

File: IW-075.150.080 Doc: IC20/359

# ITEM 2 ELECTRIC VEHICLE CHARGING INFRASTRUCTURE ON PUBLIC LAND

The uptake of Electric Vehicles (EV) in Australia is relatively low compared to other developed countries. In 2019 however, EV sales in Australia increased threefold with 6,700 vehicles being sold compared to 2,200 vehicles in 2018. Consumer research has identified high purchase cost (with no current Government subsidies or benefit) and range anxiety as two of the biggest factors contributing to the low uptake rate.

To address the issue of range anxiety and support the uptake of EVs, a draft Electric Vehicle Charging Stations on Public Land Policy (draft Policy) has been developed. The draft Policy details clear processes to guide prospective providers and Council for the establishment, operation and management of EV charging infrastructure on public land in the Wollongong Local Government Area. This report recommends that the draft Policy be placed on public exhibition.

#### RECOMMENDATION

- 1 That the draft Electric Vehicle Charging Stations on Public Land Policy be placed on public exhibition for a minimum 28 day period.
- 2 Following public exhibition, a further report be provided to Council on the submissions received and make recommendations relating to adoption of the Policy.

### REPORT AUTHORISATIONS

Report of: Chris Stewart, Manager City Strategy

Authorised by: Linda Davis, Director Planning + Environment - Future City + Neighbourhoods

#### **ATTACHMENTS**

1 DRAFT Electric Vehicle Charging Stations on Public Land Council Policy

# **BACKGROUND**

The current uptake of EVs is expected to increase to 70,000 vehicles by 2023 with distance range improvements and competitive pricing of vehicles. Whilst Council cannot control the pricing of EVs, it can promote the installation of EV charging infrastructure in the LGA to address range anxiety issues.

At its meeting of 22 July 2019, Council resolved (in part) to:

1. Endorse the development of an Electric Vehicle (EV) Charging Stations on Public Land Policy.

There are five existing EV charging infrastructure locations in the Wollongong LGA:

- 1. University of Wollongong (1 station Northfields Avenue, Keiraville)
- 2. UOW Innovation Campus (1 station Squires Way, Fairy Meadow)
- 3. Figtree Grove (2 stations near the up ramp for first floor parking)
- 4. Wollongong Central Market Street Parking Station (3 stations 2 Tesla); and
- 5. Warrawong Plaza (2 stations).





Figure 1 – Map of existing EV charging infrastructure

The current locations of charging infrastructure require EV owners to go to the UOW campuses or a shopping centre to charge their vehicle. None of these existing stations are located on accessible, public land. Nor are they complementary to destination charging, which provides opportunities for both residents and visitors to the City to charge their vehicles in key locations and explore, dine and contribute to the local economy.

Transportation emissions account for 19% of community emissions for the City. The take up of self-charging hybrids and EVs has the potential to reduce our transport emissions. Research has identified that EVs produce less emissions than standard internal combustion engine (ICE) vehicles in their operation due to their efficiency in converting fuel energy into power.

The provision of EV charging infrastructure will support the move away from ICE vehicles. Longer term, the use of renewable energy to supply the charging stations may reduce our emissions footprint even further.

# **PROPOSAL**

In determining appropriate locations for EV charging infrastructure on public land and negotiating with providers, Council must consider a range of issues and requirements, including:

- sufficient power supply
- sufficient car parking space



- proximity to amenities
- · proximity to tourist destinations
- · accessibility for persons of varied mobility
- accessible throughout the day and night
- lease and licencing arrangements.
- traffic management
- · conflict with other land uses
- procurement processes
- community safety
- environmental impact of construction
- lost opportunity costs

The draft Policy has been developed (see Attachment 1) to address these issues and has involved extensive desktop review of existing policies and consultation with key staff from other Councils and across various Council divisions.

The Policy aims to ensure that EV charging infrastructure providers are aware of Council's requirements and expectations. It prescribes the site selection criteria and design requirements for this infrastructure and the roles and responsibilities of Council and providers of the EV charging infrastructure.

