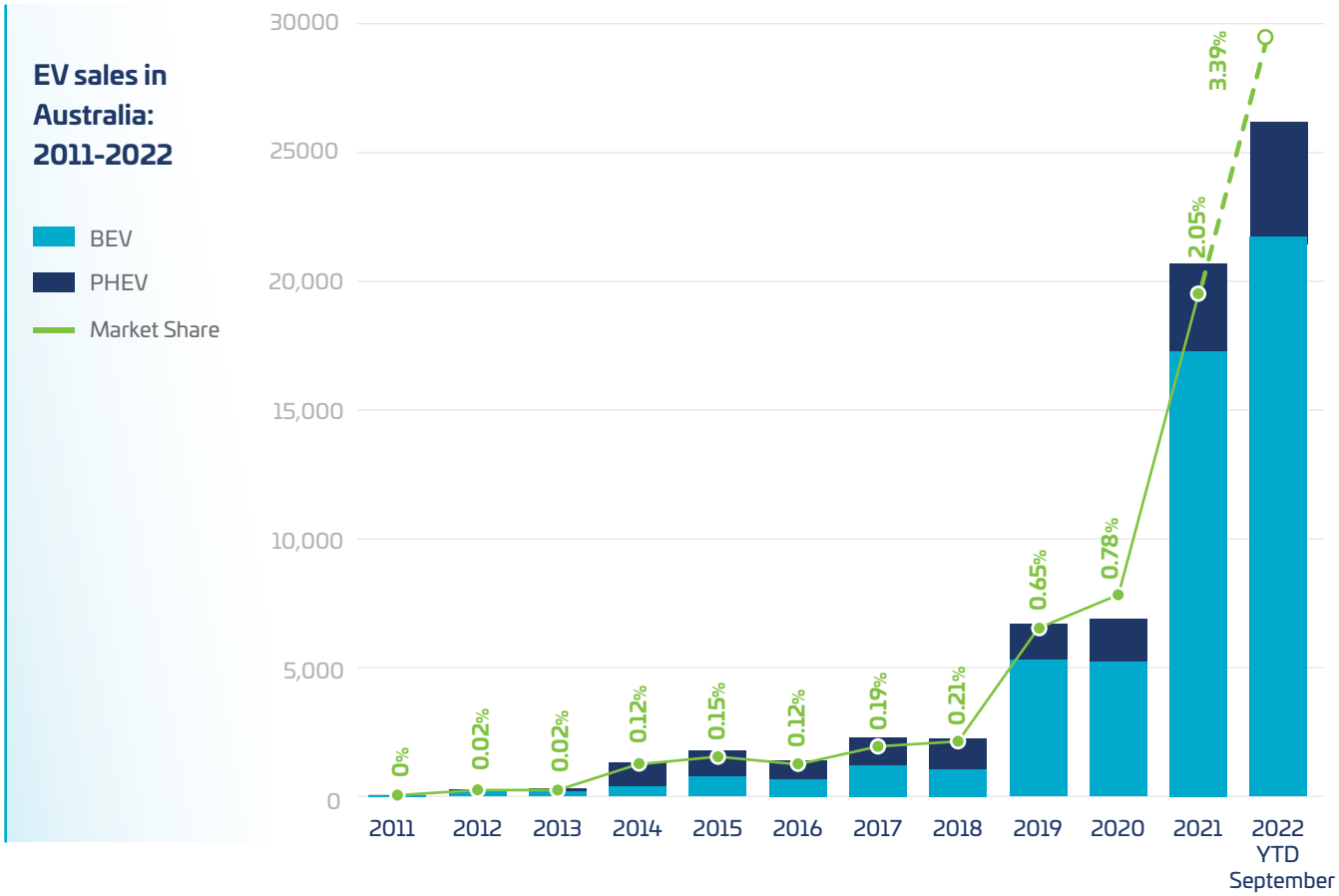
100kW+ DC
ULTRA-FAST CHARGING





Electric Vehicle Sales

During the first three quarters of 2022 a total of 26,356 EVs were sold. The share of new vehicles sold in Australia that were EVs increased to 3.39% (YTD September 2022), compared to 2.05% in 2021. This represents a 65% increase in the market share of electric vehicle sales so far in 2022.



Rapidly growing interest from consumers wanting to make the switch to an electric vehicle has seen some models being sold out within minutes of being made available for purchase. This persistent demand for EVs is not being met due to a lack of supply of EV models to the Australian market – in large part due to the absence of a fuel efficiency standard.

The introduction of a robust and ambitious fuel efficiency standard is a necessary prerequisite for significantly increasing EV model availability in Australia. Additionally, temporary incentives to reduce the upfront cost of EVs, and support for the deployment of charging infrastructure, will continue to be critical policy levers for driving EV adoption, and getting Australia on an emissions reduction pathway aligned with our targets of a 43% reduction by 2030, and net zero by 2050.

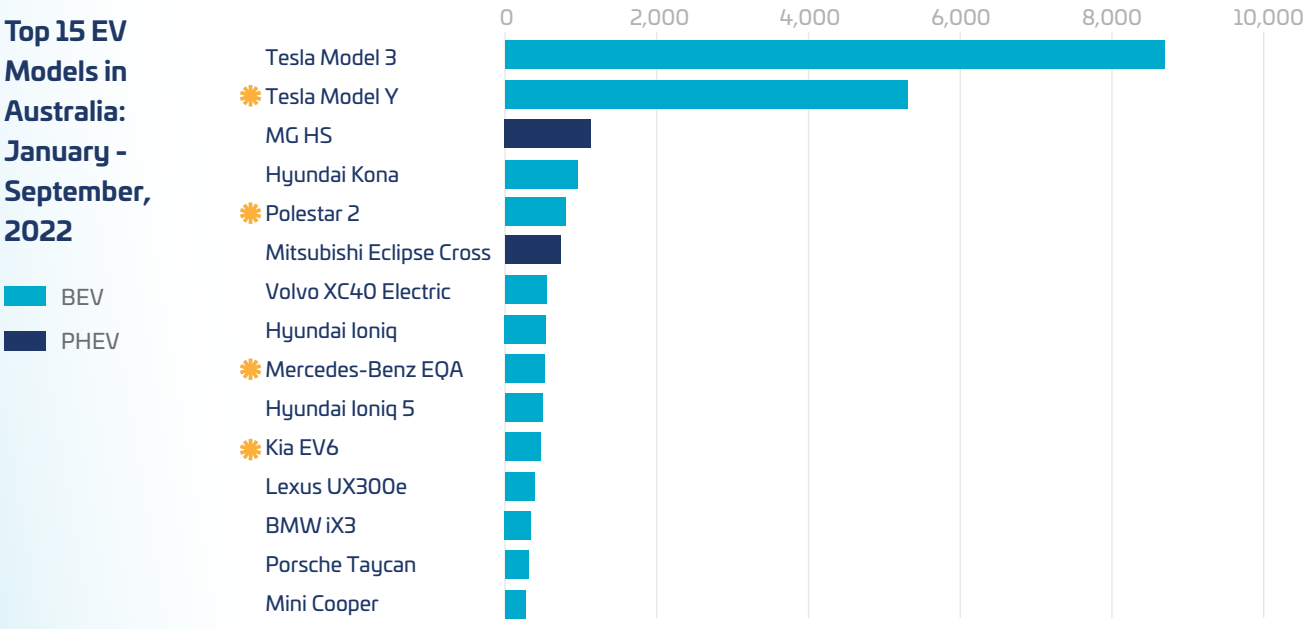
Top-selling EV models

The Tesla Model 3 has continued to dominate EV sales so far during 2022, accounting for 33% of new EVs sold. Despite first deliveries of the Model Y starting only in August of this year, this model has already skyrocketed to second place on the sales chart, representing 20% of new EV sales.

Encouragingly, as of September, 2022, there are 25 different EV models in Australia that have sold more than 200 vehicles each during 2022. The sales figures for the 15 top-selling EV models are included below.

It is worth noting that of the 15 top-selling EV models so far in 2022, 13 were BEVs, while only 2 were PHEVs. Of notable absence from this list is the MG ZS EV (BEV) and Mitsubishi Outlander (PHEV). While both of these models were top-sellers during 2021, new versions of these EVs were not available for purchase during the first half of 2022.

Top 15 EV Models in Australia: January - September, 2022



Vehicles denoted by ✱ are new additions to the Australian market in the last 12 months.

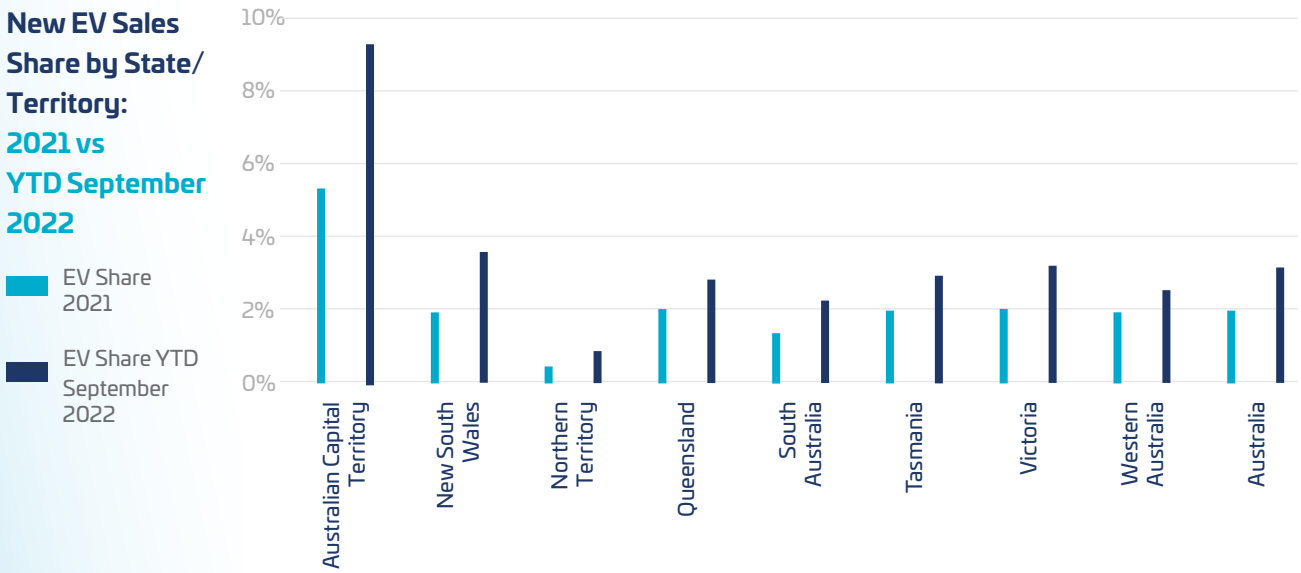
EV sales across Australian States and Territories

Every Australian state and territory government has now introduced some form of incentive for the purchase of electric vehicles. These incentives include: upfront rebates off the purchase price of the vehicle, zero interest loans, and stamp duty and registration discounts.

