City of Ryde

Lifestyle and opportunity
@ your doorstep

ATTACHMENTS FOR: AGENDA NO. 8/25 COUNCIL MEETING

Meeting Date: **Tuesday 22 July 2025**
Location: **Council Chambers, Level 1A, 1 Pope Street, Ryde and Online**
Time: **6.00pm**

ATTACHMENTS FOR COUNCIL MEETING

Item

8 DRIVING ELECTRIFICATION IN RYDE

Attachment 1 LGA Resource Pack - Electric Vehicle Council 2025

The Electric Vehicle Resource Pack for Local Governments

ELECTRIC VEHICLE COUNCIL

City of Ryde

2025

ELECTRIC VEHICLE COUNCIL

The Electric Vehicle Council (EVC) is the national peak body representing the electric vehicle industry in Australia. The EVC represents companies involved in providing, powering and supporting electric vehicles. Our mission is to accelerate the electrification of transport for a sustainable and prosperous Australia.

As the world's largest vehicle markets and companies set their course for a future where transport is powered by zero emissions vehicles, the Electric Vehicle Council works to highlight the important role and opportunities for Australia in this global transition. Working to overcome the current challenges in Australia's electric vehicle market through policy and advocacy, industry development, and market facilitation, the Electric Vehicle Council recognises electrification is a key milestone in the future mobility ecosystem, enabling advances in sharing, connectivity and autonomy.

By bringing the Australian market up to speed with the global transition in transport, we firmly believe Australian consumers and industry can be leaders in the future of electric mobility.

Acknowledgement of Country

The Electric Vehicle Council acknowledges and pays respect to the past, present and future Traditional Custodians and Elders of this nation and the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples.

A message from our partner

City of Ryde

The journey to electrification for the City of Ryde began in 2017 with Council supporting a pilot introduction of two electric vehicles (EV) into its fleet and delivering three publicly accessible chargers for community use. The introduction aimed at boosting community confidence in the new technology and supporting Council to reduce emissions from its fleet.

Following this, Council surveyed community to understand sentiment towards the new technology and for building EV education programs and materials that has grown to include the development of a Sustainable Transport Strategy (2022) with a plan for low to no emissions transport solutions for Ryde. This included the development of an educational guide on EV's developed in partnership with the EVC.

Carbon emissions generated from transport in the City of Ryde represents the second largest source of emissions. Ryde is experiencing rapid high-density growth and is situated along two major transportation corridors crossing Sydney, both North-South and East-West. With this brings increased connectivity, congestion and emissions reduction challenges.

To affirm Council's commitment in supporting EV transition an EV Policy and Guideline was developed which later became a model for many other councils. This was then followed by the development of a Sustainable Transport Strategy (2022) to drive initiatives that support new low/ no carbon technologies, improve community connection and reduce congestion.

Council has developed two EV Transition Strategies targeting a whole of fleet conversion to align with Council's adopted Net Zero Emissions target by 2035 for Operations and by 2040 for Community. Ryde is an active lead in the metropolitan EV space across Sydney, working with three key regional EV working groups and in consultation with peak EV bodies and the NSW State Government on EV grants programs and model feasibility.

Council is currently refreshing its Integrated Transport Strategy and Sustainable Transport Strategy. Both strategies promote EV-related initiatives and reflect the recent developments in the electrification of road transport.

Advocacy for EVs has also been a key priority for Council recognising the transitionary changes impacting broad community uptake and in emissions reduction. Council has actively led advocacy supporting new fuel efficiency standards and EV State planning policy, and for new multi-unit dwelling developments. Presently over 44% of the Ryde community reside in multi-unit dwellings with this number expected to continue to grow.

To date, Council continues progressing actions of Sustainable Transport Strategy with a continued focus on fleet transition and in increasing public EV charging options for community

City of Ryde

Lifestyle and opportunity at your doorstep

Ryde City Council is a proud Local Government member of the Electric Vehicle Council and hopes this resource pack will assist other councils towards a sustainable transport future.

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Electric Vehicles and Local Government

The electric vehicle (EV) market continues to grow internationally, with over 17 million estimated to be sold globally in 2024.[1] While Australia continues to trail the global average in terms of EV market share, we too are starting to see a significant increase in sales, with fully electric and plug-in hybrid vehicles approaching 10% of the new vehicle market.[2]

The global expansion of the EV market is being driven through a combination of falling costs through increased EV production – otherwise known as economies of scale; innovation in battery technology; as well as significant government policy support aimed at encouraging the purchase of EVs to drive down transport emissions on our journey towards a low carbon economy.

Despite these promising signs, Australia still has a lot of work to do in order to accelerate EV uptake at a rate that ensures we can achieve our 2030 and 2050 climate targets, while also capturing the major economic opportunities of this transition. This includes the tens of billions of dollars spent today on imported fuel that could instead be spent on Australian-made energy to power EVs and support local jobs.

While the federal, state and territory governments have an important role to play in increasing the supply of EVs to Australia, and supporting households and businesses in making the switch to an EV, local governments are also crucial. Since this level of government is often closest to the public, local governments can make a significant contribution in leading by example in transitioning to EVs and increasing the visibility of these vehicles in the community. Local governments also have the ability to help raise awareness about EV technology and the many potential benefits of adopting the technology. Additionally, local governments can help to foster an environment that supports the rollout of EV charging infrastructure in buildings and across the local community. Supporting the broader adoption of electro-mobility, or e-mobility, such as shared electric bikes or scooters, is another important policy initiative for local government in providing an alternative to car travel.

The Electric Vehicle Council (EVC) has developed this Electric Vehicle Resource Pack for Local Governments as an update to our last edition in 2020. The intention of this updated resource pack is to provide the 537 local councils across Australia with the initial tools to support the transition to an electric vehicle future. The EVC also aims to use this resource pack to share case studies on how some local councils are already actively supporting the adoption of EVs and encourage knowledge-sharing across councils in Australia on EV initiatives.

1 https://www.reuters.com/business/autos-transportation/global-electric-vehicle-sales-up-25-record-2024-2025-01-14/

2 https://electricvehiclecouncil.com.au/reports/state-of-evs-2024/

The role of local government in accelerating EV uptake

The EVC acknowledges the unique role of local governments in serving their constituents. Local governments are responsible for planning, developing and maintaining local transportation infrastructure and overseeing local amenities and road infrastructure. They also play a key role in fostering the growth and development of their local communities. The services provided by local governments help to meet the needs of their communities and align with the efforts of state, territory, and federal governments to create a sustainable and prosperous Australia.

The EVC recommends local governments focus on eight specific areas which can act to complement initiatives run by state, territory, and federal governments in accelerating EV uptake:

1. Setting and meeting sustainability targets
2. Incentivising the adoption of electric vehicles
3. Future-proofing the built environment for EVs
4. Enabling the installation of electric vehicle charging infrastructure
5. Transitioning council vehicle fleets
6. Improving access for electric trucks
7. Promoting shared micro-mobility
8. Increasing awareness on electric vehicles.

We strongly urge local governments to seek out and connect with other local governments that have made significant efforts in areas related to electric vehicles. By communicating and collaborating with these leading communities, local governments can learn from their successful experiences, avoid common mistakes, and implement effective programs and policies to promote the use of electric vehicles.

Why should councils support the uptake of EVs?

Local governments make decisions that shape their community's future and they play a crucial role in leading efforts to reduce emissions and adapt to climate change. Therefore, as key decision makers, they have a primary role in supporting their communities' transition to EVs.

EVs can provide the community with many benefits, including:

- Reducing transport costs given EVs are 60-90% cheaper to power compared to petrol and diesel vehicles
- Supporting Australian jobs by redirecting the tens of billions currently spent on imported fuel each year – which largely flows overseas – to instead support Australian-made energy to power electric vehicles
- Increasing national security by not having to rely on imported fuel, and the associated volatile swings in global fuel prices
- Removing the carcinogenic pollution produced by petrol/diesel vehicles from our neighbourhoods
- Reducing carbon emissions – even when charged using the current electricity grid – over the lifetime of the EV, compared to petrol and diesel vehicles
- Reducing noise in our neighbourhoods through the use of quieter vehicles – acknowledging the need for some level of noise from EVs to assist those with a vision impairment, and
- Increasing climate resilience by using EVs as batteries-on-wheels in the future to power homes and community shelters during electricity grid blackout events.

Beyond the direct community benefits, there are also several benefits that can be gained by local governments in supporting the uptake of EVs, including:

- Reducing local government fleet costs due to the lower energy and servicing costs of EVs
- Attracting electric vehicle road tourism through the provision of local charging infrastructure, and in turn an associated increase in spending at local businesses while owners wait for their vehicles to charge
- Increased community satisfaction through reduced noise – including from electrifying early morning garbage trucks – as well improved air quality due to less pollution, and
- Tangible action for councils to support in achieving local government climate targets due to EVs reducing carbon emissions – even when charged using the current electricity grid.
- Leading the change through visible EV initiatives can spur uptake in the community as well, as residents and businesses see Council leading by example.

What are electric vehicles?

An electric vehicle is any vehicle that is powered by electricity and can be plugged in to charge a rechargeable battery. Electric vehicles can be cars, scooters, bikes, buses, trucks, vans, and specialised equipment.

There are two types of electric vehicles: battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).

Battery electric vehicles (BEVs) run entirely on an electric powertrain and are 100% powered by electricity stored in the vehicle's battery pack. They are recharged using an external power point or electric vehicle charging infrastructure.

Plug-in Hybrid Electric Vehicles (PHEVs) have two powertrains: an electric motor/s and an internal combustion engine. PHEVs can be driven in different modes using their different powertrains. When using the electric mode, PHEVs are powered solely by electricity stored in the battery pack, making them emission-free. However, when using the internal combustion engine, the vehicle is powered by petrol or diesel and still produces emissions.

PHEVs have a role to play in the short-term transition to zero-emissions vehicles, but if not regularly charged, they have a greater reliance on the internal-combustion engine and as a result do not reduce emissions. For that reason it is important to ensure that PHEVs are regularly charged, and run mainly using electricity, to deliver genuine emission reduction benefits.