It is proposed that the draft Policy be placed on public exhibition for a minimum 28-day period and subsequently reported back to Council with the outcomes of this process and recommendation relating to adoption.

Central Coast Joint Organisation has also prepared an online Electric Vehicle Charging Toolkit which contains guidance documents, process flow charts and a site selection matrix to assist the community and local businesses to understand and navigate the process of installing EV charging infrastructure. The toolkit includes information on the necessary steps and includes considerations such as site selection, charging infrastructure, required approvals, the installation process and signage. It is proposed that a similar toolkit be developed for Wollongong.

Should the draft Policy be adopted, it is further proposed to explore opportunities with potential providers to install additional charging infrastructure across the City. If supported it is proposed that Council conduct a public procurement process for a third-party operator(s) to supply, install and manage charging infrastructure on public land in the Wollongong LGA, in accordance with the adopted Policy.

# CONSULTATION AND COMMUNICATION

Council staff have consulted with the following organisations to inform the development of the draft Policy:

- other Australian Councils with EV charging stations policies or programs:
- Northern Rivers Shire Council
- Greater Dandenong City Council
- Hornsby Shire Council
- Maribyrnong City Council
- Adelaide Electric Vehicles
- Moreland City Council
- Electric Vehicle Council of Australia
- Lake Macquarie City
- Australian Government Infrastructure Australia
- UNSW Sydney
- Randwick City Council
- Woollahra Municipal Council
- Hobsons Bay Council
- key Council staff from Environmental Planning, Property and Recreation, Supply Chain and Logistics, Traffic and Transport Unit and Project Delivery



### PLANNING AND POLICY IMPACT

This report contributes to the delivery of Wollongong 2028 Goal 1 – 'We value and protect our natural environment' and Goal 2 – 'We have an innovative and sustainable economy'. Under these goals the draft plan delivers on the following objectives:

- Objective 1.1 Our natural environment, waterways and terrestrial areas are protected, managed and improved
- Objective 1.2 We practice sustainable living and reduce our ecological footprint
- Objective 1.5 Set targets and reduce our greenhouse gas emissions through our participation in the Global Covenant of Mayors for Climate and Energy

Objective 2.2 - The regions industry base is diversified

It specifically delivers on the following Strategies and Actions as shown in Table 3.

Community Strategic F	Plan	Delivery Program 2018-2021		Operational Plan 2019-20	
Strategy		3 Year Action		Operational Plan Actions	
1.2.1 Reduce our ecolor footprint, working together to minim	ise	Methods to reduce emissions are investigated and utilised	1.2.1.3.3	Monitor and report on organisational water, energy and greenhouse gas emissions trends	
the impacts of clir change and reduc waste going to lar	ce		1.2.1.3.4	Implement and review annual water and energy saving actions	
1.2.2 Government and community work together to mitiga impacts of climate change on our environment and generations		Our community is proactively engaged in a range of initiatives that improve the sustainability of our environments	1.2.2.1.3	Develop a project and work with partners to further explore the United Nations Sustainable Development Goals and how they align to the community's goals with funding to be considered through the business proposal process	
			1.2.2.1.4	Implement resourced priority actions from the Environmental Sustainability Strategy 2014-22	
1.5.1 Participate in the Global Covenant Mayors and set emissions reducti		Set an emissions reduction target and carry out actions to reduce greenhouse gas emissions through the Global Covenant of Mayors	1.5.1.1.2	Set an emissions reduction target that is in alignment with the Global Covenant of Mayors compliance requirements	
targets for the City	У		1.5.1.1.3	Develop a Climate Change Adaptation Action Plan and an Emissions Reduction Action Plan	
2.2.1 Further diversify t region's economy through a focus o and disruptive industries and greatechnology	n new	The development of renewable energy products and services is supported	2.2.1.1.1	Seek out opportunities to incorporate green technologies in Council's projects and contracts	
1.2.1 Reduce our ecolor footprint, working together to minim	ise	Methods to reduce emissions are investigated and utilised	1.2.1.3.3	Monitor and report on organisational water, energy and greenhouse gas emissions trends	
the impacts of clir change and reduc waste going to lar	ce		1.2.1.3.4	Implement and review annual water and energy saving actions	
1.2.2 Government and community work together to mitiga impacts of climate change on our environment and generations		Our community is proactively engaged in a range of initiatives that improve the sustainability of our environments	1.2.2.1.3	Develop a project and work with partners to further explore the United Nations Sustainable Development Goals and how they align to the community's goals with funding to be considered through the business proposal process	