While it is still too early to assess the impact of these policies – with many launched in the past 12 months – as shown we can see that the ACT continues to lead the country on EV sales (as a proportion of new vehicle sales) at 9.5%, followed by New South Wales (3.7%), Victoria (3.4%), Queensland (3.3%), Tasmania (3.3%), Western Australia (2.8%), South Australia (2.3%), and the Northern Territory (0.8%).

It is notable to also mention that New South Wales has seen a 84% increase in EV sales during 2022 so far compared to 2021, followed by a 76% increase in the ACT, and a 75% increase in the Northern Territory.

New EV Sales Share by State/ Territory: 2021 vs YTD September 2022



The Federal Government has also introduced its electric car discount, comprised of a removal of import duty for EVs manufactured in countries with which Australia does not have a free trade agreement (principally the EU and UK). Additionally, this policy includes the removal of the Fringe Benefit Tax (FBT exemption) for fleet vehicles, as well as consumers that can purchase an EV through a salary sacrifice arrangement.

Although it is not yet possible to assess the impact of the Federal Government's electric car discount, once passed by the senate we expect it to be a strong driver in further increasing EV adoption. This is largely due to the significant benefit provided to fleets and salary sacrifice vehicles through the FBT exemption. Further detail on the electric car discount has been included on page 23 of this report.

Ultimately, the full benefit of this policy, and other incentives, will only be realised through the introduction of an ambitious fuel efficiency standard that can assist in ensuring EV supply meets this increasing demand.

Electric Vehicle Model Availability

BEV

Battery electric vehicle

A BEV is 100% powered by a battery 100% of the time.

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 up to a certain range or use the engine.

Availability of all types of electric vehicles continues to be restricted by supply constraints – both globally and locally. While Australia is not immune from global challenges, it is important to note that similar right-hand drive markets, like the United Kingdom, are achieving more than 20% of all new vehicles sold being EVs, while Australia is roughly one-sixth of this. The difference between our markets is that Australia lacks an ambitious fuel efficiency standard and nationally-consistent EV policy.

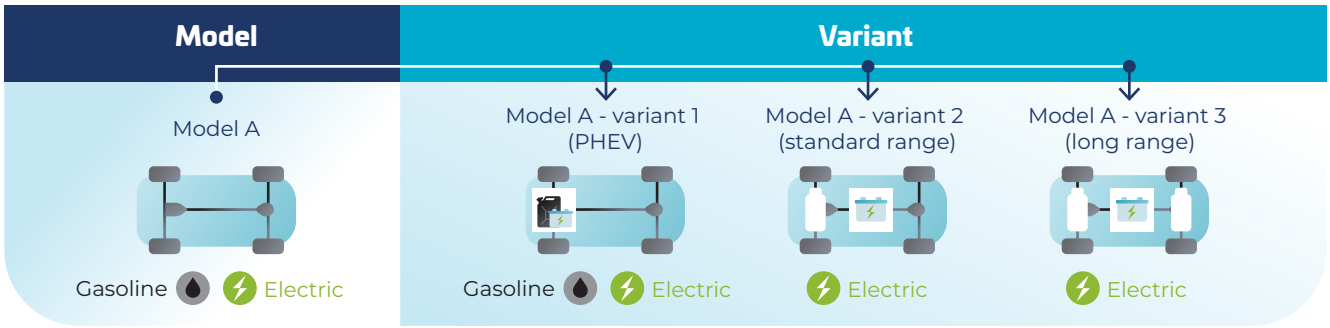
This limited model availability is restricting choice for Australian consumers, and in turn holding back the transition to EVs. The good news is that this issue can be resolved in the coming years if an ambitious fuel efficiency standard is introduced as soon as possible.

An update on model availability across vehicle segments has been included below. Please note, the figures presented here are based on industry submissions and desktop research. While some errors may be present, the intention here is to provide approximate estimates on availability.

Light Vehicles (Cars, vans, utes)

Since our last State of EVs report in March, 2022, 11 new BEV and PHEV models have been introduced to the Australian market. This brings the number of electric vehicle models available in the Australian market to 45. These 45 electric vehicle models include a total of 95 variants. There are approximately 60 BEV and 35 PHEV variants. For comparison, there are approximately 140 BEV variants and 40 PHEV variants in the United Kingdom. In the future, we can expect to see the introduction of an additional 26 electric vehicle models in Australia, including 23 BEV and 3 PHEV variants.

Diagram of model and variants



Electric motorcycles , bikes and scooters

The electric motorcycle and scooter market has been relatively stable over the first half of 2022, with many models available from Australian-owned companies. It is also worth noting shared electric bikes and scooters (micro-mobility) have continued to expand in their presence across Australia through various deployments and trials.

Electric trucks, utility vehicles and vans

In total there are now 10 electric trucks, 4 utility vehicles, and 4 vans available on the Australian market.

Further expansion of the electric truck market is dependent on changes to Australian Design Rules on truck width to align with international standards, and the introduction of policy actions to support the adoption of electric trucks, including incentives and a 1 tonne mass concession.

Electric buses

18 manufacturers are now supplying electric buses to the Australian market. Given that many state and territory governments are now committing to electrify public transport, we can expect the bus vehicle segment to continue year on year growth.

Charging Infrastructure

Charging infrastructure in Australia continues to expand. As at 30 June 2022, the number of public charging locations was 2,147, while the number of individual public EV chargers in service was 3,669. This is a 15% increase in charging locations compared to early 2021.

Note that many of these locations have multiple charging bays in place, to support multiple cars charging simultaneously.

Public charging locations over time

Of these locations, 356 have fast or ultrafast charging infrastructure. This is a 22% increase in the number of locations since 2021.

Public charging locations by region and power level, as at 30 June 2022:

State/territory	Regular (below 24kW, AC and DC)	Fast (24kW - 99kW DC)	Ultrafast (100kW DC and above)	Grand Total
ACT	35	4	1	40
NSW	529	85	33	647
NT	22	1	0	23
QLD	301	57	10	368
SA	178	26	6	210
TAS	91	14	5	110
VIC	383	51	21	455
WA	252	36	6	294
Grand Total	1,791	274	82	2,147

The data included above is drawn from Plugshare, a publicly available crowd-sourced platform designed to enable drivers to find public charging stations. The Electric Vehicle Council has made efforts to cleanse the data to provide a reasonably accurate snapshot of the current state of play, but we have not independently verified every location.

Public charging reliability

COVID and the war in Europe have disrupted global supply chains in the electrical industry, which has impacted the supply of EV charging hardware and supporting components, including spare parts. This means that the time taken to fix broken EV charging equipment is currently longer than usual.

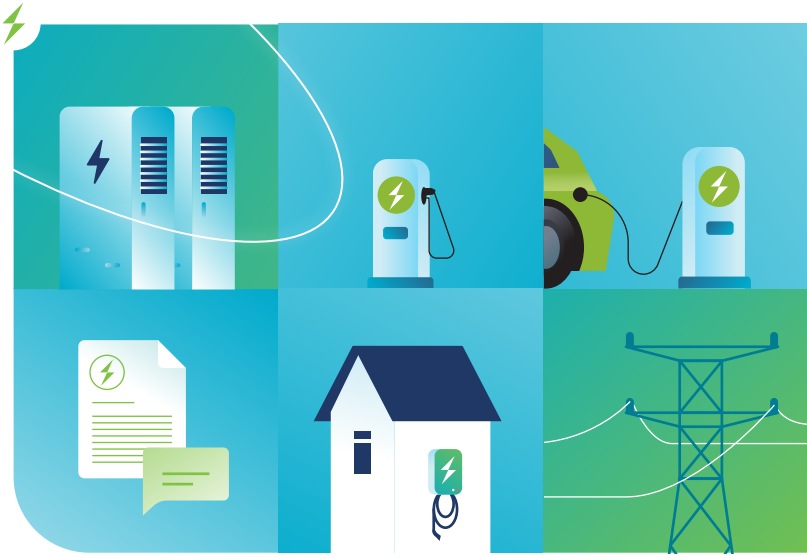
Coupled with this interruption, many public charging locations in Australia have been deployed with a single charger. Of the 363 fast and ultrafast charging locations currently deployed, 257 of them (70% of locations) have a single EV charger in service. In addition to potentially creating queuing issues as the number of EVs on our roads increases, a single charger at a location means that if it's out of service, the driver needs to go somewhere else until the site owner or operator can arrange the repair of the infrastructure.

It has been reported to us that there have been instances where the upfront cost of deploying a fast charger is budgeted for by a site owner, but no budgetary provision is made for ongoing maintenance. This means that if the equipment fails for any reason, there's no money available to bring it back into service.

These factors and others have created a circumstance where public EV charging equipment is, in some cases, less reliable than consumers have a reasonable right to expect. We're not alone in facing this challenge – the same issue is at play in Europe and the US, and it's being collaboratively addressed by industry and government.

The Electric Vehicle Council is working with its members, and with the federal, state, and territory governments, on a charging reliability framework designed to address this issue.

The framework will take into account site design for redundancy, maintenance planning, accountability, visibility, accessibility, payment methodologies, and a range of other factors selected to ensure that when drivers roll up to public charging equipment, it's available to use.



Energy policy related to Electric Vehicles

The Australian electricity system has been challenged in recent months, requiring unprecedented intervention from the Australian Energy Market Operator (AEMO) to maintain reliability of electricity supply to homes and businesses around the country.

Questions around the impact of EVs on the energy system have been raised many times, in many places. The recent issues in our energy system highlight the need for effective integration of EVs into the grid.

Put simply: In a future where EVs are the dominant form of road transport, if we choose to do most of our vehicle charging at peak times when the electricity networks are working hard supporting heating or cooling in our homes, we'll need to augment the energy system to support that choice, and the introduction of EVs could drive up energy prices.

However, if we choose to do the majority of our vehicle charging at non-peak times, tens of billions of dollars worth of energy system costs can be avoided, and the transition to EVs will instead put downward pressure on energy costs for all consumers.