The EVC considers both BEVs and PHEVs as EVs and adopts this classification in all of our reports.

Note: *An electric vehicle is any vehicle that can be plugged in to charge using electricity and this does not include hybrid vehicles that are not externally charged using electricity. Although hybrid vehicles are generally more fuel efficient than an internal combustion engine vehicle, they are still solely reliant on imported fuel and do not reduce emissions by enough to align with a net zero economy by 2050 – at the latest.*

Survey of Local Governments

To help inform the development of this updated EV resource pack, the EVC surveyed local governments in early 2023 on their current efforts, barriers faced, and other areas of concern with regards to accelerating the uptake of electric vehicles, including micro-mobility.

This short survey was distributed to all 537 local governments, and we received 119 responses from both metropolitan and regional councils in all states and territories. The input provided by local governments has significantly assisted in shaping the content of this document, and the EVC would like to thank all councils for their participation in this short consultation.

While responses to this survey are confidential, we have compiled a summary of the major themes identified by local councils with regards to EVs:

Priority EV Policy Areas
for Local Governments

The EVC recommends local governments focus on eight policy areas which can act to complement initiatives run by state, territory, and federal governments.

1. **Setting sustainability targets**
2. **Incentivising the adoption of electric vehicles**
3. **Future-proofing the built environment for EVs**
4. **Enabling the installation of electric vehicle charging infrastructure**
5. **Transitioning council vehicle fleets**
6. **Improving access for electric trucks**
7. **Promoting shared micro-mobility**
8. **Increasing awareness on electric vehicles.**

The EVC has chosen to highlight the initiatives undertaken by some local governments to increase awareness of what can be done to support and accelerate the transition to EVs across these eight key policy areas.

The Gold Standard
for Local Government EV Policy

Here we provide a summary of what the EVC sees as the gold standard for local government EV policy. The EVC recognises that it will take time to achieve this gold standard, but it has been developed to inform local government policy and planning with regards to EVs. The remainder of this EV resource pack provides further detail on the processes councils can follow to achieve this gold standard for local government EV policy.

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 2030
- 100% of new heavy vehicles purchased by council being EVs by 2028
- 100% of council's heavy vehicle fleet being electric by 2050
- Support national EV charging infrastructure targets of:
  - Multi-bay fast charging stations every 70 km along major highways, and at least 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
- Dedicated or preferential parking 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:

- Explore access for charge point operators to install chargers on council land (e.g. on long-term leases, commercial contracts)
- 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 Transitioning local government vehicle fleet

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 Improving access for electric trucks

In line with supporting uptake of electric trucks above existing mass limits, councils should:

- Provide as-of-right access to key council roads, aligned with state-based concessions
- Facilitate a 'one-stop shop' for ad-hoc road access arrangements
- Future proof road asset management by planning for higher mass electric trucks going forward

7 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

8 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

Setting sustainability targets

Sustainable transport systems need to meet the requirements of the community whilst reducing energy consumption and carbon emissions. The result is an integrated system that prioritises safety, efficiency, the environment and productivity. Whilst these systems are designed to improve the overall wellbeing of society, their successful implementation requires clear goals and targeted timelines.

Electric vehicles, including trucks and micro-mobility, should be incorporated across a range of local governments policies and plans, to successfully accelerate adoption. Examples include:

- Sustainable transport strategies
- Net zero emission plans
- Climate action plans
- Fleet management plans
- Land-use planning and guidance, and
- Dedicated EV action plans, including EV-readiness in buildings.

As local governments write policy to shape the future of their local area, EVs can deliver a range of benefits, but specifically have a key role to play in reducing emissions and improving overall sustainability. As highlighted by the International Council on Clean Transportation[3] - a group of independent global experts:

> *Electric vehicles are the single most important technology for decarbonising the transport sector. They are several times more efficient at converting energy into vehicle propulsion than petrol and diesel vehicles, with much lower life-cycle emissions.*

To learn more about the lifecycle emissions of EVs, please refer to the EVC's lifecycle emissions calculator.

3 https://theicct.org/policies/electrification/

There are three key principles the EVC recommends that all councils adopt as part of setting sustainability targets:

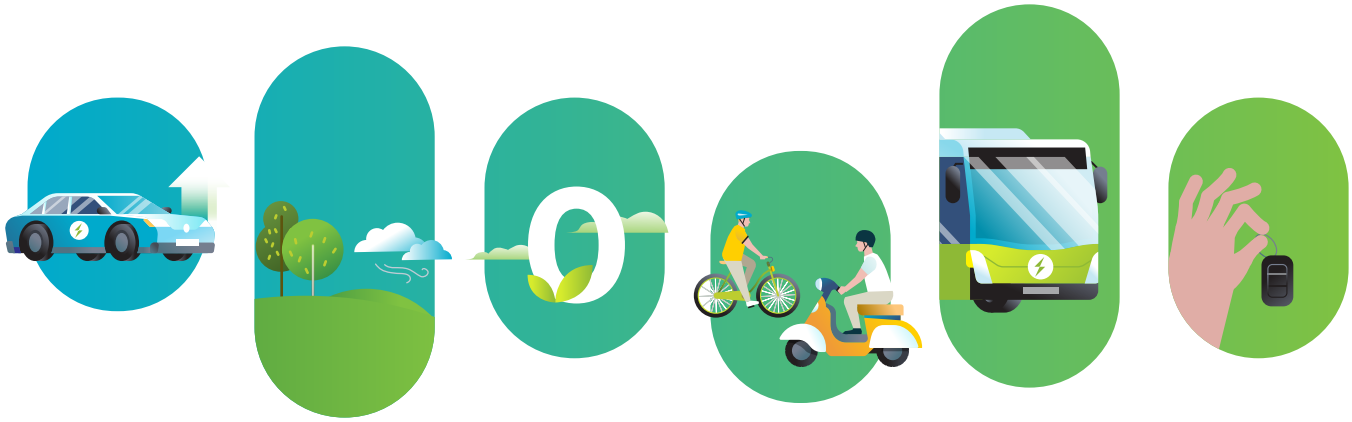
1. A clear commitment to achieving net zero carbon emissions by 2050 – at the latest – in line with the Federal Government's legislated target.

2. To meet net zero, clear targets should be set for transitioning council's light and heavy vehicle fleets to EVs. The EVC suggests aiming for 100% EV sales for new light vehicles by 2026, leading to a 100% light EV fleet for councils by 2030; and 100% EV sales for new heavy vehicles by 2030, leading to a 100% heavy EV fleet for councils by 2050.

3. Thirdly, targets that encourage the use of non-car transport – particularly for commuting trips – where possible to do so. This could include specific targets for the use of micro-mobility devices, such as electric bikes and electric scooters. These targets will vary depending on the local infrastructure, services, and needs of individual communities. An example target could be: 25% of all commuting trips to be carried out using non-car transport by 2035.

Beyond setting targets, it is also critical that local governments regularly evaluate their progress towards achieving these targets, and publish information on what additional measures may be explored or adopted to accelerate progress – where required.

Without adequate consideration of the role of EVs in the local government area over the coming years, it will be nearly impossible to develop achievable net zero action plans. Although some challenges exist, EVs present a significant opportunity to reduce emissions in line with achieving a future net zero economy for the community.



CASE STUDY

The City of Melbourne has approved a plan called the *Emissions Reduction Plan for Council Operations 2021-26*. This plan commits the council to taking action to reduce emissions for its own operations until 2026. Over the five-year plan, the council has been taking key actions such as transitioning its entire fleet to fully electric vehicles by 2025, preparing its facilities to support charging infrastructure for electric vehicles, and continuing to prioritise fuel efficiency when purchasing or leasing new vehicles, especially when electric vehicle options are not yet commercially viable. Additionally, the council is working with waste contractors and procurement to develop a plan for an electric vehicle-heavy fleet.

The City of Sydney's *Electrification of Transport in the City Strategy and Action Plan* promotes the use of EVs and reducing transport emissions. The plan includes accelerating the transition of the city's light and heavy vehicle fleets to EVs, increasing the capacity of depots to handle more and larger EVs, encouraging public charging facilities in car parks and service stations, updating planning controls to support charging capacity in new buildings, and conducting research to understand the challenges of retrofitting existing apartment buildings with chargers. The City of Sydney also aims to accelerate the transition to electric vehicles in its own fleet and favour contractors with green fleets in procurement processes. The plan aims to reduce private vehicle dependence through aspiring to be a city for walking, cycling and public transport alongside achieving net-zero transport emissions by 2035.

The Surf Coast Shire is located about 100km outside of Melbourne. In 2022 Council set a *zero emissions target* for all operations by 2030 (excluding the Anglesea landfill). The *Climate Emergency Corporate Response Plan 2021-2031* targets transitioning Council's smaller vehicles to EVs by 2028 and converting larger vehicles, such as trucks and excavators, to electric by 2030. Additionally, the Council has set a goal to reduce their corporate greenhouse gas emissions by 1,500 tonnes each year as part of their commitment to achieving net zero greenhouse gas emissions by 2030.

Example policy process

STEP 1 Review existing local government plans and policies that should consider EVs

STEP 2 Engage with community and other stakeholders to identify opportunities to incorporate EV policy into existing plans, and where gaps exist, input on the development of new plans and policies that consider EVs

STEP 3 Define goals and vision for future net zero economy to inform emission reduction targets, and in-turn EV targets to support achieving the emission reduction targets

STEP 4 Embed overall vision, and EV-specific targets into future policy and planning

STEP 5 Secure funding to implement policy and planning

STEP 6 Regularly assess progress towards achieving targets, monitoring success of existing policies, and exploring additional measures that may be required to accelerate progress towards targets, including ultimately achieving net zero by 2050 – at the latest.

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

2 Incentivising the adoption of electric vehicles

While much of the responsibility for financially incentivising the adoption of electric vehicles sit with the state, territory and federal governments, there are a number of key measures and initiatives that local governments can implement to accelerate this transition. In addition to supporting the rollout of charging infrastructure (covered separately later in this resource pack), the four key initiatives that local governments should consider are:

- Introduction of low emission zones
- Preferential parking for EVs
- Enabling EV inclusion in car-sharing fleets, and
- Procurement policies that preference external contractors transitioning to EVs.