The risk here isn't that EVs will break the grid, or that consumers won't be able to charge their cars. It's going to take decades to transition the on-road fleet from petrol and diesel to electric, so there's ample time to execute on the transition in the energy system. The risk is that if the majority of EV charging happens at the wrong time of day, it could create an expensive outcome for everyone.

What are consumers choosing to do at home today?

Many studies have been done on this matter, both in Australia and around the world. The Electric Vehicle Council has pulled together some of the most recent and relevant work on this matter, with a particular focus on Australian consumers.[1]

One of the key takeaways from this recent report is that Australian consumers are not generally charging their cars at peak times. In the studies we've reviewed, there are two characteristic spikes in usage:

the middle of the day, corresponding with self-consumption of solar

the middle of the night, corresponding with off-peak electricity pricing

The savings available to consumers through these choices are significant, typically amounting to $500 to $1,000 per year per vehicle.

While it would seem likely that people will get home from work, plug in, and start charging, this is not actually what's generally happening. They're plugging in while they're at home, but they're using a wide range of methods to control when charging starts. This can be as simple as setting the preferred charging times in the car, like setting preferred radio stations – very much 'set and forget'.

Across the various independent studies and data sets, contribution to peak demand by EVs at home is on the order of 250 Watts per vehicle. This is equivalent to about 1 in every 30 cars (3%) using a standard 7kW charger at home during peak time.

If we extrapolate this behaviour out to 2030 and assume around 1.5 million EVs on the road at that point, the impact on overall peak demand will be about 1%. For context, year-to-year variation in peak demand caused by the weather is about 10%. As long as consumers follow the money and take the simple step of scheduling their charging, this is not likely to create a near-term system-level problem.

Longer term, centralised orchestration of EV charging, with the explicit consent of consumers, may offer a lower cost solution than increasing the capacity of the network. With this in mind, the EVC supports efforts to ensure that EV charging equipment installed in domestic settings is enabled with OCPP 1.6J communication capability, in a nationally consistent manner. This is a globally standard communications protocol, proven in multiple ARENA-funded trials to be suitable for demand response solutions.

1 https://electricvehiclecouncil.com.au/reports/home-ev-charging-and-the-grid-impact-to-2030-in-australia/

What are consumers choosing to do in public today?

We expect the majority of energy delivered into EVs to occur at home (over 80%). Charging at home combines maximum convenience with minimum cost for most consumers. In Australia, this outcome is supported by a housing mix where the majority of consumers, whether renting or owning, have a driveway or garage next to their home, with convenient access to an existing electrical supply that they're already paying for.

Public fast charging currently accounts for approximately 10% of energy delivered to EVs in Australia, principally serving drivers on long journeys, and those without ready access to charging at home. Unlike charging at home, public fast charging mainly occurs in the middle of the day, while people are out and about. The majority of energy usage at public fast chargers is concentrated into the same part of the day as solar generation, which is excellent news from the point of view of the wider electricity system, and is supporting the uptake of renewable energy.

The challenges of deploying public charging come down to the need to strengthen the energy networks at specific locations. A location capable of delivering ultrafast charging to multiple vehicles will typically need a dedicated transformer. Enabling the planning and installation of new transformers and network connections in a timely manner and ensuring that the right tariff structures are in place to support the roll-out of fast charging locations, will be key to accelerating the deployment of public fast charging. Responsibility for this rests largely with the energy networks, the regulators, and state, territory and federal governments, working in consultation with industry.

What else do we need to do about this?

Consumer behaviour around the charging of EVs is an area which requires continued monitoring. Current EV drivers are relatively early adopters, so their behaviour may not be representative of mainstream consumers in coming years. Education campaigns, highlighting the direct financial benefits to consumers of charging their cars at non-peak times, will likely prove important.

Energy networks will also need improved visibility on where EVs are entering the system so that they can identify areas that are adopting EVs at rates much faster than the national average. This is known as clustering – where clusters of EVs are turning up in particular pockets on the network.

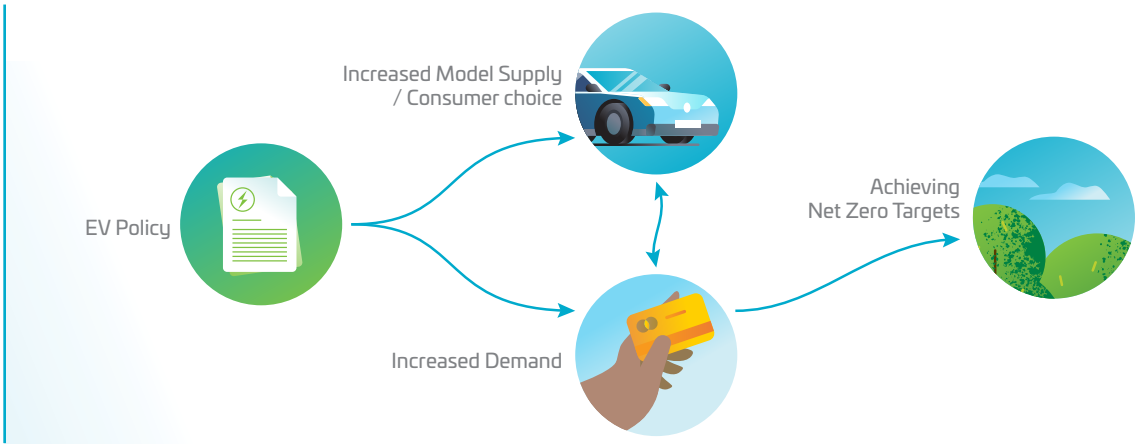
This increased visibility will be best delivered through improved record keeping of the installation locations of EV charging equipment, appropriately managed data-sharing between vehicle registration bodies and energy market participants, and technology based approaches, such as transformer monitoring.

Electric Vehicle Policy

The adoption of electric vehicles has been strongest in markets where nationally-consistent policy has been introduced to attract a wide supply of EV models, and importantly, to stimulate consumer demand during the early stages of the transition.

There is clear evidence to show that a combination of both strong and sustained supply and demand policies are necessary for driving EV adoption. In markets where governments have introduced supply regulation, such as fuel efficiency standards or sales mandates, there have been clear increases in model availability, with vehicle manufacturers prioritising those markets for the supply of EVs.

Conversely, in markets like Australia where we have no supply regulation, we are a low priority for EV supply. This leads to fewer choices and higher fuel bills for consumers, slower adoption rates, continued dependency on imported fuel, and ultimately jeopardises Australia's chances of achieving its emission reduction targets of 43% by 2030, and net zero by 2050.



The Federal Government has the most influence in driving an increase in the supply of electric vehicle models through policies, such as an ambitious and robust fuel efficiency standard. Without the introduction of this policy, Australians will continue to miss out on the choice of EV models that they want to buy.

While it is encouraging that every Australian government now has some form of policy to support the adoption of EVs, an increase in the supply of EV models is critical for maximising the impact of these initiatives.

In addition to driving adoption, incentive policies can also work in tandem with a fuel efficiency standard to increase model supply by making Australia a more attractive market for vehicle manufacturers. Key to delivering this outcome, however, are nationally-consistent eligibility rules so consumers and manufacturers understand which EVs are eligible for support. Unfortunately, differing rules across incentive programs in Australia - as shown on the next page - are leading to confusion among consumers, and reducing the overall potential effectiveness of these well-intentioned policy actions.

The Electric Vehicle Council calls on Australian governments to work collaboratively to align their incentive programs to be nationally-consistent. In our view, state and territory incentive programs should include:

- an upfront rebate and/or zero interest loan with a monetary value of at least $3,000 available to all EVs up to the fuel-efficient luxury car tax limit ($84,916) and pegged to this limit so that it is indexed over time.
- a full exemption from purchase stamp duty
- at least 2 year's free vehicle registration.

Temporary incentives introduced by the Federal Government should also conform to the same eligibility rules, as outlined above. We also recognise the need for greater support to be directed towards BEVs, as opposed to PHEVs, given there is a higher difference in upfront costs between BEVs and equivalent petrol/diesel vehicles.

Finally, while there are promising signs of Australian governments uniformly being committed to the decarbonisation of light vehicles, as a nation we still have a long way to go in order to decarbonise other transport segments – such as buses and trucks. The decarbonisation of these transport segments will be critical not only for achieving net zero by 2050, but also to achieve a minimum 43% reduction by 2030. Much greater effort is required from Australian governments to stimulate the electrification of these transport segments, starting today.

What EV incentives are available across Australian states and territories?

Here we have provided an example of what incentives are available in each Australian state and territory for a consumer purchasing an electric vehicle for $50,000.

As previously outlined, while each of these programs are well intentioned, unfortunately the significantly differing eligibility rules across jurisdictions is leading to confusion amongst consumers and vehicle manufacturers.

Government	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Party	Labor/ Greens	Coalition	Labor	Labor	Labor	Coalition	Labor	Labor
Registration discount over 5 years^	$1,166	$0	$965	$364	$414	$0	$500	$0
Stamp duty discount	$1,450 (2.9%)	$1,500~ (3.0%)	$1,500** (3.0%)	$500 (1.0%)	$0	$2,000 (4.0%)	$0	$0
Rebate	$0	$3,000	$0	$3,000	$3,000	$0	$3,000	$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	Not yet charged
Approximate total incentive value	$6,708	$4,500	$2,465	$3,864	$3,414	$2,000	$1,888	$3,500
No. of Subsidies Currently Committed	0	25,000	0	15,000	7,000	0	20,000	10,000
Rebate / zero interest loan vehicle price limit	$84,916 i.e. Fuel Efficient Luxury Car Tax Limit	$68,750	N/A	$58,000	$68,750	N/A	$68,740	$70,000
Rebate available to businesses				Yes	Yes	Yes	Yes	
Rebate available under a novated lease					Yes		Yes	Yes

^Queensland and Victorian registration discounts are ongoing; Northern Territory limited to 5 years; South Australia limited to 3 years; Australian Capital Territory limited to 2 years; no vehicle price limits; New South Wales does not offer a specific EV discount. ~Stamp duty has been permanently phased out for EVs in exchange for the future introduction of a road user tax. *Assumes 5% interest rate on a normal car loan. #Assumes an average of 12,400 km travelled p.a. +Available at this rate for the first 6,600 eligible vehicles purchased; rate to be confirmed for the remainder of subsidies.**Only available for vehicles up to $50,000.

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

The Federal Government's electric car discount

As one of the first pieces of legislation introduced to parliament, the new Federal Government is in the process of implementing its electric car discount. The electric car discount is comprised of two components:

1. An exemption from import duty for all EVs under the fuel-efficient luxury car limit of $84,916.
2. An exemption from fringe benefits tax for all EVs under the fuel-efficient luxury car limit of $84,916.

Import Duty Exemption

While many EVs in the Australian market are already exempt from import duty (5% of the retail price) under existing free trade agreements, this policy levels the playing field by removing this tariff from EVs primarily imported from the EU and UK.

While only a small number of current models will benefit from this policy, there are many EV models available in the UK/EU markets that are not yet sold in Australia. If the supply of these models can be increased – principally through the introduction of an ambitious fuel efficiency standard – then more EU/UK models may be introduced to the Australian market, and benefit from this exemption.

Fringe Benefits Tax Exemption

A fringe benefit is a 'payment' to an employee, but in a different form to wages. This includes allowing an employee to use a work car for private purposes, providing access to a car under a salary sacrifice package. Given the value of these benefits can be significant, the purpose of the fringe benefits tax is to treat these benefits as if they were income.

The problem with fringe benefits tax for EVs is that the higher the cost of the vehicle, the higher the tax that needs to be paid. Since many EVs still cost more than equivalent petrol or diesel vehicles, this policy makes it even more difficult for fleets to adopt the technology, which is then a key barrier to creating a second-hand EV market in Australia.

Additionally, the FBT makes it unattractive to salary sacrifice an EV.

What is the Federal Government doing to about the negative impact of the fringe benefits tax on EV purchases?

The Federal Government has introduced new legislation that will make EVs (up to the fuel-efficient luxury car tax limit of $84,916) exempt from fringe benefits tax for a period of up to 3 years (initially).

While the precise details of the policy are still being finalised, what is clear is that this policy has the potential to provide fleets and/or individuals who choose to salary sacrifice an EV a tax saving of around $3,000 - $5,000 per annum.

This is a significant policy that will effectively reduce the cost of an EV to be at parity with an equivalent petrol or diesel car. As a result, it has the potential to generate significant demand for EVs in the near term, getting Australia back on track in terms of decarbonising our transport sector.

Importantly, since the fringe benefit tax exemption is a short-term measure, it will also have a significant impact on encouraging these EVs to be sold after a few years (since it is expected the tax exemption will be phased out). As a result, this policy has the potential to drive the creation of a second-hand EV market for other Australians to benefit from.

Critically, however, this policy will only be effective if there is sufficient supply of EVs to meet the increased demand. This again highlights the importance of introducing an ambitious fuel efficiency standard, so Australians can have greater choice in the EV models available to them, and so that government incentive programs can have maximum impact.

Should PHEVs receive the same level of incentives as BEVs?

Plug-in hybrid electric vehicles (PHEVs) can play an important role in the short-term as a transitionary technology for those vehicle segments where fit-for-purpose BEVs are not yet available, or where public charging infrastructure is not yet adequate.

PHEVs have the potential to reduce emissions if they are regularly charged e.g. charged often enough to drive 75% or more on the battery alone (on average).

PHEVs that are not regularly charged do not significantly reduce emissions and therefore should not be actively supported.

Governments and industry need to work collaboratively to ensure the right incentives and programs are in place to encourage the regular charging of PHEVs.

PHEVs will not require the same level of support as BEVs because the upfront cost difference between petrol/diesel vehicles and PHEVs is lower than the upfront cost difference between petrol/diesel vehicles and BEVs.

Electric Vehicle Policy Scorecard

The following section of this report details our assessment of how Australian governments are tracking on EV policy.

For 2022 we have expanded our methodology in response to the pressing need for governments to support decarbonisation of the transport sector beyond solely light vehicles. While light vehicles make up around 62% of transport emissions, heavy vehicles such as trucks and buses, 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 significantly increased to decarbonise 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 different metrics. These metrics are then weighted to provide sub-category scores out of 10, and in turn, an overall summary EV policy score out of 10. An explanation of each of the metrics assessed can be found in Appendix A.

It is important to note that the newly elected Federal Government is currently undertaking consultation to inform its National Electric Vehicle Strategy. The assessment below has been conducted on the basis of what has been announced at the time of publication, but we recognise there are ambitions to take further steps through this new strategy. We encourage all stakeholders to provide input to the Federal Government's ongoing consultation on its National Electric Vehicle Strategy. To find out more, please visit our website: www.electricvehiclecouncil.com.au

We also note the South Australian Government has also only been recently elected in 2022, and this state of play does not reflect their future intent in supporting EVs.

Dedicated Electric Vehicle Strategy

A dedicated electric vehicle strategy is critical for sending a strong signal to industry and consumers about the government's commitment to and plans for supporting the transition to this critical zero emission technology.

All but one jurisdiction in Australia now has a dedicated EV strategy, with many jurisdictions now on the second or third iteration of their EV strategies.

The Electric Vehicle Council encourages all Australian governments to continue to develop new actions under their respective EV strategies to support market development in response to emerging conditions. This will help to ensure EV adoption continues to increase across all transport segments, and support Australia in achieving our emission reduction targets.

FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
✓*	✓	✓	✓	✓	✓	✓^	✓	✓

*The Future Fuels and Vehicles Strategy was introduced by the former Federal Government. The new Federal Government plans to introduce a National Electric Vehicle Strategy in the near future. ^The Tasmanian Government has EV policies, but not a dedicated EV Strategy.

Summary of EV policy scores

A summary of the EV policy scores that we have allocated to each Australian government is included below. Further detail on the metrics that have informed these summary policy scores are outlined in the following section of this report.

As shown, no single jurisdiction leads on every policy area, and all have room for improvement.

We look forward to all Australian governments building stronger collaboration to move towards nationally-consistent EV policy with the objectives of:

Achieving our national emission reduction targets

Getting carcinogenic pollution out of our communities and towns

Giving Australian households and businesses more choices when it comes to making the switch to an EV

Improving our national security by powering transport using Australian-made energy

And harnessing the major economic opportunities that this transition presents, whether it be through the redirection of ten of billions of dollars each year in overseas fossil fuel spending to Australian-made energy to power our vehicles, or creating thousands of new jobs across the full EV value chain – from mining to manufacturing and recycling.

The opportunity for Australia to make this transition and capture the enormous associated benefits still exists, but it wont last forever, and the time for action is now.

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

Light Vehicles

The majority of transport emissions come from light vehicles – cars, utes and vans. This is a critical transport segment to decarbonise, and one which governments have had a primary focus on in recent years. Here we provide greater insight into how different governments are tracking in supporting the electrification of light vehicles.

Regulation

The number one barrier to EV uptake in Australia is the lack of supply regulation, e.g. a national fuel efficiency standard. Without supply regulation, Australia will remain an EV laggard. Australian federal, state and territory governments need to work collaboratively to support the introduction of a robust and ambitious fuel efficiency standard. We welcome the Federal Government's consideration of this important policy as part of its National Electric Vehicle Strategy.

While supply regulation is generally lagging, we have seen encouraging moves by some states and territories to set ambitious sales targets, and signal the future end of the sale of new petrol and diesel cars. The ACT is leading the nation with a target of 80-90% zero emission vehicle sales by 2030, and the phase out of new petrol and diesel cars by 2035 – in line with the International Energy Agency's view that this is a critical commitment for having a credible net zero policy. Queensland has also outlined a goal to have 200,000 zero emission vehicles in the state by 2027 - in line with the EVC's recommended national target of 1 million EVs by 2027.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Supply regulation (fuel efficiency standard / sales mandate)	25%	0%	0%	0%	0%	0%	0%	0%	0%
Sales target	0%	100%	50%	0%	75%	25%	0%	50%	0%
Government fleet target	0%	100%	75%	25%	100%	75%	75%	50%	25%

Incentives

Every Australian government now has some form of incentive to support the uptake of electric vehicles. While most are focussed on reducing the upfront cost, some also providing ongoing cost savings e.g. annual registration exemptions. New South Wales is the only government with a targeted fleet incentive - noting some jurisdictions also allow fleets to apply for a certain number of EV rebates. The Electric Vehicle Council encourages governments to further increase support for fleets to accelerate the creation of a second-hand EV market, and provide equitable access to EV technology for all Australian households and businesses. It is recognised that the Federal Government's Fringe Benefits Tax exemption for EVs will also support EV adoption in fleets that have higher levels of non-business use.

Australian governments should start thinking about what policies may be required in the next 10 to 20 years to assist with getting older, higher-polluting petrol and diesel vehicles out of the national fleet and accelerate fleet turnover to meet climate targets e.g. vehice scrappage programs linked to EV adoption.

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

Charging Infrastructure

Arguably, charging infrastructure for light vehicles one of the areas where governments have been doing best, particularly in terms of public charging. This is not to say that more support isn't required, but that the level of support so far is largely keeping pace with uptake. This pace will need to be maintained as EV adoption accelerates, and efforts will be required to ensure coverage across the nation is adequate.

Governments also have more work to do to support workplace charging, whether that be at individual premises or at commuter car parks. These are prime locations for EVs to charge during the day, soak up excess solar energy, and charge at a relatively low rate using regular charging infrastructure. Additionally there is a need for further support for rolling out charging infrastructure in apartments. New South Wales and the ACT are leading in this space through their recently announced programs funding infrastructure for these types of buildings. The Electric Vehicle Council also welcomes recent amendments to the National Construction Code for all new apartments to be EV-ready from late 2023.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Public regular charging	50%	100%	100%	0%	25%	100%	25%	50%	50%
Public fast charging	100%	50%	100%	25%	50%	50%	50%	25%	50%
Workplace charging	0%	25%	25%	25%	25%	75%	25%	75%	100%
Home charging	0%	50%	0%	50%	0%	0%	0%	0%	0%
EV readiness	50%	50%	50%	25%	25%	25%	25%	25%	25%
Retrofit programs (electrical infrastructure)	0%	75%	100%	0%	0%	0%	0%	25%	0%
Resources to enable Strata	0%	100%	100%	0%	25%	0%	0%	25%	0%

Awareness

Often overlooked, continuing efforts to build awareness of EV technology is critical for fostering confidence and support in the community to make the switch. While undoubtedly sentiments have changed in recent years, and more and more Australian households and businesses are ready to make the switch, it is important that no one feels they are being left behind, and that the benefits of Australia's move to an electric transport system are made clear. This also flows on to developing the skills and training support to capture the job opportunities from this transition. While most governments are undertaking a range of awareness activities, there is still a lack of information regarding the negative impacts of existing petrol and diesel vehicles.