Here we provide further detail on these initiatives.

Low emission zones

Internationally, many cities have implemented low emission zones (LEZs) into urban planning. LEZs are designated areas where only vehicles meeting certain emissions levels are permitted to enter. Some zones apply to all vehicles, while others specifically target heavy vehicles (e.g. trucks), given the significant contribution these vehicles make to poor air quality and broader carbon emissions due to their historical reliance on diesel – known as LEZ-Freight or LEZ-Fs.

In Europe alone, there are around 275 LEZs in place as of 2025.[4] The number of LEZs continues to increase - a clear indication of the growing interest in using this policy initiative to improve the efficiency of transport systems, while reducing emissions and improving public health. Stringency is also increasing, with many local governments pursuing Zero Emission Zones, restricted to vehicles with zero tailpipe emissions. Three examples are detailed in Table 1 below.

4 https://www.europe-consommateurs.eu/en/travelling-motor-vehicles/motor-vehicles/environmental-zones-in-europe.html

Table 1 - International examples of low emission zones (LEZs)

Location*	Zone Type	Minimum entry requirements	Operation	Enforcement	Penalty	Outcome
London, U.K.	Ultra Low Emission Zone	Euro 3 standards for motorcycles Euro 4 standards for petrol cars, vans, minibuses Euro 6 for diesel cars, vans, minibuses	24/7 except Christmas Day	Automatic Number Plate Recognition	£12.50 daily charge (~$22) Failure to pay resulting in up to £180 (~$360)	• road transport NOx emissions reduced by 31% • increased micro-mobility hubs • decrease in hospitalisation caused by air pollution • increased use of public transportation
Amsterdam, Netherlands	Zero Emission Zone Applies to trucks, vans, mopeds and scooters registered after 1 January 2025	Vehicles with zero tailpipe emissions	24/7	Automatic Number Plate Recognition	Non-compliance penalty of €80-€300 (~$130-$500)	• improved local air quality • Transition to pedestrian or bicycle couriers • Increased use of electric freight vehicles • increased revenue from non-compliant vehicles
Shenzhen, China (10 micro-zones)	LEZ-F Applies to trucks with a gross vehicle mass of <4.5 tonnes	100% electric trucks	24/7	Police enforcement	Non-compliance penalty of CNY300 (~$65) and 3 demerit points (12 demerit points = licence suspension)	• Paired with financial incentives to support transition • Has helped to support adoption of over 75,000 electric freight vehicles

LEZs are powerful tools to encourage transport mode shifts away from high polluting vehicles towards electric mobility, public, shared and/or active transport. That said, the implementation of these zones can be complex and requires coordination between different levels of government to ensure appropriate legal frameworks are in place for establishing these zones. Additionally, it requires investment in infrastructure to support enforcement mechanisms, such as number plate recognition.

Most LEZs start as pilots, with phase-in periods to provide the community with time to adjust. These pilots can also start as small as a single street, and then expand over time. As outlined above, they can also apply to a specific subset of the vehicle fleet, and expand in time.

Clearly equity is also an important consideration as part of the decision-making process, and it is important that alternative transport options that are accessible, reliable and affordable, are made available to the community. Appropriate lead times for the future implementation of low emission zones (and pilots of these zones) is useful for the planning and deployment of these alternatives transport options.

You can read more on LEZs at the following links:

International Council on Clean Transportation

C40 Cities How-to Guide

Preferential parking for EVs

Local governments generally have control of local parking regulations, particularly paid on-street parking. In an effort to encourage the transition to EVs, local governments should consider providing preferential parking pricing to EVs and lower-emission vehicles, either instead of or in addition to existing paid parking schemes.

This preferential parking treatment could be temporary, and transitioned to a new scheme once EVs are the majority of the local vehicle fleet. Special arrangements to manage any equity concerns should also be incorporated into the pricing scheme. In addition to preferential parking pricing for EVs, councils can also consider how on-street charging infrastructure could be offered and incorporated into the parking fee.

CASE STUDY

City of Sydney's emission-based parking fees

The *City of Sydney* has implemented emissions-based parking fees to tackle pollution and improve air quality in urban areas. The pricing scheme can be viewed below, with pensioner discounts shown in brackets. A *similar scheme* exists for business vehicles.

Table 2 - Overview of City of Sydney's parking fee scheme based on CO2 emissions

Vehicle Tailpipe Emissions (combined CO_2 g/km)	First Permit	Second Permit ($)
111.9 of less	$46 ($7)	$69 ($29)
112-186.5	$67 ($11)	$103 ($42)
186.6-261.1	$89 ($14)	$137 ($58)
261.2 or more	$178 ($27)	$272 ($116)
Standard Fee (not listed in the Federal Government's *Green Vehicle Guide*)	$89 ($14)	$137 ($58)

Enabling EV inclusion in car-sharing fleets

Car-sharing services have become increasingly popular in Australia in recent years. Through allowing individuals to share a fleet of vehicles instead of owning their own private car, car-sharing can help to reduce the number of vehicles on the road, lower the overall demand for transportation, and decrease the amount of emissions generated by the transportation sector. When coupled with initiatives that encourage the use of low and zero emission vehicles like EVs, this transport policy has been shown to reduce the rates of ownership, frequency of car use and reduce overall vehicle kilometres travelled[5].

Local governments should actively partner with car-sharing companies to advance the use of electric vehicles in their fleets. In addition to financial incentives, for these schemes to be widespread and successful, there is need for local investment in charging infrastructure at dedicated car parking spaces exclusively for the use of car-sharing vehicles. Without this, operators cannot offer a reliable experience to its users, and therefore the proposition of investing in shared EVs becomes too risky.

One of the significant benefits of encouraging the uptake of EVs in car-sharing fleets is it presents a low-cost option for members of the community to have the opportunity to experience an EV, and increases awareness of the benefits of this technology.

Procurement policies that preference external contractors transitioning to EVs

One other consideration for local governments is how external contractors can be incentivised to transition to EVs. Preferential treatment of parties that actively demonstrate a commitment to transitioning their light and heavy vehicle fleets to EVs should be incorporated into procurement policies. Noting such commitments may lead to marginal differences in contract costs, this should be accounted for to ensure those organisations that commit to reduce emissions in the local area receive appropriate recognition of the social benefit, within a competitive tendering process.

5 https://www.sciencedirect.com/science/article/abs/pii/S0967070X15000347

Example policy process

STEP 1 Consider options for incentivising the adoption of EVs in the local area

STEP 2 Engage with community and other stakeholders to identify opportunities to partner on initiatives

STEP 3 Develop an action plan for EV incentives, including short-, medium- and long-term initiatives

STEP 4 Progressively implement incentives, and regularly evaluate success in terms of progress towards achieving sustainability and EV-specific targets (see page 11)

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

Future-proofing the built environment for EVs

The transition to electric vehicles in our road vehicle fleet raises both opportunities and challenges. In the built environment, a key new requirement will be the ability to charge EVs at times and places convenient for drivers without placing undue stress on electrical infrastructure. Therefore, future-proofing development and infrastructure are necessary to support and prepare communities for the transition to EVs. This is often referred to as making buildings "EV ready".

WHAT MAKES A BUILDING EV READY?

Being EV-ready means to future-proof a building's infrastructure to allow for the future installation of EV charging infrastructure without major retrofitting, which is costly, complicated, and time consuming. This can be as simple as running appropriate conduit and/or cabling to parking bays for future EV charging connections, and ensuring there is appropriate capacity at the electrical switchboard to support future EV charging (the National Construction Code only requires the latter).

Note: it is not necessary for a building to have sufficient capacity for an EV to be charged in every parking space simultaneously. EV charging can be dynamically managed to spread electrical loads throughout the day.

The cost of retrofitting a building to make it EV ready can be significantly higher compared to incorporating EV readiness into the design and construction of a new building. This is because retrofitting an existing building often requires upgrading the electrical infrastructure and potentially making modifications to the building itself, which can be expensive.

The exact cost of retrofitting a building will depend on several factors, such as the size of the building, the current electrical capacity, the type of charging equipment desired, and local regulations and codes. One international study[6] from San Francisco indicated it costs 1.7-2.3 times as much to retrofit a parking space with an EV charger than to plan for it when the parking is originally constructed. On average, retrofitting a building in Australia can cost anywhere from a few thousand to tens of thousands of dollars, depending on the scope of the project.

6 Energy Solutions. (2016). Plug-In Electric Vehicle Infrastructure Cost-Effectiveness Report for San Francisco.

In comparison, incorporating EV readiness into the design and construction of a new building is typically much more cost-effective, as the electrical infrastructure can be planned and installed in a more efficient manner. Making a building 'EV ready' requires planners and builders to install the electrical cabling, distribution boards, and circuitry to support electric vehicle charging, at the time of development. For example, installing wiring to support charging would add about a tenth of 1%, or $30,000, to a new $30 million building. In doing so, residents can easily install charging infrastructure without having to upgrade the electricity to the building and can avoid costly retrofitting.

EV readiness requirements under the National Construction Code (NCC) 2022

Where new structures are being created that have car parking spaces, local governments are often well placed to set sustainability requirements such as 'EV charging readiness' as part of the planning approval process. The EVC encourages local governments to incorporate the 2022 National Construction Code (NCC) into their planning approval processes to align council requirements and recommendations with the national code.

The NCC 2022 requires new buildings to have the capacity to install electric vehicle charging infrastructure and to provide adequate electrical capacity to support charging. Section J9D4 of NCC 2022 specifically stipulates the minimum requirements for carparks to make them "EV ready", requiring:

- one electrical distribution board for every 24 car parking spaces.
- 100% of car parking spaces to be "EV ready" in apartment buildings
- 10% of car parking spaces to be "EV ready" in warehouses, office and retail buildings
- 20% of car parking spaces to be "EV ready" in other commercial buildings.

For further information please engage with your state regulatory body to better understand and interpret the requirements set in NCC 2022.

Supporting future-proofing of buildings for EVs

Local councils should develop reasonable planning policies that promote the installation of electric vehicle charging infrastructure in new developments and existing buildings, such as requiring a certain number of charging stations in new parking garages.