The Electric Vehicle Council would like to see Australian governments adopt vehicle pollution labels and/or increase awareness of the impact that existing petrol and diesel vehicles are not only having on the environment, but importantly on our health, and our children's health through the carcinogenic fumes they produce in our neighbourhoods.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Skills and training	25%	75%	25%	0%	25%	0%	0%	50%	0%
Consumer awareness	50%	25%	75%	25%	25%	50%	0%	75%	25%
Electric vehicle drive days	0%	25%	100%	0%	25%	25%	25%	25%	0%
Vehicle emissions / pollution labels	0%	0%	25%	0%	0%	0%	0%	0%	0%

Road User Charge

Australia needs to have a serious discussion on the future of transport funding, including consideration of what are the most efficient ways to raise road tax revenue. The Electric Vehicle Council supports a national enquiry into road taxation measures that takes into account the full economic costs and benefits of all vehicles, regardless of fuel type. This is an area in need of serious reform, and should not be subject to short-term solutions – such as simplistic per kilometre fees – which do nothing to tackle the major costs of transport e.g. congestion and emissions. Reliance on per kilometre fees to raise road tax revenue will also unfairly penalise regional communities.

We welcome the new South Australian Government's leadership in repealing the state's planned EV tax, and encourage other states to follow suit in support of a national enquiry led by the Federal Government.

Australians should not be penalised for a zero emission technology that can redirect billions of dollars into the local economy, support our national security by using Australian-made energy, and support the creation of thousands of new jobs. It is premature to take this short-sighted approach to introduce a tax solely on EVs, without broader reform of the road tax system, at the precise time when we need to significantly accelerate uptake of this technology to meet our emissions reduction targets. For this assessment we provide 100% to those governments that have not introduced a road user charge or proposed to introduced a road user charge solely targeting EVs.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Road user charge disincentive	100%	100%	50%	100%	100%	100%	25%	0%	25%

Light Vehicle Summary

In summary, the ACT government continues to lead Australia on EV policy for light vehicles, followed closely by New South Wales, and then the Federal Government, Queensland and South Australia.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Light Vehicle Policy Scorecard	7/10	9/10	8/10	4/10	7/10	7/10	3/10	5/10	4/10

Trucks

While trucks are a major contributor to Australia's emissions, this policy area is the most behind in regards to receiving government attention. With the exception of minor, targeted programs being run by the Victorian government, as well as the Federal Government via ARENA, there is too little policy action. To achieve Australia's target of a 43% reduction in national emissions, we expect that emissions from trucks and buses will need to fall by 2030, in contrast to the current expectation of a continuing increase in truck emissions.

In January, 2022, the Electric Vehicle Council released a report in partnership with the Australian Trucking Association. This report highlighted the actions governments need to urgently take to support the decarbonisation of this sector[2]. The Electric Vehicle Council calls on all governments to provide support for truck operators to decarbonise their vehicles, including the introduction of temporary financial incentives (including zero interest loans), sales targets to encourage supply, reform of Australian Design Rules to increase vehicle width to at least 2.55m and provide a 1-tonne mass concession to electric trucks, as well as the deployment of dedicated charging infrastructure for these larger vehicles. Given the amendment of ADRs can be a long process, we also call on Australian governments to provide temporary exemptions from ADRs - in terms of mass and width requirements - in order to accelerate the roll-out of electric trucks today.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Financial incentives	50%	0%	0%	0%	0%	0%	0%	25%	0%
Regulation (supply)	0%	0%	0%	0%	0%	0%	0%	0%	0%
Charging infrastructure	50%	0%	0%	0%	0%	0%	0%	25%	0%
Awareness	0%	0%	0%	0%	0%	0%	0%	0%	0%
Electric Truck Policy Scorecard	6/10	0/10	0/10	0/10	0/10	0/10	0/10	3/10	0/10

2 https://electricvehiclecouncil.com.au/wp-content/uploads/2022/01/ATA-EVC-Electric-trucks_Keeping-shelves-stocked-in-a-net-zero-world-1.pdf

Buses

While support for electric buses is marginally ahead of electric trucks, there is still a significant amount of policy support required to decarbonise this transport segment. Similar to trucks, these large vehicles are currently largely reliant on diesel, emitting carcinogenic pollution in our communities and towns, and present a major public health risk.

New South Wales and Victoria lead Australia in the deployment of this technology – but there is still more work to be done. New South Wales has made a strong commitment to electric buses, although it was disappointing to see the original target of decarbonising the state's bus fleet by the early 2030's recently be pushed back to 2047. This not only jeopardises the state's net zero target, but also leaves polluting vehicles operating in the community for far too long. That said, it is important to recognise most other jurisdictions have not set a phase-out of diesel buses either, so this is a national problem.

The Electric Vehicle Council would like to see the Federal Government work with the states and territories to accelerate support for bus operators, and rapidly advance the uptake of this technology in line with achieving the nation's emission reduction targets.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Financial incentives	0%	25%	50%	0%	0%	0%	25%	25%	25%
Regulation (supply)	0%	25%	25%	0%	50%	0%	0%	50%	0%
Charging infrastructure	0%	25%	25%	0%	25%	0%	0%	25%	0%
Awareness	0%	25%	25%	0%	25%	0%	25%	25%	0%
Electric Bus Policy Scorecard	0/10	5/10	7/10	0/10	4/10	0/10	2/10	6/10	2/10

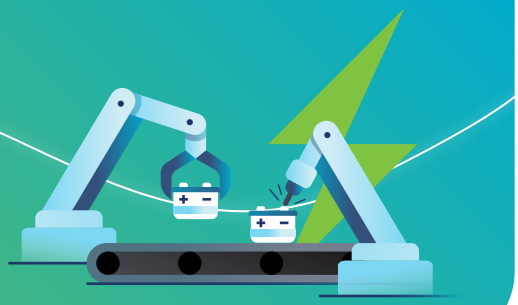
Micro-mobility

Micro-mobility has an important role to play in decarbonising transport, particularly in our cities. This includes freeing up space for single-occupancy trips that otherwise would have required a car. Micro-mobility can also support the use of multi-modal transport by linking commuters to/from public transport on first/last mile trips. Finally, micro-mobility enables the possibility of active transport – such as electric bikes and scooters – to some commuters who would not have previously considered this type of transport given the extra effort of non-electric bikes and scooters in Australia's hotter climate.

Queensland and the ACT lead the country in their sensible approach to supporting the deployment of micro-mobility in a measured approach that learns from trials, invests in the infrastructure necessary to enable safe use of these devices, and in the case of the ACT, also provides financial support to use these devices. While micro-mobility will not suit everyone, it has an important role to play in the larger decarbonisation of transport, and the Electric Vehicle Council would like to see more Australian governments support the deployment of these technologies, with assistance from the Federal Government in investing in the necessary physical infrastructure that can provide safe riding alternatives to using cars in our inner-cities.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Financial incentives	0%	50%	0%	0%	0%	0%	0%	0%	0%
Regulation (supply)	0%	100%	25%	75%	100%	25%	100%	75%	0%
Charging infrastructure	0%	25%	0%	0%	0%	0%	0%	0%	0%
Awareness	0%	0%	0%	0%	50%	0%	0%	0%	0%
Micro-mobility Policy Scorecard	0/10	8/10	2/10	5/10	9/10	2/10	6/10	5/10	0/10

Industry Development



Australia is in prime position to benefit from the global transition to electric vehicles, and not only support the uptake on this technology locally, but also support our international partners in making this necessary switch. Australia has the potential to be a powerhouse across the full electric vehicle value chain.

While some Australian governments have started to make inroads on this once-in-a-lifetime opportunity, there is a need for strategic coordination across the country so that all jurisdictions can support each other in capturing the benefits of this new industry. This will not happen by itself, and it will require more than just words and intent. To capture this opportunity Australia needs to put its best foot forward and significantly invest in this industry, and provide tax incentives to secure private investment. If we do this soon enough, we will reap the rewards of these efforts for generations to come.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Critical minerals	50%	0%	50%	50%	50%	0%	0%	0%	50%
Refining / processing	50%	0%	50%	50%	0%	0%	0%	0%	25%
Battery and components	50%	0%	75%	0%	50%	0%	0%	0%	25%
Vehicle manufacturing	25%	0%	0%	0%	0%	0%	0%	0%	0%
Battery reuse / recycling	25%	0%	0%	0%	0%	0%	0%	25%	0%
Charging infrastructure	25%	0%	0%	0%	25%	0%	0%	0%	0%
Industry Development Scorecard	7/10	0/10	6/10	3/10	4/10	0/10	0/10	1/10	3/10

Data

The sharing of data is key to enabling industry to invest in EV technology, and to build consumer awareness and confidence. Australia currently rates poorly on this measure by international standards. The fact is, right now no Australia government has an independent count of new vehicle sales, including electric vehicle sales, and as a result, cannot make this data publicly accessible. This issue will need to be resolved, first and foremost to enable the introduction of an independent, robust and ambitious fuel efficiency standard. Furthermore, however, this data is critical for national visibility on how Australia is tracking in regards to EV adoption. We note the New South Wales Government already provides EV registration data at the postcode level to the national map and we encourage other jurisdictions to follow their lead to provide insight into the national spatial distribution of Australia's EV fleet[3].

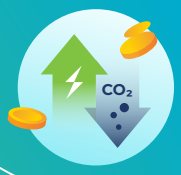
The Electric Vehicle Council holds the same concerns for the sharing of electricity grid capacity data, charging infrastructure data, and EV driving/charging patterns. This lack of data has a flow on effect of impeding EV modelling, which in turn challenges the implementation of evidence-based policy.

The Electric Vehicle Council would welcome a national dialogue on how these issues related to the collection and publication of EV data can be resolved.

Policy	FED	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Sharing vehicle registration data	0%	75%	100%	0%	25%	0%	50%	0%	0%
Sharing electricity grid capacity data	0%	50%	25%	0%	0%	0%	0%	50%	50%
Sharing charging infrastructure data	0%	0%	50%	0%	0%	0%	0%	0%	0%
Sharing EV driving/ charging patterns	0%	0%	0%	0%	25%	25%	0%	0%	0%
EV modelling	25%	0%	25%	25%	25%	50%	0%	25%	25%
Data Policy Scorecard	1/10	4/10	5/10	1/10	1/10	1/10	2/10	2/10	2/10

3 https://nationalmap.gov.au/

Other EV Policy Issues



The final policy scorecard metrics focus on a series of other important EV policy issues that the Electric Vehicle Council wishes to flag with jurisdictions in terms of their recent performance.

Firstly, much greater efforts are required to consider sensible energy policy related to electric vehicles. Heavy-handed approaches aimed at removing charging decisions from consumers are short-sighted, and not supported by the evidence of how EV owners are currently using and charging their vehicles. A sensible dialogue is required around the integration of EVs into the electricity grid in a manner that drives down costs across the energy system. We would also welcome further cooperation across jurisdictions, including harmonisation of various regulations related to EVs.

In terms of emissions reduction targets, all Australian governments have committed to net zero by at least 2050. Based on the best available evidence today, we view this as the minimum level of emission reduction that should targeted. Interim targets out to 2050 should continue to be adjusted over time to ensure this ultimate target is achieved.

Finally, in regards to total EV funding, many jurisdictions are doing well and punching above their weight, however, there is still some roof for improvement, particularly when considering heavy vehicle segments, such as electric buses and trucks.

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

Local Government

The Electric Vehicle Council views the 532 local governments around Australia as having several important roles in the transition to EVs and is pleased to see many of them undertaking EV-related activities.

The EVC recommends local governments focus on several specific areas, where their key strengths can act to complement government initiatives run from state, territory, or federal level.

1. Fleet transition

Local governments run light and heavy vehicle fleets, which can be transitioned to EVs in a phased approach, starting today. This brings more EVs into communities immediately and will support the creation of a robust second-hand EV market, in time. It's not necessary to transition all the vehicles immediately, and there are easy places to start, as demonstrated by various local governments who have already started this journey.

2. Direct deployment of local government-owned regular EV charging infrastructure (below 24kW)

Local governments own many structures with adjacent car parking, which are highly suitable for the deployment of public charging equipment. This includes libraries, swimming pools, tourism information centres, etc.

In particular, wherever local government owns and operates accommodation (such as caravan parks), the installation of EV charging in the 22kW and below range is a very easy, and very useful action to take in support of EV uptake.

The EVC encourages local government to make energy from these EV chargers a 'paid for' service to the driver. Setting a price - even a fixed fee - will mean that local drivers who are able to easily charge at home won't overuse a resource that's needed by drivers who cannot.

3. Deployment of public charging infrastructure in partnership with Charging Point Operators (CPOs)

Where fast or ultrafast charging equipment is to be deployed, local government may find the cost and complexity onerous if going it alone.

Partnering with charge point operators that have national scale and experience in this space, and who are supported by state and federal government grants, is a good pathway to securing fast and ultrafast charging within the local government agea

4. Community education

Local governments are well placed to run and support community information events related to EVs.

5. Planning requirements

Where new structures are being created that have car parking spaces, local government are often well placed to set sustainability requirements, such as EV charging readiness, as part of the planning approval process.

The EVC encourages local government to consider the EVC's submission to the public comment draft of the 2022 National Construction Code for more detailed information on sensible, cost-tested requirements.

Multiple local governments have already done work of the type listed above. The EVC has produced a local government resource pack to support the sector and will produce more materials in the coming year.

On a cautionary note, the EVC has observed that in some cases, local governments have deployed charging infrastructure without adequate planning as to support and maintenance, which has contributed to the public perception of unreliable charging.

The EVC would remind project planners considering the deployment of EV charging hardware to account for operating expenditure (OPEX) as well as capital expenditure (CAPEX) when deploying charging hardware, or alternatively, engage with a charge point operator who will commit to taking care of the ongoing maintenance of charging infrastructure.

The EVC has also seen policy work by some local governments that overlaps, and in some cases contradicts, electrical and construction regulations. Planners and policy makers at the local government level will need to take some care to stay within scope while encouraging EV uptake, particularly on matters relating to technical detail.

Local governments span a huge range of community demographics, housing types, driving behaviours, and community expectations. There are some aspects of the transition where the solution can genuinely be 'one size fits all'.

The EVC encourages local governments to consult with the community, with each other, with other levels of government and with industry to work through the complexities of the transition.

APPENDIX A

Explanation of Policy Assessment Metrics

Light Vehicles

	Policy Metric	Explanation
REGULATION	**Supply Regulation (Fuel efficiency standard / sales mandate)**	Commitments and/or actions to regulate an increase in vehicle supply / availability. This includes a fuel efficiency standard at a federal level and/or sales mandates at a federal/state/territory level.
	Sales target	Clear future EV sales targets for the entire fleet that align with emission reduction targets e.g. 100% EV sales by 2035.
	Government Fleet target	Clear future EV sales targets specifically for the government fleet that demonstrate leadership in EV adoption, and support the creation of a viable second-hand EV market.
INCENTIVES	**Upfront cost**	Rebates, loans, or other incentives to reduce the upfront cost for purchasing an electric vehicle.
	Operating cost	Tax exemptions, electricity credits, or other incentives to reduce the operating cost of an electric vehicle.
	Targeted fleet incentive	Rebates, tax exemption, or other targeted incentive available specifically for fleet vehicles to encourage early adoption, and support the creation of a viable second-hand EV market.
	Novated leases (rebate eligible or separate)	Rebates, tax exemption, or other targeted incentives available specifically to private and/or fleet vehicles purchased through a novated lease arrangement, in order to support the creation of a viable second-hand EV market.
	Vehicle scrappage	Rebates, or other incentives to encourage the scrapping of older, high-polluting petrol and diesel vehicles, in exchange for new, electric vehicles, with the aim of accelerating the electrification of national vehicle fleet, and reducing transport emissions.
	Behavioural incentives	Generally non-monetary incentives to incentivise uptake and usage of electric vehicles e.g. transit/bus lane access, priority parking, etc.

CHARGING INFRASTRUCTURE	**Public regular charging**	Financial and/or regulatory support for the deployment of regular charging infrastructure (below 24 kW, AC or DC) in public locations to enable opportunity charging, including at tourism destinations, shopping centres, and accommodation.
	Public fast charging	Financial and/or regulatory support for the deployment of regular charging infrastructure (24 kW or greater, DC) in public locations to enable long-distance travel, and charging for apartment residents.
	Workplace charging	Financial and/or regulatory support for the deployment of charging infrastructure at workplaces and commuter carparks to enable daytime charging, and provide alternatives to home charging.
	Home charging	Financial and/or regulatory support for the deployment of charging infrastructure at homes, with consideration of rental accommodation, and apartments.
	EV readiness	Financial and/or regulatory support for the deployment of electrical infrastructure in buildings to enable the future installation of EV charging equipment and minimise the potentially significant costs associated with future retrofits.
	Retrofit programs (electrical infrastructure)	Financial and/or regulatory support for retrofitting existing buildings to enable the install of EV charging infrastructure, given the significant costs associated with these types of installs.
	Resources to enable Strata	Guidance and support for Strata complexes to prepare for and install EV charging infrastructure.
AWARENESS	**Skills and training**	Efforts to develop new skills and training courses to capture the future job opportunities associated with the broader EV value chain.
	Consumer awareness	Programs to increase consumer awareness of the benefits of EV technology, address misconceptions and misinformation, as well as support EV experience opportunities for business and consumers e.g. vehicle-sharing of government fleet vehicles during weekends / holidays.
	Electric vehicle drive days	Support for and organisation of test drive days focussed around providing consumers and business with the opportunity to learn more about EV technology, and trial different vehicles.
	Vehicle emissions / pollution labels	Labelling on vehicles to increase awareness of the associated pollution levels and support the future introduction of future levies and/or schemes that differentiate vehicles depending on their tailpipe emissions.
ROAD USER CHARGE	**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
Financial incentives	Rebates, loans, tax exemptions or other incentives to reduce the upfront and/or operating costs associated with an electric truck.
Regulation (supply)	Commitments and/or actions to regulate an increase in electric truck supply / availability. Examples include a sales mandate aligned with emission reduction targets, and/or a variation of Australian Design Rules to enable an increase in vehicle supply.
Charging infrastructure	Financial and/or regulatory support for the deployment of depot and/or public charging infrastructure at sites that can accommodate electric trucks.
Awareness	Programs to increase consumer awareness of the benefits of electric trucks, address misconceptions and misinformation, as well as support electric truck experience opportunities for businesses. Efforts can also include the introduction of vehicle pollution labels to increase awareness of the emissions impacts of different trucks.

Buses

Policy Metric	Explanation
Financial incentives	Rebates, loans, tax exemptions or other incentives to reduce the upfront and/or operating costs associated with an electric bus.
Regulation (supply)	Commitments and/or actions to regulate an increase in electric bus supply / availability. Examples include a sales mandate aligned with emission reduction targets, and/or a variation of Australian Design Rules to enable an increase in vehicle supply.
Charging infrastructure	Financial and/or regulatory support for the deployment of depot and/or public charging infrastructure at sites that can accommodate electric buses.
Awareness	Programs to increase consumer awareness of the benefits of electric buses, address misconceptions and misinformation, as well as support electric bus experience opportunities for businesses. Efforts can also include the introduction of vehicle pollution labels to increase awareness of the emissions impacts of different buses.

Micro-mobility

Policy Metric	Explanation
Financial incentives	Rebates, loans, tax exemptions or other incentives to reduce the upfront and/or operating costs associated with electric micro-mobility devices.
Regulation	Commitments and/or actions to regulate an increase in electric micro-mobility device supply / availability. Note these devices should be safe, and aligned with a nationally-consistent set of design rules.
Charging infrastructure	Financial and/or regulatory support for the deployment of public and/or workplace charging infrastructure to support electric micro-mobility devices.
Awareness	Programs to increase consumer awareness of the benefits of electric micro-mobility devices, address misconceptions and misinformation, as well as support electric micro-mobility experience opportunities for consumers.

Industry Development

Policy Metric	Explanation
Critical minerals	Financial and/or regulatory support to enable investment in, and expansion of local critical mineral supply for both domestic and international use.
Refining / processing	Financial and/or regulatory support to enable investment in local refining and processing of critical miners for both domestic and international use.
Battery and components	Financial and/or regulatory support to enable investment in, and expansion of local battery and component manufacturing for both domestic and international use.
Vehicle manufacturing	Financial and/or regulatory support to enable investment in, and expansion of local vehicle manufacturing. This includes supporting the transition of existing manufacturing industry (trucks, buses), and consideration of future opportunities to reintroduce light vehicle manufacturing (cars, utes, vans).
Battery reuse/ recycling	Financial and/or regulatory support to enable investment in, and expansion of local battery reuse to provide energy grid services, and eventual battery recycling to move towards a circular economy.
Charging infrastructure	Financial and/or regulatory support to enable investment in, and expansion of local charging infrastructure manufacturing for domestic and international use.