By way of international examples from the United States, the City of Ypsilanti reduced the requirement for off-street parking spaces from businesses if some of their spaces are equipped with EV chargers. And the City of Grand Rapids requires that all the parking lots provide space for 1 EV charging station for 200 parking spaces[7].

7 https://graham.umich.edu/media/pubs/How-Local-Government-Can-Lead-the-Way-on-Electric-Vehicles-48170.pdf

Given that over 80% of electric vehicle charging is done at home, and that local governments are responsible for approving building development, there is a significant opportunity for local governments to support the development of EV-ready buildings by updating Development Control Plans (DCP) to incorporate the intentions of the NCC, and allow for simple and affordable installation of electric vehicle charging infrastructure in the future.

Example policy process

STEP 1 Review the NCC 2022 (especially section J9D4) and consider opportunities to incorporate its intentions into local government planning policy.

STEP 2 Consult with stakeholders, including developers, building designers, EV industry experts, and community representatives to understand different perspectives and needs on any future changes to local government planning policy. This will ensure that "EV readiness" provisions are feasible and practical as well as catering to the needs of the community reasonably.

STEP 3 Update local government planning policy, including development control plans (DCPs) to incorporate EV readiness provisions; consider opportunities to encourage future-proofing in both new buildings as well as major renovations of existing buildings.

STEP 4 Develop guidance to facilitate the development of EV ready buildings, and ensure stakeholders are well informed of any new local government requirements or DCP provisions.

STEP 5 Regularly review and evaluate the success of EV readiness provisions to ensure they are being implemented effectively.

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

Enabling the rollout of EV charging infrastructure

The need and speed at which electric vehicle charging infrastructure is installed will grow as electric vehicle uptake continues to increase. A transition to electric vehicles without adequate public charging infrastructure is not possible. Charging infrastructure has been demonstrated to incentivise higher uptake of EVs[8].

Local governments play an important role in the planning and infrastructure development of their local government area, and this includes planning for and enabling the rollout of EV charging infrastructure. This is particularly true of metropolitan councils where renters or apartment-dwellers will be more dependent on public chargers.

There are multiple advantages for local governments to facilitate the installation of EV chargers on public land. Efforts by local governments to support the rollout of public EV chargers will also demonstrate to their local residents and businesses that they are future proofing their community and preparing adequately for the inevitable transition to electric vehicles in Australia over the coming years.

Here we provide a brief overview of EV charging infrastructure and outline how local governments can support its deployment in their local areas.

8 https://www.sciencedirect.com/science/article/abs/pii/S0301421521005255#appsec1

The different types of EV chargers

EV charger types	Level 1 AC	Level 2 AC	Level 3 DC (often referred to as a fast charger)
Example	A mobile charging cord plugged into a power point (similar to a laptop charger)	A dedicated charging box or stall	A dedicated high-power charging stall
Typical application	Home, caravan parks	Home, work, shopping centres, car parks, caravan parks, tourist destinations	Along highways, in urban areas with limited off-street parking
Power	Typically up to 3.6 kW (technically up to 22 kW using three-phase industrial outlets)	Typically 3.6 – 11 kW, but possible up to 22 kW	25 – 350 kW
Typical charge rate	1 – 3.6 km every 10 mins	3.6 – 11 km every 10 mins	25 – 350 km every 10 mins
Typical time to add 100 km driving range*	7 hours	2.2 hours	3 - 40 minutes

**Note: typical charging times are based on average rates and can vary depending on a range factors*

The EVC recommends councils focus on Level 2 charging for on-street parking, car parks, and tourist destinations, and also consider provision of some Level 3 chargers to support residents that have limited off-street parking, and also to facilitate longer distance EV driving. Lower power level 3 chargers (e.g. 50-75 kW) may also be suitable for tourist destinations – fast enough to be attractive to travellers, but ensuring tourists stay a reasonable amount of time to spend money with local businesses. This is sometimes referred to as the “linger-and-spend” model.

Local governments' role in the rollout of EV charging infrastructure

The installation of EV chargers can be complex, and the ongoing maintenance – including providing customer support – can be challenging for local governments to manage internally. As such, it is highly recommended that local governments partner with private charge point operators to support the rollout of EV chargers in their communities, particularly in the case of DC fast chargers.

Local governments should engage with charge point operators early to explore suitable options for the deployment of infrastructure that minimise costs, while maximising utilisation and overall benefit. Some other considerations include:

- The design of charge points to accommodate the dimensions and charging requirements of all EVs, including light commercial vehicles (e.g. electric vans, utes and small trucks).
- Opportunities to provide charge point operators with access to land / car-parking bays over long-term licence agreements, subject to appropriate conditions under a commercial contract.
- Some charge point operators may also seek to install advertising at charging infrastructure sites to help recover costs, potentially reducing funding requirements, and maximising the infrastructure rollout.

To assist local governments engage with commercial charge point operators, the EVC has developed some pro-forma guidance on what to look out for when negotiating a licence agreement:

Recommendations for LGAs engaging with charge point operators

Template licence agreement for EV charging services and infrastructure

CASE STUDY

Partnering with private operators to deploy EV chargers in Knox, Victoria

In 2023, *Knox City Council* entered into an agreement with a private charging infrastructure operator to deploy seven public fast chargers at selected activity centres across the city's local government area. The chargers were deployed near train stations and shopping hubs to encourage greater spending at local businesses while visitors wait for their vehicles to charge.

The new chargers were installed at no cost to Knox City Council, and were enabled through the provision of appropriate parking bays, and the ability to provide advertising at the charging station to help recover installation and maintenance costs.

Choosing the locations for EV chargers

Deciding on the locations for EV charging infrastructure is important, and should consider a range of factors, including, but not limited to:

- In an area where there is demand for EV charging e.g., near high-density residential units with limited off-street parking; within close proximity of major roads or tourist routes; nearby tourist destinations, etc.
- Access and availability of land and car-parking spaces for both the EV charging unit, and any associated electrical infrastructure; ideally owned by Council to reduce costs.
- Access to the electricity grid with sufficient electrical capacity to support the intended number and type of charging stations.
- Surrounding amenities for drivers to use while charging e.g., restrooms, food/drink outlets, shops, tourist attractions, parks, etc.
- High visibility both in terms of ensuring EV chargers are easy to find as well as ensuring the surrounding area is safe for drivers to use at any time of day.
- Minimal civil works requirements e.g., digging up footpaths, etc, to reduce installation costs.

A careful balancing act needs to be struck when deciding on the location of EV chargers in order to minimise costs, but also to ensure the infrastructure is accessible, convenient and meets the community's needs.

Note that some local governments have encountered challenges with regard to installing EV chargers on crown land. We encourage local governments to work with their state/territory counterparts to identify any potential issues that may arise at charging sites planned for crown land and put in place uniform processes to accelerate approval.

Some examples of strategies adopted to locate EV chargers in Australia are included below:

Central Victorian Greenhouse Alliance's Charging the Regions Study

City of Wollongong's EV Charging Infrastructure Policy

Capitalising on state, territory and federal government co-funding programs

In addition to solely partnering with private operators to deploy EV charging infrastructure, the EVC recommends local governments explore what opportunities may be available to them to capitalise on state, territory and/or federal government co-funding programs.

These co-funding programs provide significant support to the rollout of different types of charging infrastructure, and help to significantly expand the number of chargers that can feasibly be deployed by private operators – particularly in regional areas. Local governments can apply directly for co-funding, or partner with private operators to co-bid for funding. A list of example co-funding schemes (available at the time of publication) has been included in Table 3 below.

Table 3 - Examples of EV charging infrastructure co-fund schemes available in Australia

Jurisdiction	Co-funding Scheme	Link
Federal	ARENA Driving the Nation Fund	https://arena.gov.au/funding/driving-the-nation-program-2/
New South Wales	EV fast-charging infrastructure	https://www.energy.nsw.gov.au/business-and-industry/programs-grants-and-schemes/electric-vehicles/electric-vehicle-fast-charging/charging-sites
	EV destination charging infrastructure	https://www.energy.nsw.gov.au/business-and-industry/programs-grants-and-schemes/electric-vehicles/electric-vehicle-destination
Tasmania	ChargeSmart Grants	https://recfit.tas.gov.au/grants_programs/climate-change/chargesmart_grants/chargesmart-3-guidelines
Western Australia	Charge Up Grants	https://www.wa.gov.au/organisation/energy-policy-wa/faq-charge-grants

In the absence of a co-funding scheme available to your local government, or outside of applications being accepted for co-funding schemes, the EVC recommends local government engage with their state, territory and federal counterparts to explore opportunities to cooperate on the deployment of charging infrastructure, particularly in regional and remote regions. Cooperation across all three levels of government in Australia will be critical to building a comprehensive, national EV charging network, that enables all Australian households and businesses to capture the significant benefits of EVs.

How much infrastructure is enough?

While it is difficult to definitively identify how much charging infrastructure should be rolled out, and needs will obviously vary across the country, as a general rule the EVC recommends all levels of government support the establishment of a national charging network that aims to have fast charging sites at least every 70 km along arterial roads and at least every 5 km in urban areas by 2027. Given this guidance forms part of a national target, at a local level, councils should account for charging infrastructure rolled out locally by other levels of government and private operators in the local area in meeting this goal.

In addition to fast-charging sites, we recommend local governments work closely with their communities to identify where AC charging may be required, and how it can be used to support local residents and businesses transition to EVs, as well as to attract EV road tourists to the area.

Example policy process

STEP 1

Consult with local stakeholders to understand interest and demand for EV charging infrastructure, as well as opportunities for future deployment, in line with supporting the establishment of a national network of EV chargers.

STEP 2

Engage with private charging operators to understand interest in deploying infrastructure in the local government area, and use feedback to inform the development of an expressions of interest (EOI) process.

STEP 3

Run an EOI process to attract submissions for the rollout of different charging infrastructure options across the local community. This EOI process should specify minimum requirements for submissions, including:

- Council's expectations in terms of co-funding infrastructure
- Conditions related to the provision of land / car-parking spaces, and if possible, identification of preferred locations (CPOs can often help identify these)
- Identification of opportunities to attract co-funding from other levels of government
- Minimum uptime and reliability standards (Note: the EVC will soon publish guidelines on our website to inform these standards)
- Commitment of private operator to ongoing maintenance and customer support

STEP 4

Select suitable private operators and establish contractual partnerships to deploy EV charging infrastructure in the local government area.

STEP 5

Promote availability of local charging infrastructure to the community, and road tourists more broadly (see page 29 for further discussion on how local governments can assist in raising awareness about EVs).

STEP 6

Regularly evaluate existing charging infrastructure, and identify opportunities to increase infrastructure in line with community needs and expectations. Ensure EV charging infrastructure rollout keeps pace with growth in the EV fleet.

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

5 Transitioning local government vehicle fleets

One of the most important initiatives that all levels of government should adopt is to accelerate the transition of their own vehicle fleets to EVs. Committing to a 100% EV government fleet provides the opportunity for more people to experience and see EVs while reducing emissions in the local community. As an additional benefit, given that fleets turnover vehicles generally every 3 to 4 years, a second-hand EV market can be rapidly developed through government leadership in adopting EVs.

Local governments run light and heavy vehicle fleets, both of which can be transitioned to EVs. Yet, this transition is not always straight-forward, and requires a number of factors to be successful, including:

- Strong executive support for the transition, with clear direction to fleet/ sustainability teams on the motivation for change, and links with local government's sustainability and EV-specific targets (see page 11)
- Active involvement of fleet users in transition planning, development of education tools, as well as eventually on-boarding using EV-specific training materials to address concerns, highlight benefits, and explain how to use and charge these vehicles, and
- Flexibility in willingness to try different approaches to what may have been implemented in the fleet previously, including seeking external support to help inform and guide at least the initial stages of transitioning to an EV fleet.

Here we outline further information to support local governments in planning the transition of their vehicle fleets to EVs.

Seeking external support

Transitioning vehicle fleets to EVs can be complex, with many different factors to consider, including the appropriate provision of charging infrastructure. An overview of some of these considerations is shown in Figure 1.

Figure 1 - Overview of considerations in planning the transition to EVs

Customer goals	Vehicle mix	Site selection	Site capability	Transition plan	Funding
Reduction in emissions Reduction in fuel and maintenance costs Demonstrating commitment to sustainable transport Preparing for the transition to EVs	Current fleet Vehicle usage (locations, distance travelled, work requirements) Vehicle types Expected future vehicle mix Total cost of ownership	Where are the vehicles based? Where do vehicles travel? Where would vehicles need to be charged? When will vehicles need to be charged?	Existing electrical infrastructure capabilities Current ownership of sites Ability and costs to upgrade infrastructure at different sites	When will existing fleet vehicles be sold? What EVs are available now and into the future? Which sites need to be enabled first? Does lease / ownership length need to be varied?	Funded internally Leased Funding support secured through government grant programs

The EVC suggests that local governments also explore potential co-funding programs offered by state, territory and federal governments to facilitate the transition of their vehicle fleets to electric. These programs provide financial assistance for the adoption of EVs in fleets. Details of state programs and eligibility vary, therefore local governments should ensure they are staying updated with available programs in each state.

At the time of writing, only NSW had a dedicated fleet incentive program open for applications via Round 5 EV Fleets Incentive. The EVC continues to advocate for dedicated fleet transition support in every state and territory as well as targeted incentives at the federal level.

CASE STUDY

Successful local government recipients from fleet funding programs

The Murray River Council successfully applied for a grant from the NSW EV Fleets Incentive Round 2, which provided them with $6,000 towards the purchase of a Kia Niro and the installation of a smart charging station. The move has allowed the council to drive down their transport emissions, decrease running costs and increase awareness of this technology within the community. The success of the program has encouraged the council to continue adopting electric alternatives in other areas of their fleet operations. The Council plans to seek further state grant funding to expand their electric vehicle fleet in the future.

WHAT IS TOTAL COST OF OWNERSHIP?

Total cost of ownership (TCO) is an important consideration when making vehicle procurement decisions. TCO considers the lifetime costs of the vehicle, including the upfront purchase cost, fuel/energy costs, maintenance costs, insurance and depreciation. TCO is often easier to calculate for leased vehicles as the costs are bundled as part of the lease package. While EV sticker prices continue to fall, generally they are still more expensive to purchase. That said, operating costs can be between 50-90% cheaper than comparable petrol/diesel vehicles. For this reason, in many cases, the TCO of EVs can be competitive with petrol/diesel models. In some cases, longer lease or holding periods help to improve the business case, and are possible due to the significantly lower servicing requirements of EVs.

A fleet advisory service or fleet management organisation can provide professional support to local governments looking to transition to EVs.

A list of EVC members that are fleet advisors or management organisations is available here, or alternatively refer to the EVC membership directory at the back of this resource pack.

CASE STUDY

Greater Shepparton leading by example on the transition to EVs

The City of Greater Shepparton is located about 180km north of Melbourne. In 2020, the council declared a climate emergency and set a goal of achieving net zero emissions by 2030. To begin the transition of its vehicle fleet, the council collaborated with the *Goulburn Broken Greenhouse Alliance on a feasibility study* in 2017 and developed a business case for the transition. Today this local government has integrated 15 PHEVs and fully electric EVs into its passenger pool fleet and introduced one fully-electric truck. All vehicles are powered by 100% solar electricity. Council has also installed a number of EV chargers, including four that are free of charge. Council's strategy is to continue transitioning the remainder of its passenger pool fleet in the years ahead.

Fit-for-purpose vehicles

Whilst the EV transition is well underway in Australia, some local governments may face practical challenges transitioning specific segments of their fleets in the near term. While the range of EV models available globally continues to rapidly expand, including electric utes, vans and trucks, many of these models are not yet available in Australia.

Local governments should initially focus on transitioning the segments of their fleet for which suitable EV replacements are already available. Fleet policy should remain flexible, given the EV market is rapidly expanding, and therefore regular reviews of new and upcoming EV models should be carried out to ensure procurement decisions are made based on the latest data on vehicle availability.

Educating users

Alongside a fleet transition, it is necessary to educate fleet users on how to drive and charge electric vehicles. A lack of knowledge on how to drive and charge EVs, as well as their capabilities, can be a significant obstacle to transitioning fleets. Buy-in from fleet users is important for accelerating adoption, and capitalising on the benefits EVs can deliver as soon as possible. It is recommended that local governments develop and/or adopt training materials specific to the use of EVs in order to increase familiarity with the technology, and ultimately support the transition to EVs. EV training events can also be useful for demonstrating the capabilities of EVs, how to use them efficiently, and also, the overall motivations for making the switch.

Examples:

QFleet's induction video on how to drive and charge electric vehicles

VicFleet's induction videos on what to do before and after driving an electric fleet vehicle

Tasmania's Smarter Fleets factsheets on transitioning to EVs, vehicle selection and policy considerations

OTHER VEHICLES AND EQUIPMENT IN YOUR FLEET

Local governments use a variety of vehicles and equipment, such as street sweepers, lawn mowers, and construction vehicles, to maintain their communities. Many of these vehicles traditionally run on diesel or petrol, however alternative electric models are emerging. By transitioning to electric vehicles, local governments can reduce their carbon footprint and work towards achieving net-zero emissions across all of their fleet and maintenance vehicles. Local governments can require contractors to use electric vehicles for these services.

Toowoomba Regional has commissioned a fully electric garbage truck as part of its ongoing waste management contract with J.J. Richards. The truck was specially designed by Volvo Trucks Australia and manufactured over a 12-month period. It was trialled for several weeks in Toowoomba prior to entry into full service in 2024. The truck is a direct result of Council seeking "innovative solutions for waste collection" under its waste services procurement. The electric truck is expected to deliver significant fuel reductions, cut operational costs and aligns strongly with Council's broader sustainability goals.

Example policy process

STEP 1 Set an initial vision for the vehicle fleet transition, with targets linked back to local government sustainability strategies or EV-specific policy (see page 11), with strong top-down executive support for the transition to EVs.

STEP 2 Consult with vehicle fleet stakeholders to understand concerns and requirements.

STEP 3 Seek external support from a fleet advisory or management organisation to help inform at least the initial stages of a transition to EVs. Work with the external advisor to develop a transition plan (for both light and heavy vehicle fleets), that also considers infrastructure requirements. Also review potential opportunities to secure grants or co-funding to support the fleet transition to EVs from state, territory or federal governments.

STEP 4 Commit to the initial stage of a transition to EVs, monitoring and evaluation progress against future EV fleet targets, and incorporate lessons into future procurement processes.

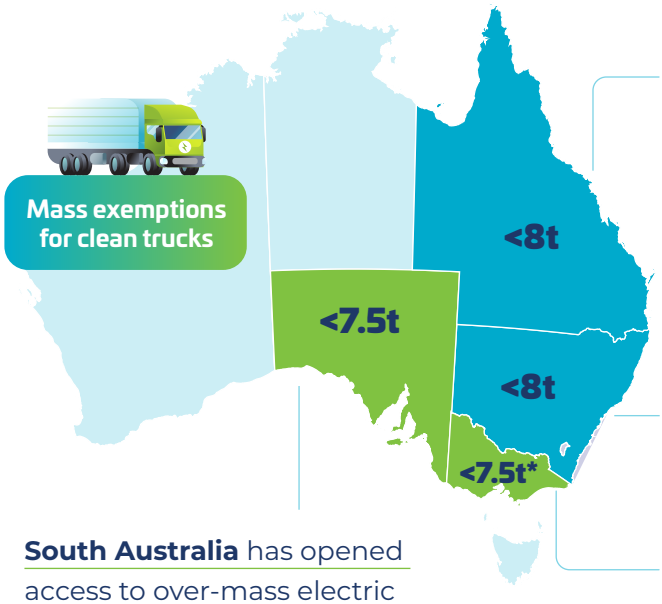
STEP 5 Develop and deploy the necessary education and training resources to ensure buy-in from fleet users on the EV transition, and a clear understanding of how to drive and charge EVs, and the inherent benefits of this sustainable transport technology.