Data

Policy Metric	Explanation
Sharing vehicle registration data	Publication of anonymised vehicle registration data at a suitable geographic level e.g. postcode-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	Sharing of electricity grid capacity data with industry at a suitable level to inform EV charging infrastructure planning.
Sharing charging infrastructure data	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	Collection and sharing of anonymised EV driving and/or charging patterns to inform transport and energy planning, and associated modelling.
EV modelling	Development and/or procurement of qualitative and/or quantitative EV modelling resources to inform policy and planning, and the publication of model outputs.

Other EV Policy Issues

Policy Metric	Explanation
Energy policy related to EVs	Efforts on energy policy that enable EV uptake, and do not actively disincentivise or create artificial barriers to EV adoption.
Inter-governmental cooperation	Efforts to work with other federal/state/territory governments to support nationally-consistent policy and regulation, and enable widespread uptake of EVs across Australia.
Emissions reduction target	Ambitious emissions reduction targets aligned with the best available evidence on climate science.
Regulation harmonisation	Efforts to harmonise regulation of EVs and associated infrastructure across Australia – ideally in line with global standards, and resistance against efforts to create standards unique to Australia that would burden local consumers and industry.
Total EV funding	Strong financial commitment to support the electrification of transport, taking into account the relative population and size of each jurisdiction.

APPENDIX B

Electric Vehicle Sales

Light Vehicles

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	1,012	1,771	0.15%
2016	668	701	1,369	0.12%
2017	1,208	1,076	2,284	0.19%
2018	1,053	1,163	2,216	0.21%
2019	5,292	1,402	6,694	0.63%
2020	5,215	1,685	6,900	0.78%
2021	17,293	3,372	20,665	2.05%
2022 (YTD September)	21,772	4,584	26,356	3.39%

Please note, the 2019 sales figure for PHEVs was previously incorrectly reported as 1,426. The correct figure of 1,402 PHEV sales in 2019 has been included in the updated summary above.

APPENDIX C

Passenger vehicles available now

Make	Model	Variant	BEV/ PHEV	Body Type	MLP excl. on-roads ($AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
Audi	e-tron SUV	e-tron SUV 50	BEV	SUV	138,323	71	336	6.8
		e-tron SUV 55	BEV	SUV	147,400	95	436	5.7
		e-tron SUV S	BEV	SUV	166,900	95	413	4.5
	e-tron Sportback	e-tron Sportback 50	BEV	SUV	149,323	71	342	6.8
		e-tron Sportback 55	BEV	SUV	158,400	95	444	5.7
		e-tron Sportback S	BEV	SUV	173,900	95	418	4.5
BMW	iX	iX xDrive40	BEV	SUV	135,900	77	420	6.1
		iX xDrive40 Sport	BEV	SUV	141,900	77	420	6.1
		iX xDrive50 Sport	BEV	SUV	169,900	112	620	4.6
		iX M60	BEV	SUV	222,900	112	566	6.8
	iX3	iX3	BEV	SUV	114,900	80	460	6.9
	MINI	Electric	BEV	Subcompact	55,650	33	242	7.3
	i4	i4 eDrive40	BEV	Gran Coupé	99,900	84	590	5.7
		i4 M50	BEV	Gran Coupé	124,900	84	510	3.9
BYD	Atto 3	Atto 3	BEV	SUV	44,400	38.2	500	5
Ford	Escape	Escape PHEV	PHEV	SUV	54,440	14.4	56	N/A
Hyundai	Ioniq	Electric Elite	BEV	Sedan	49,970	28	311	9.9
		Electric Premium	BEV	Sedan	54,010	38	311	9.9
		Plugin Elite	PHEV	Sedan	NLA	8.9	63	10.6
		Plugin Premium	PHEV	Sedan	47,950	8.9	63	10.6
	Ioniq 5	Ioniq 5 2WD	BEV	SUV	69,900	72.6	451	7.4
		Ioniq 5 AWD	BEV	SUV	77,500	72.6	430	5.2
	Kona	Electric Elite - standard	BEV	SUV	54,500	39.2	305	9.9
		Electric Elite - long range	BEV	SUV	60,500	64	484	7.6
		Highlander - long range	BEV	SUV	64,000	64	499	7.6
		Highlander - standard range	BEV	SUV	58,000	39.2	305	9.9

Please note, the figures presented here are based on industry submissions and desktop research. While some errors may be present, the intention here is to provide approximate estimates on availability.

Make	Model	Variant	BEV/ PHEV	Body Type	MLP excl. on-roads ($AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
JLR	Range Rover	Range Rover PHEV SE	PHEV	SUV	236,076	38.2	125	6
		Range Rover PHEV HSE	PHEV	SUV	270,272	38.2	125	5.5
		Range Rover PHEV Autobiography	PHEV	SUV	301,687	38.2	125	5.5
	Range Rover Evoque	Range Rover Evoque PHEV R-Dynamic HSE	PHEV	SUV	105,061	15	66	6.4
	Range Rover Sport	Range Rover Sport PHEV Dynamic HSE	PHEV	SUV	198,097	38.2	125	5.5
	Range Rover Velar	Range Rover Velar PHEV R-Dynamic HSE	PHEV	SUV	138,800	19.2	59	5.4
	I PACE	I-PACE EV400 SE	BEV	SUV	146,857	90	446	4.8
		I-PACE EV400 HSE	BEV	SUV	160,217	90	446	4.8
Kia	E-Niro	Niro Sport Wagon	PHEV	Wagon	50,490	8.9	58	N/A
		Niro S Wagon	PHEV	Wagon	46,590	8.9	58	N/A
		Niro EV Sport Wagon	BEV	Wagon	65,990	64	455	N/A
		Niro EV S Wagon	BEV	Wagon	62,590	64	455	N/A
	EV6	EV6	BEV	SUV	72,600	77.4	528	7.3
Lexus	ux300E	ux300E	BEV	SUV	82, 515	54.3	360	7.5
	NX450h+	NX450h+	PHEV	SUV	88,323	18.1	70	6.3
Mazda	MX-30 Electric	E35 Astina	BEV	SUV	65,490	35.5	224	9.6
Mercedes-Benz	EQC	EQC 400	BEV	SUV	122,724	80	434	5.1
		EQC 400 Sport	BEV	SUV	139,723	80	434	5.1
	A-Class	A 250e	PHEV	Hatch	68,989	15.6	73	6.6
	GLC	GLC 300e	PHEV	SUV	94,124	13.5	46	5.7
	E-Class	E 300e	PHEV	Sedan	124,623	13.5	50	5.8
	EQA	EQA 250	BEV	SUV	78,513	66.5	480	8.9
		EQA 350	BEV	SUV	97,900	66.5	464	6
	EQB	EQB 250	BEV	SUV	87,800	66.5	507	8.9
		EQB 350	BEV	SUV	106,700	66.5	445	6.2
	EQS	EQS 53 4MATIC+	BEV	Sedan	328,400	107.8	578	3.8

Make	Model	Variant	BEV/ PHEV	Body Type	MLP excl. on-roads ($AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
MG	HS PLUS EV	Excite	PHEV	SUV	44,990	16.6	52	6.9
		Essence	PHEV	SUV	47,990	16.6	52	6.9
	ZS EV	Excite	BEV	SUV	N/A	50.3	320	8.2
		Essence	BEV	SUV	N/A	50.3	320	8.2
Mitsubishi	Eclipse Cross	Eclipse Cross PHEV	PHEV	SUV	46,990	13.8	56* (NEDC)	10.4
	Outlander	Outlander PHEV	PHEV	SUV	54,490	20	84* (NEDC)	8.2
Nissan	Leaf	Leaf	BEV	Hatch	50,990	39	270	7.9
		Leaf e+	BEV	Hatch	61,490	59	385	6.9
Peugeot	508	GT Hybrid Fastback	PHEV	SEDAN	81,610	11.5	55	8.3
	3008	GT Sport Hybrid AWD	PHEV	SUV	84,790	13.2	60	5.9
Polestar	Polestar 2	Polestar 2 Standard Range Single Motor	BEV	Sedan	63,900	61	470	7.4
		Polestar 2 Long Range Single Motor	BEV	Sedan	68,400	75	540	7.4
		Polestar 2 Long Range Dual Motor	BEV	Sedan	73,400	75	480	4.7
Porsche	Taycan	Rear Wheel Drive	BEV	Sedan	158,100	71	403	5.4
		Rear Wheel Drive Plus	BEV	Sedan	170,120	83.7	462	5.4
		4S	BEV	Sedan	197,200	71	413	4.0
		4S Plus	BEV	Sedan	208,790	83.7	478	4.0
		GTS	BEV	Sedan	240,300	83.7	485	3.7
		Turbo	BEV	Sedan	280,300	83.7	482	3.2
		Turbo S	BEV	Sedan	351,000	83.7	482	2.8
	Taycan Cross Turismo	4	BEV	Wagon	178,800	83.7	469	5.1
		4S	BEV	Wagon	208,000	83.7	469	4.1
		Turbo	BEV	Wagon	283,000	83.7	472	3.3
	Cayenne	E-Hybrid	PHEV	SUV	150,900	14.3	47	5.0
		E-Hybrid Platinum Edition	PHEV	SUV	162,000	14.3	47	5.0
		E-Hybrid Coupe	PHEV	SUV	159,500	14.3	47	5.1
		E-Hybrid Coupe Platinum Ed.	PHEV	SUV	162,600	14.3	47	5.1
		Turbo S E-Hybrid	PHEV	SUV	307,200	14.3	47	3.8
		Turbo S E-Hybrid Coupe	PHEV	SUV	311,100	14.3	47	3.8

Make	Model	Variant	BEV/ PHEV	Body Type	MLP excl. on-roads ($AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)
	Panamera	4 E-Hybrid	PHEV	Sedan	252,700	14.3	56	4.4
		4 E-Hybrid Platinum Edition	PHEV	Sedan	253,000	14.3	56	4.4
		4 E-Hybrid Executive	PHEV	Sedan	262,100	14.3	55	4.5
		4 E-Hybrid Sport Turismo	PHEV	Sedan	260,000	14.3	56	4.4
		4S E-Hybrid	PHEV	Sedan	298,800	14.3	54	3.7
		Turbo S E-Hybrid	PHEV	Sedan	433,500	14.3	53	3.2
Tesla	Model 3	Model 3 Rear-Wheel Drive	BEV	Sedan	63,900	N/A	491	6.1
		Model 3 Long Range	BEV	Sedan	73,200	N/A	612	4.4
		Model 3 Performance	BEV	Sedan	84,900	N/A	567	3.3
	Model Y	Model Y Rear Wheel Drive	BEV	SUV	72,300	62.3	455	6.9
		Model Y Performance	BEV	SUV	93,900	82	514	3.7
Volvo	XC40	Recharge Twin Pure Electric	BEV	SUV	79,490	78	450	4.9
	XC60	Recharge Ultimate T8 Plug-in Hybrid	PHEV	SUV	100,990	14.9	81	4.8
	XC90	Recharge Ultimate T8 Plug-in Hybrid	PHEV	SUV	121,990	14.9	77	5.3

Passenger vehicles coming soon

Make	Model	Variant	BEV/PHEV	Body Type	MLP excl. on-roads ($AUD)	Useable battery capacity (kWh)	WLTP Electric Driving Range (km)	0-100 kph (seconds)	Available to order	Approximate time until delivery
Audi	e-tron GT	e-tron GT	BEV	Sedan	TBC	93.4	448	4.1	H2 2022	
		RS e-tron GT	BEV	Sedan	TBC	93.4	433	3.3	H2 2022	
BMW	i7	xDrive60	BEV	Upper Large	TBC	102	TBC	4.7	Q4 2022	
	iX1	xDrive30	BEV	SUV	TBC	TBC	TBC	5.7	Q1 2023	
CUPRA	Leon	VZe	PHEV	Hatch	60490	12.8	60	6.7	Q3, 2022	Q4, 2022
	Formentor	VZe	PHEV	SUV	60990	12.8	55	7	Q3, 2022	Q4, 2022
	Born	Born	PHEV	Hatch	TBC	TBC	TBC	TBC	Q4, 2022	Q1, 2023
Fiat	500e	500e	BEV	Hatch	TBC	TBC	TBC	TBC	H2, 2023	
Genesis	G80	G80 electrified	BEV	SUV	TBC	87.2	500	4.9	Q3 2022	
	GV60	GV60 RWD	BEV	SUV	TBC	77.4	451	-	Q3 2022	
		GV60 AWD	BEV	SUV	TBC	77.4	451	-	Q3 2022	
		GV60 performance	BEV	SUV	TBC	77.4	451	4	Q3 2022	
	GV70	GV70 electrified	BEV	SUV	TBC	77.4	400	4.5	Q3 2022	
Kia	EV6	GT-Line	BEV	SUV	TBC	77.4	505	5.2	Q2 2023	
LDV	eT60	eT60	BEV	Ute	TBC	88.5	330	TBC	Q4 2022	
	Mifa 9	GV70	BEV	People Mover	TBC	90	440	TBC	Q4 2022	
Mercedes-Benz	EQE	53	BEV	Sedan	TBC	90.6	TBC	3.5 (3.3s w/ AMG Package)	Q1 2023	
Peugot	e-2008	e-2008	BEV	SUV	TBC	50	332	TBC	2022	
Polestar	Polestar 3	Polestar 3	BEV	SUV	TBC	TBC 600			Q1 2023	H2 2023
Skoda	Enyaq	iV	BEV	SUV	TBC	TBC	TBC	TBC	H2 2023	
		Coupe iV	BEV	SUV Coupe	TBC	TBC	TBC	TBC		
Subaru	Solterra	Solterra	BEV	SUV	TBC	TBC	TBC			
Tesla	Model S	Model S – Long range	BEV	Sedan	TBC	N/A	652	3.2		
		Model S – Plaid	BEV	Sedan	TBC	N/A	637	2.1		
	Model X	Model X – Long Range	BEV	SUV	TBC	N/A	560	3.9		
		Model X – Plaid	BEV	SUV	TBC	N/A	536	2.6		

Toyota	BZ4X	FWD	BEV	SUV	TBC	71.4	516	8.4	2023	
		AWD	BEV	SUV	TBC	71.4	460	7.7	2023	
Volvo	XC40	Recharge Pure Electric – single motor	BEV	SUV	72,990	69	510	7.4	Late 2021	Q4 2022
	C40	Recharge Pure Electric	BEV	SUV	74,990	69	540	7.4	Q2 2022	Q4 2022
		Recharge Twin Pure Electric	BEV	SUV	82,490	78	500	4.7	Q2 2022	Q4 2023
Volkswagen	ID3	ID3	BEV	Hatch	TBC	55	TBC	TBC	2023	
	ID4	ID4	BEV	SUV	TBC	62/82	TBC	TBC	2023	
	ID5	ID5	BEV	SUV	TBC	62/82	TBC	TBC	2024	

Please note, the figures presented here are based on industry submissions and desktop research. While some errors may be present, the intention here is to provide approximate estimates on availability.

Trucks, vans and utility vehicles available now / coming soon

Make	Model	Segment	Battery size (kWh)	Range (km)	Available
ACE	ACE Cargo Light	Van	23.2	200	TBC
	ACE Yewt	Light Utility Vehicle	23.2	200	TBC
	V1 Transformer	Van	52.5	215-258	TBC
AUSEV	Atlis XT	Light Utility Vehicle	120	480	2024
	Zeus Z-16	Medium Duty Truck	210	350	2023
	Zeus Z-19	Medium Duty Truck	210	350	2023
		Medium Duty Truck	210	350	2023
	XOS MDXT	Medium Duty Truck	480	434	2024
	XOS HDXT	Heavy Duty Truck	480	370	2024
BLK Auto	The JAC N55 EV	Light Duty Truck	96.7	200	
Daimler Truck and Bus	Fuso e-canter	Light Duty Truck	82.8	100* *@ full GVM	
Electric Trucks Australia / TrueGreen Mobility	BYD T3	Van	50.3	300	
EV Automotive	EC11	Van	73.6	200	
Ford	E-transit	Van	68	317	Q4 2022
Foton iBlue	iBlue Electric Truck	Light Duty Truck	81/100		Q4 2022
GB Auto	TEMBO 4x4 E-LV	Light Utility Vehicle	28.4/56.8	80/160	
JAC motors	N55 EV truck	Light Duty Truck	96.7	200	
Janus Electric	Kenworth T403	Heavy Duty Truck	600	400-500	
LDV	eDeliver 9	Van	88.5	280	Q4 2022
Mercedes	eVito Tourer	Van	90	361	Q4 2022
	eVito Panel Van	Van	60	341	Q4 2023
	eSprinter	Van	TBC	TBC	2024
Renault	Kangoo Z.E. Maxi	Van	33	200	
Safescape	Bortana EV	Light Utility Vehicle	52	120	

SEA Electric	E4V	Van	88 kWh	250
	SEA 300-45	Medium Duty Truck	70 kWh	200 (unladen)
	SEA 300-85	Medium Duty Truck	100 kWh – 136 kWh	220 (unladen)
	SEA 500-140	Medium Duty Truck	136 kWh	160 (unladen)
	SEA 500-225	Medium Duty Truck	136 kWh – 250 kWh	200 (unladen)
Voltra	e-cruiser	Light Utility Vehicle	42.24	100
Volvo Trucks	Volvo FL Electric	Medium duty truck	200 to 396kWH	300
	Volvo FE	Medium duty truck	200 or 265kWh	220
Zero automotive	ZED70	Light Utility Vehicle	88	350

Buses available now

Make	Model	Range (km)	Seats (if specified)
Bus and Coach International	Citirider E	350	45 seated
	Proma Low Floor E	300	28 seated
BusTech Group	Proterra ZDI	325	N/A
King Long (Bus Stop Sales)	King Long Evolution Coach	350	53 seated
BYD	K9RA (Gemilang chassis)	250	35 seated 31 standing
Custom Denning	Element EV	400-500	70 seated
Daimler Truck and Bus	eCBC	300	
Foton Bus Australia	Foton 12.5m Electric City Bus		44 seated 20 standing
Joylong	E6 Minibus	280	12 seated
Nexport Pty Ltd.	12.5m Bus		
	9.7m Bus	250	32 seated / 36 standing
	7m Bus	230	14 seated / 8 standing
Optare	MetroCity Tempo 11.5m	150-210	44 seated / 16 standing
SEA Electric	E4B Minibus	250	15 seated
Volgren Australia	Volgren (BYD D9RA Chassis)	250	39 seated / 22 standing
Volvo Bus	BZL Electric Chassis		
Yutong	E12 e-bus	320	40-44 seated / 30 standing
Zemtec	E-City	200-263	

Please note, the figures presented here are based on industry submissions and desktop research. While some errors may be present, the intention here is to provide approximate estimates on availability.

Two-wheelers available now

Make	Model	Segment	Price ($AUD)	Battery size (kWh)	All electric range (km)
braaap	MotoE	Motorbike	4,939	4.32	140
Benzina Zero	Duo	Scooter	4,650	2.52	105
	Duo +	Scooter	5,250	2.52	95
	City	Scooter	4,250	2.1	80
	Sport	Scooter	7,250	2.1	90
EMoS	iTango	LA	3,999	1.25	60
	iTank	LA	5,999	1.56	70
		LC	5,999	1.56	60
	EH7	LA	5,999	2.16	160
		LC	5,999	2.16	100
	CT-KARGO	LA	14,999	-	100
	CT-KUBE	LA	12,999	-	100
Evoke	Urban Classic	Motorbike	7,999	7.8	250
Fonzarelli	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
Harley-Davidson	LiveWire™	Motorbike	49,995	15.5	235
Horwin	EK3	Scooter	N/A	6.2	100
Savic	Alpha	Motorbike	26,990	11	200
	Delta	Motorbike	16,990	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 Scooter	Scooter	4,990	1.8	75
Vmoto	EVS1	LC	5,999	2.7	140
WYLD	G	LA	4,999	1.2	50
	T	LA	4,999	1.2	50
	R	LA	5,499	1.8	80
		LC	5,499	1.8	80
	THANG	LA	5,499	1.8	60

Please note, the figures presented here are based on industry submissions and desktop research. While some errors may be present, the intention here is to provide approximate estimates on availability.

State of Electric Vehicles

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ELECTRIC VEHICLE COUNCIL