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

6 Improving access for electric trucks

Electric vans and light rigid trucks are already operating on Australian roads but for electric prime movers and heavy rigids, uptake is currently hampered by road access rules. The current generation of heavy electric trucks typically host multiple battery packs, weighing as much as 2 tonnes. This additional weight can exceed the existing rules limiting gross vehicle mass on Australian roads.[9]

The federal regulator and individual states are already trying to accommodate the extra weight of electric trucks through regulatory concessions and exemptions. Recognising the broader community benefits that zero emission vehicles offer, electric trucks meeting certain criteria are allowed onto key parts of Australia's freight network, despite being heavier than regulations allow:



Queensland has a defined network in South-East Queensland for zero emission heavy vehicles, the first in a series of future network maps

NSW has a 2-year trial giving access to key state roads for electric trucks that are heavier than normal

South Australia has opened access to over-mass electric trucks, on a trial basis via permit application

Victoria has opened up access for two specific models of heavy electric truck/combination

To date, however, all such schemes are limited to roads managed by state governments.

9 Electric truck batteries can increase the overall tare weight of a vehicle, but they can also concentrate mass on the front steer axle, one of the most highly regulated truck dimensions. Typically steer axle masses are limited to around 6.5 tonnes in Australia; electric trucks will likely require up to 8 tonnes.

The role of councils in supporting electric trucks

Local governments own around half of Australia's public roads and councils manage access conditions on this critical network. No matter the location of the LGA, council roads play a fundamental role in supporting road freight and national supply chains:

- In metro areas, local roads are essential for 'last-mile' deliveries to businesses, households and end consumers
- Outer metro areas often host important industrial centres, with local roads connecting distribution centres and freight hubs to major freight routes
- In regional areas, almost all primary producers and freight distributors rely on council-owned roads to feed into the state and national highway network.

Without improved access for heavy electric vehicles on council roads, zero emission supply chains are largely impossible. Currently, buyers and sellers of electric trucks have no certainty on where the vehicles can be used. Prospective operators face a potential minefield of negotiating individual access arrangements for every LGA they may wish to travel through. This creates a disincentive for would-be electric fleets and a serious barrier to the uptake of electric trucks in Australia.

Managing mass on council roads

Many councils already have processes to manage the impact that heavier vehicles have on their road assets. Under existing schemes and regulatory arrangements, trucks that meet certain criteria are allowed to operate at higher masses on key parts of the local road network (e.g. to facilitate construction activity or to allow higher payloads during key harvest periods). Extending these arrangements to electric trucks as standard is a commonsense first step for local governments.

Such arrangements are becoming easier to manage with the rise of new monitoring technology and telematics data found in newer trucks models. Typically, heavy electric trucks are also equipped with these features and are by definition newer than most trucks on the road, offering better technology and performance than the national fleet average.

Evaluating the impact of heavier electric trucks should not be limited to questions of road maintenance and infrastructure. Councils should consider the full costs and benefits of allowing higher mass electric vehicles onto their roads, including:

- pollution and air quality impacts on the community across the entire LGA
- health impacts from noxious emissions and flow-on impacts on health services (e.g. asthma and respiratory disease)
- noise impacts, particularly in high-density and residential areas
- road safety impacts from newer vehicle technology with the latest safety features
- climate change and impacts on the broader LGA environment
- carbon footprint and impacts on council's emission reduction responsibilities.

Facilitating electric truck operations

How road access decisions are made are just as important as the decisions themselves. Early adopters of electric trucks already face big changes to business-as-usual operations so providing certainty on local road access is a precondition for increased uptake. Few heavy vehicle fleets operate exclusively within one LGA meaning any access arrangements by an individual council is just one of many regulatory processes for electric fleets to navigate.

Defining as-of-right access on a predefined network of council roads is best practice. Public information on where higher mass electric trucks can operate gives operators certainty over which electric trucks they can adopt and what operations they can support. Aligning council criteria with any state concessions (see page 38) must be a central principle in defining higher-mass access.

Nevertheless, some ad-hoc assessments will likely be required to facilitate individual routes serving different freight customers. Ensuring that such assessments follow a swift and flexible negotiation process is essential to boosting certainty for operators. The EVC recommends councils facilitate a 'one-stop shop' window for commercial operators to negotiate expedited access to council roads.

Councils' role as road managers

Local governments have key rights and responsibilities under Australia's *Heavy Vehicle National Law*. The National Heavy Vehicle Regulator has developed a range of resources for councils to facilitate access for non-standard vehicles, including electric trucks. Councils can stay up-to-date on these resources at www.nhvr.gov.au/LocalGovernmentUpdate.

NHVR Go: a dedicated hub for LGA road managers

Freight PASS: an interactive tool to inform road managers about the heavy vehicles they allow on their road network.

Rapid Cost Benefit Analysis: a new platform to streamline access permits

STRATEGIC LOCAL GOVERNMENT ASSET ASSESSMENT PROJECT (SLGAAP)

The NHVR's SLGAAP is an initiative funded by the Australian Government to optimise heavy vehicle access on local road networks across Australia. Specifically, it offers assistance to local government road managers to undertake heavy vehicle assessments of on-road assets, such as bridges and culverts.

Phase 3 of the SLGAAP commenced in December 2024 with $6.55 million assigned for projects through to 2026. The current focus area is on bridge and culvert assessments to complement the civil/traffic asset engineering functions that many councils have in-house. Key freight routes in Victoria and South Australia will be an immediate focus.

A series of e-learning modules is also provided under the SLGAAP available to council road managers via the Access Essentials course, available here.

Example policy process

STEP 1

If not already known, define the local road assets that most support freight movements across the LGA as well as key routes linking industrial hubs to the state/federal road network. A long-term project could be assessing the future maintenance requirements of this key network.

STEP 2

Evaluate current arrangements for approving higher mass truck movements (i.e. for diesel-powered vehicles/combinations) and any associated network rules. Assess how these concessions could be extended to heavy electric trucks, aligning with the prevailing criteria at state level.

STEP 3

Consult with major local operators, local businesses and other vehicle freight stakeholders, to understand their electrification plans for their fleets and any concerns and requirements. The EVC can provide advice from its trucking members on the kind of electric models coming to the Australian market.

STEP 4

Allocate dedicated resources within the road management team for a 'one-stop shop' for electric truck access arrangements. Predetermined as-of-right access information should be published for public reference but a streamlined enquiries portal for freight businesses should be developed for ad-hoc arrangements.

STEP 5

Electric trucks are coming so assuming higher mass vehicles as part of forward road asset management is a prudent step. In time, this should inform where and how councils allocate maintenance and infrastructure resources as the truck fleet electrifies in the decades ahead.

7 Promoting shared micro-mobility

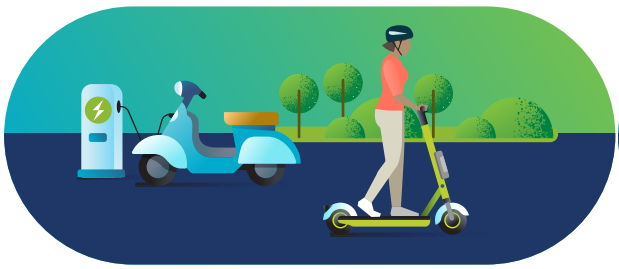
Shared micro-mobility, such as electric scooters (e-scooters) and electric bikes (e-bikes), have become an increasingly important part of Australia's mobility offerings. These services are cost-effective and offer alternative transport options for shorter journeys, as well as start-of- and end-of-trip connections to the public transport network.

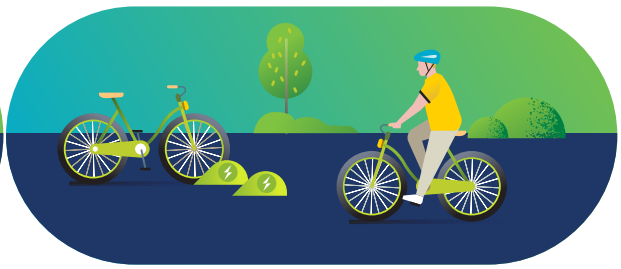
After international success, the popularity of local shared e-bike and e-scooter schemes has grown considerably in recent years, and are now available in many urban areas, as well as in regional towns and tourist destinations across Australia.

Local governments have an important role to play in supporting and promoting the rollout of sustainable transport options, including shared e-bikes and e-scooters. Here we provide guidance on how local governments can enable the adoption of these sustainable transport options in their local area.

What are e-scooters and e-bikes?

Typically, e-bikes and e-scooters (sometimes referred to as eRideables) are small lightweight electric motored devices which are generally restricted to operate at less than 25km/h. The electric battery can be charged either by plugging into a power point or, in a shared scheme, it can be manually replaced with a fully charged battery/device. Electric scooters are propelled solely by the electric motor/s, whereas electric bikes generally have an electric motor that assists with pedalling but does not propel the vehicle without pedalling.





Private versus shared micro-mobility

It is important to distinguish between privately-owned versus shared micro-mobility devices. With private devices, law enforcement is the main mechanism for limiting poor behaviour, including the use of illegal devices. For this reason, it is understandable that many Australian governments have limited the use of private devices. Further work is required to introduce stronger frameworks for discouraging the illegal use of privately-owned micro-mobility devices in order to protect the community.

Shared micro-mobility differs as the operator – and in turn the local government that sets the rules for the operator – can more strictly manage the use of these devices. Shared devices can be electronically limited to travel at slower speeds through particular areas e.g. high pedestrian traffic areas. These devices can also be restricted for use within certain zones, and locked to prevent use when they exit these zones.

Another benefit of shared micro-mobility devices is that users need to register with the operator to pay to use the devices, and agree to a set of terms and conditions. This includes having their behaviour tracked to ensure they are complying with the operator's riding rules. This tracking helps to deter poor behaviours, and also helps to encourage positive behaviours, such as appropriate parking of devices.

The three leading shared micro-mobility operators in Australia – Beam, Neuron and Lime – have fleets of shared devices in several cities across Australia, and continue to improve their technology to meet local government requirements and community expectations.

Shared operators are solely responsible for the maintenance of their micro-mobility fleets, including the charging of batteries. Local governments can also set performance expectations, and run competitive tender processes for operators to bid for time-limited permits to operate in the local government area.

While there is limited ability to profit from these permit schemes, there is the potential to offset administrative costs, while outsourcing the primary responsibility for managing the planning and operations to the shared micro-mobility operators.

For the purpose of this local government resource pack we primarily focus on how local governments can support and promote the use of shared micro-mobility – given the greater ability to control and manage the use and performance of these devices, as well as the use of safer, high-quality devices.

We recommend local governments engage with their state/territory government counterparts to discuss the broader considerations of personal micro-mobility device usage. This includes management of both the illegal use of these devices, as well as the potential fire risk posed by these devices due to a lack of regulation mandating the importation of safe, privately-owned devices.

CASE STUDY

Brisbane City Council's E-Mobility Strategy

The City of Brisbane was the first city in Australia to permit shared micro-mobility and has administered one of the most successful trials in the country. Within two weeks of its launch, over 50,000 rides occurred across the permitted area in the city. The success of their program is credited to a strong regulatory environment, and extensive consultation that led to the development of Brisbane City Council's *E-Mobility Strategy*. The Council recorded over 3 million trips on electric scooters and bikes during 2024.

Regulations and Insurance

Regulations guiding the legal use of micro-mobility devices are generally set at a state or territory government level. Local governments should engage with their state/territory counterparts to understand these regulations, and the implications for deploying shared micro-mobility locally. At present, these regulations do differ significantly across Australia so it is not possible to provide generic guidance here.

Local governments should also ensure all shared micro-mobility operators have appropriate insurances in place. This is an emerging space in the local insurance industry, however, with many operators already having a presence across Australia, appropriate insurance products do exist.

Safety

While the promotion of shared micro-mobility can deliver many benefits, it is necessary for local governments to work with vendors to ensure that they are accessible, equitable and safe for all members of the community. There are several measures that local governments can implement in partnership with shared micro-mobility operators to increase safety, including:

- Ensuring permitted riding areas have adequate infrastructure
- Installing riding and parking signage and markings – see Figure 2
- Setting a cap on the number of shared micro-mobility devices allowed in different zones – this could differ across device types e.g. e-scooters vs e-bikes
- Running rider education programs
- Implementing speed limits in high pedestrian traffic areas
- Enforcing minimum standards for operators to meet in terms of the provision of safe devices, appropriate deployment of devices, and reporting of data – including collision, complaint and feedback data.

Figure 2 - Example of designated parking zones for shared micro-mobility devices.

Collecting and analysing rider data, such as through GPS tracking or injury data, can also help to provide insights into areas that require additional measures in terms of safety and/or compliance. It's important to consider that accidents can be caused by a range of factors, such as rider behaviour, infrastructure or unfamiliarity with the technology. Therefore, a comprehensive approach to micro-mobility safety which includes education, regulation and enforcement is necessary.

Attitudes and behaviours towards shared micro-mobility vary across Australia and therefore private operators need to work with local governments to trial 'best practise' regulations suited to each area.

Mobility as a Service

Local governments should also consider how shared micro-mobility schemes fit within the broader local mobility system. Micro-mobility has been made available as part of Mobility as a Service (MaaS) schemes deployed across the globe. MaaS provides the community with the opportunity to purchase different mobility subscriptions that include discounted or unlimited access to shared micro-mobility, public transport, taxis, car-sharing, and effectively any other mobility service available in the area.

The deployment of micro-mobility via MaaS programs can help to improve overall connectivity and accessibility across a city or region, as well as increase the use of non-private transport options in general. There are two notable MaaS programs that have been deployed in Australia:

1. Tripi (Sydney MaaS Trial) – IAG, University of Sydney, iMOVE: up to 100 participants, 2019-2020[10]
2. ODIN PASS (UQ-TMR MaaS Trial) – Queensland Department of Transport and Main Roads, The University of Queensland, iMOVE: over 6,000 paid participants, 2022-ongoing[11]

While there are other challenges associated with deploying MaaS programs, this broader mobility landscape is worth considering when supporting the adoption of shared micro-mobility. Local governments can also seek support from their state/territory counterparts to jointly deploy MaaS trials and/or programs that incorporate shared micro-mobility.[10]

10 https://imoveaustralia.com/wp-content/uploads/2021/04/iMOVE-Sydney-MaaS-Trial-Final-Report-March-2021.pdf
11 https://odinpass.com.au/

Example policy process

STEP 1

Consult with other local governments that have already deployed shared micro-mobility programs for insights, recommendations and lessons learnt, and understand existing community mobility needs and areas for improvement, including through direct surveying of residents.

STEP 2

Develop an Expression of Interest (EOI) process that clearly outlines local government's aims and requirements for a local shared micro-mobility program, and seek submissions from micro-mobility operators.

STEP 3

Review EOI submissions, and consult with local stakeholders for further input on the final procurement requirements, including consideration of:

- Riding rules and zones
- Parking rules and designated areas
- Number of devices per operator
- Number of operators
- Time length of permits

STEP 4

Undertake a timely but competitive procurement process to determine which operators will be allocated initial permits.

STEP 5

Appoint initial operator/s and work with their teams to collaboratively plan for the future deployment of devices, including consideration of any initial trial period. This planning stage should also involve development of appropriate communication materials to explain the aims of the program, and advocate the safe and efficient use of devices. It should also involve the development of appropriate data reporting tools to track the success of the program overtime, and identify any potential issues.

STEP 6

Launch shared micro-mobility program, and ensure reviews of the scheme are undertaken, taking into consideration local learnings, as well as learnings from other local governments across Australia.

STEP 7

Revisit offering of new permits for existing and new operators every 2 to 3 years.

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

8 Increasing EV awareness and responding to community needs

An effective electric vehicle rollout requires active community consultation and engagement. By working closely with their constituents, local government can ensure that EV policy and plans align with the community's vision and, importantly, empower residents to play an active role in supporting the transition to an electric vehicle future.

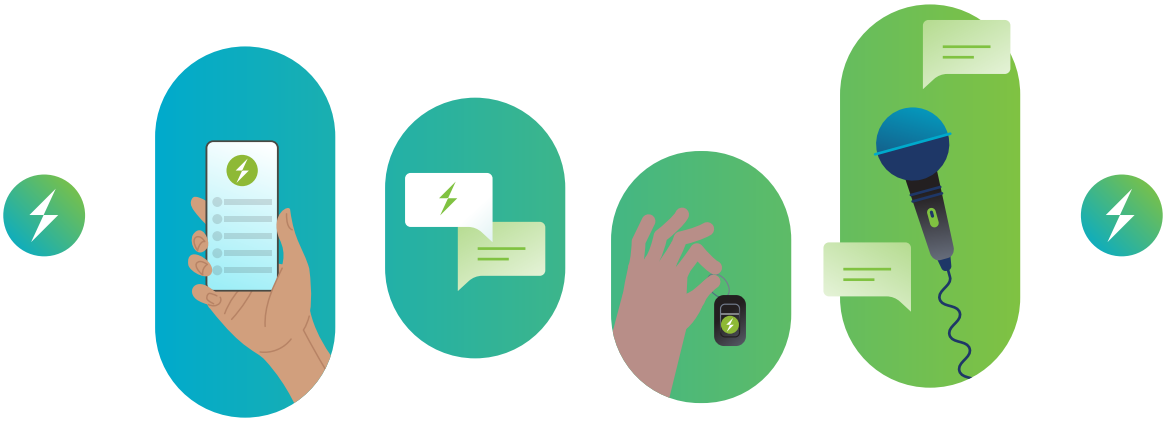
Here we provide guidance on the kinds of EV awareness and engagement activities local governments can support as part of a broader EV strategy.

Increasing EV awareness

Public awareness campaigns and activities are critical for increasing familiarity with new technologies, like EVs. These campaigns should dispel misinformation, explain the benefits of electric vehicles, and cover the practicalities of owning an EV. This can be done through local community advertising, EV demonstration/drive days, information sessions, as well as through local government's website and other communication avenues e.g. community newsletters.

Electric vehicle drive and demonstration days

EV drive and demonstration days allow the community to get first-hand experience of EVs, understand their capabilities and learn more about how they work and the associated benefits of ownership. These events can include presentations by industry experts, local EV owners and importantly the opportunity for the community to ask questions. This includes understanding about how and where to charge an EV.



CASE STUDY

EV Drive Days

In late 2024, the Central NSW Joint Organisation held a 2-day EV drive day at the famous Mount Panorama circuit in Bathurst, NSW. The event included a full-day information session for local government representatives in Central NSW focusing on the unique challenges facing regional councils transitioning their fleets to EVs. The second day was a free test drive day for members of the public to experience a range of EVs first-hand. Similar events have now been arranged in neighbouring LGAs.

Examples:

Manningham Council's Electric Vehicle Expo & Seminar in 2024

Noosa Council sponsoring the Noosa EV & Electrify Everything Expo

The NRMA's program of drive days in Dubbo, Port Macquarie and other NSW centres

Information sessions

Facilitating information sessions can increase awareness around EVs, answer frequently asked questions and inform residents on EV incentives available to them. Guiding and educating residents on processes such as accessing EV incentives or installation of electric vehicle charging at home, can support potential adopters. These community outreach efforts can be achieved through partnerships with trusted professionals who may be more familiar with the barriers and concerns of the target community group.

CASE STUDY

Information sessions

Mornington Peninsula Shire Council hosted a 'Transition to an Electric Vehicle' event in a local community theatre. The information session included a showcase of electric vehicles and presentations from experts in the field. The information session covered the following topics:

- General information including the benefits of EVs
- EV model availability including new and used options, models available now and in the future, price range, and rebates
- EV charging including public charging networks, home charging options, opportunities to link to renewable energy

The session was recorded, and all information was accessible on EV dedicated page on the council website.

Examples:

Waverly Council's webinar on EV charging in apartment buildings

Penrith City Council's webinar: "Is an EV Right for Me?"

Yarra City Council's Zero Emissions Vehicle Subsidy Information Session

Websites or accessible resources

Having a dedicated EV page on your local government website can ensure there is a central location for constituents to access information regarding EVs, including local policy updates. This page can link to additional programs and resources but could include topics such as: local government plans to transition to electric vehicles, proposed charging locations, education materials or downloadable posters/pamphlets that local shop owners or community centres can display. Exemplary council webpages also include local EV success stories from constituents who have benefitted from EV programs and policies. Social media and digital campaigns have also contributed to EV information reaching a wide range of individuals.

Examples:

City of Adelaide Charging Information and Locations

Merri-bek Electric Vehicle information page

City of Wollongong's micromobility resources

Consultation

Community consultation can take many forms, such as public meetings, surveys and focus groups. By involving the community in the planning process, local governments can ensure that EV policies are inclusive and equitable, and that they consider the diverse perspectives and experiences of residents. This can lead to greater buy-in and participation from the community, which is essential for long-term EV policy success.

Examples:

Northern Beaches Council EV charging engagement report

Clarence City Council EV Infrastructure consultation

City of Ipswich's feedback on its e-scooter e-scooter trial

Example policy process

STEP 1

Engage with the community to gather input, feedback and suggestions on local government EV policy priorities, and identify potential misconceptions or knowledge gaps that should be the initial focus of awareness activities.

STEP 2

Seek opportunities to partner with other local governments and industry to develop EV education resources, and to hold awareness events in the community, such as EV drive days. Leverage any community events to promote EV initiatives being led and/or supported by local government.

STEP 3

Continue to gather community feedback on local government EV policy and initiatives, and support resources and events – as required – to enable broader acceptance, and the eventual transition to an electric vehicle future.

The steps outlined above are general in nature and may not align with specific local government policies and procedures.

Looking for helpful resources to inform your EV awareness activities?

Please check out our website here.

Get help from a member of the Electric Vehicle Council

The Electric Vehicle Council (EVC) is the national peak body representing the electric vehicle industry in Australia. The EVC represents companies involved in providing, powering and supporting electric vehicles. Our mission is to accelerate the electrification of transport for a sustainable and prosperous Australia.

Our members are well placed to support and work with local governments in the delivery of the priority policy areas outlined in the resource pack. To enable this, we have developed an online EVC member directory, through which local government's can identify the members that are best placed to assist them with delivering different EV initiatives in the community.

The online EVC member directory is regularly updated, and can be accessed here.

Local governments have been able to receive additional assistance by forming alliances with other nearby councils to cooperate on EV-related efforts. These alliances have worked together to share knowledge on EVs, and advance regional efforts to reduce emissions and create EV-ready communities. The EVC advises local governments to participate in discussions and partnerships within the EV field, either through inter-council talks or through alliances. Examples include:

Victoria	Northern Alliance for Greenhouse Action Central Victorian Greenhouse Alliance Eastern Alliance for Greenhouse Action
South Australia	Local government association of SA Adapting Northern Adelaide Resilient East
New South Wales	Central NSW Joint Organisation Northern Rivers Joint Organisation Riverina & Murray Joint Organisation Net Zero Acceleration
Western Australia	Perth South West Metropolitan Alliance

Answers to the top 10 frequently asked questions by local governments

Here we have compiled answers to the ten most frequently asked questions we have been asked by local governments across Australia.

1 IS THERE A REGULAR, ONE-STOP-SHOP REPORT THAT PROVIDE UPDATES ON STATE, TERRITORY AND FEDERAL GOVERNMENT EV POLICIES, INCLUDING AVAILABILITY OF INCENTIVES, CO-FUNDING PROGRAMS, ETC?

The EVC produces an annual EV industry recap at the start of each year, and an assessment on national progress through out State of EVs report in the middle of each year. These reports can be found on our website here.

2 DO EVS ACTUALLY REDUCE CLIMATE EMISSIONS?

Electric vehicles have the ability to completely eliminate tailpipe emissions when running on electricity. This not only is an improvement for the environment, but importantly removes toxic fumes from our communities, which are produced by our existing petrol/diesel vehicles, and have significant negative impacts on our health.

When we look at the full lifecycle emissions of EVs, which accounts not only for the tailpipe emissions during their use, but also the manufacturing of the vehicles, and the end-of-life recycling and disposal, on average EVs reduce emissions by around 35% compared to similar petrol/diesel models. This can be increased significantly when EVs are primarily charged using renewable energy, however, even when charged using the existing grid, they deliver an environment benefit.

For more information, check out the International Council on Clean Transportation's assessment of lifecycle emissions for electric vehicles here.

3 ARE THERE SUSTAINABILITY ISSUES RELATED TO THE MINING OF BATTERY MINERALS?

As with the production of all goods, it is important that materials are ethically-sourced and environmental impacts are minimised. While there have been past issues with the supply of some battery minerals, such as cobalt, many carmakers are ensuring the minerals they source are traceable, and that there is transparency in being able to know the source. Many EV manufacturers are also adopting battery

chemistries that do not include minerals like cobalt, such as lithium iron phosphate (LFP) batteries.

Australia is already a major supplied of lithium, nickel, copper and cobalt – all important minerals for the manufacturing of EVs. Our country is well placed to further expand supply of critical minerals to support EV manufacturing globally, in an ethically and environmentally-responsible manner.

4 CAN EVS AND THEIR BATTERIES BE RECYCLED?

The vast majority of materials included in EV batteries can be fully recycled and used in the production of new batteries. Prior to recycling, EV batteries can also be taken out of vehicles after a useful life of around 10-15 years, and then repurposed as stationary storage for potentially another decade. In this way, EVs provide an opportunity to move closer to a circular economy where we will become less reliant on mining new minerals over time.

The major challenge facing EV battery manufacturing today is the low volumes due to most EVs still being relatively new. Over the coming decade, as more EV batteries become available, there are significant economic opportunities for Australia both in second-life applications of these batteries, and recycling these batteries to be used in the manufacturing of new batteries.

5 CAN AUSTRALIA'S ELECTRICITY GRID SUPPORT AN ELECTRIC VEHICLE FUTURE?

If every car on Australia's roads today was to become electric, this would result in around a 15% increase in overall electricity demand. Given this transition will occur over the next 25 or so years (in order to achieve net zero by 2050), there is more than enough time for this level of new energy generation to come online.

One potential challenge for the grid from EVs is the time of charging. While current EV owners are generally either charging during the day using solar, or overnight to take advantage of cheap, off-peak electricity rates, further efforts will be required to ensure this behaviour continues as the number of EVs grows in Australia. This will help to prevent EVs putting extra stress on the electricity during peak demand periods.

Like all cars, EVs are generally parked more than 90% of the time, and so as long as drivers have access to charging where these vehicles are parked, there is significant flexibility in shifting the time of when charging occurs to minimise any negative grid impacts, while maximising the benefit for the driver through lower energy costs. To read more about EVs and the Australia electricity grid, check out one of our recent reports on this topic here.

6 WHAT EV MODELS ARE AVAILABLE IN AUSTRALIA?

While Australia is still lagging international markets on EV sales and model availability, there are now more than 122 electric car models available in Australia, and this continues to regularly expand. The number of electric scooters, bikes, trucks and buses available in Australia also continues to expand. You can view the full list in the most recent State of EVs report available here.

7 WHEN WILL ELECTRIC TRUCKS AND ELECTRIC UTES BE AVAILABLE IN AUSTRALIA?

They are already here! Around 18 electric trucks models and 10 models of electric vans and utes are already currently available in Australia. More launches are expected in the months ahead. , and we encourage you to reach out to electric truck makers who are members of the EVC by going to our member directory. Additionally, the first electric ute went on sale in Australia in late 2022, and we anticipate many more will become available over the next few years. You can keep an eye on the EV models available in Australia on our website here.

8 HOW MUCH DOES IT COST TO CHARGE AN EV?

The cost to charge an EV varies depending on how you choose to charge it. Most EVs are charged at homes/depots/workplaces and can be scheduled to take advantage of either cheap electricity from solar during the day, or from off-peak tariffs overnight. This can equate to as much as a 90% saving compared to a petrol or diesel, vehicle, or the equivalent of less than $0.20 per L (compared to paying $1.80 per L for petrol). It generally costs more to charge at public fast chargers – due to the extra convenience – and this varies depending on the charging network, the type of vehicle being charged, and the power of the fast charger. Generally speaking, the cost to fast charge an EV is still around 20% cheaper than buying petrol.

9 WHERE CAN I FIND MORE INFORMATION ON WHERE CHARGING STATIONS ARE LOCATED?

The network of EV charging stations in Australia continues to rapidly expand. The best public tool for finding EV charging infrastructure at present is Plugshare. Plugshare provides a global map of charging stations with the ability to see photos of different charging sites, read user reviews, and also find out costs.

The EVC also regularly reports charging infrastructure statistics every 6 months as part of our annual EV industry recap and State of EVs reports, available here.

10 CAN ELECTRIC VEHICLES BE USED TO POWER BUILDINGS OR COMMUNITY SHELTERS?

All electric vehicles are effectively batteries on wheels which means in theory they could be used in the future to power appliances, homes, buildings, traffic lights, and even send power back to the grid.

In Australia at present there are some vehicles that come with a feature called “vehicle-to-load” (V2L), which allows 240V appliances to be plugged in to the car and run off the vehicle’s battery. This can include lights, kettles, power tools, etc.

There have also been some initial trials of exporting power from EVs back to the grid using a feature called “vehicle-to-grid” – although this is not yet widely available commercially. This feature provides the vehicle owner with the ability to potentially charge using cheap electricity, and then sell electricity back to the grid at a profit. Related to V2G is another feature called “vehicle-to-home” (V2H) which allows EV owners to power their homes using the vehicle's battery, either to reduce costs or as a backup during a blackout. The average EV battery holds enough energy to power a home for anywhere between 3-7 days.

While we are still a few years away from these features being available in many EVs, there is significant promise for EVs being able to provide energy benefits, in addition to meeting transport needs, in the near future.

See our full list of FAQs for the general public here.

ELECTRIC VEHICLE COUNCIL

City of Ryde

The Electric Vehicle Resource Pack for Local Governments

2025