				1.2.2.1.4	Implement resourced priority actions from the Environmental Sustainability Strategy 2014-22	
1.5.1	1.5.1 Participate in the Global Covenant of Mayors and set emissions reduction	1.5.1.1	Set an emissions reduction target and carry out actions to reduce greenhouse gas emissions through the Global Covenant of Mayors	1.5.1.1.2	Set an emissions reduction target that is in alignment with the Global Covenant of Mayors compliance requirements	
	targets for the City			1.5.1.1.3	Develop a Climate Change Adaptation Action Plan and an Emissions Reduction Action Plan	

Installing EV charging stations, is consistent with the following goal of the draft Sustainable Wollongong Strategy:

• We will achieve net zero emissions by 2030 for Council operations, and together we will achieve net zero emissions by 2050 for the City.

It will also deliver on the following draft Climate Change Mitigation Plan actions:

- **T3** Develop and adopt an Electric Vehicle Charging Stations on Public Land Council Policy, addressing public access and range anxiety.
- **T4** Pursue the installation of public EV charging stations at a number of accessible locations across the City. This will consider partnerships with the State Government, charging companies, car companies or other sponsors to establish electric vehicle charging stations.

Council joined the Cities Power Partnership (CPP) in January 2020 and has committed to five pledges. Installing EV charging infrastructure on public land will contribute to achieving the following pledge:

• Encourage sustainable transport use such as public transport, walking and cycling through Council transport planning and design.

# SUSTAINABILITY IMPLICATIONS

The establishment of EV charging infrastructure on public land in the Wollongong LGA will support the uptake of alternative forms of transport which have a lower emissions intensity than most ICE vehicles. This will in turn support Council's Climate Emergency Declaration, Global Covenant of Mayors and Cities Power Partnership commitments and achievement of the emissions reduction targets.

#### **RISK MANAGEMENT**

Should Council not pursue the development of a Policy, Council will not be acting in accordance with recently adopted emission reduction targets, pledges and draft climate change mitigation actions.

There are lost opportunity costs associated with the provision of EV charging infrastructure as the land will no longer be available for general parking purposes.

# FINANCIAL IMPLICATIONS

If charging infrastructure is installed as part of a public procurement process, it is anticipated that these costs will be largely borne by the contractor, in accordance with the draft Policy.

# **CONCLUSION**

There are currently five EV charging infrastructure locations that are publicly accessible in the Wollongong LGA, these are all located on private land within shopping centres or University of Wollongong. Installing charging infrastructure on public land will assist to alleviate 'range anxiety' and provide increased public access to charging infrastructure, encouraging uptake of the EV technology.

The draft Electric Vehicle Charging Stations on Public Land Council Policy has been prepared to facilitate installation of additional EV charging infrastructure particularly at destination charging locations. It is recommended that the draft Policy be placed on public exhibition.



Should the draft Policy be adopted by Council, it is proposed that a public procurement process be undertaken to explore opportunities with potential providers for the installation of EV charging infrastructure across the City.





# ELECTRIC VEHICLE CHARGING STATIONS ON PUBLIC LAND COUNCIL POLICY

ADOPTED BY COUNCIL: "[TO BE COMPLETED BY GOVERNANCE]"

#### **PURPOSE**

The purpose of this Policy is to provide guiding principles to prospective providers and Council for the establishment, operation and management of Electric Vehicle Charging Infrastructure (EVCI) on Public Land in the Wollongong Local Government Area (LGA). This is to allow for consistency in approach and execution and ensure that providers are aware of Council's requirements and expectations.

#### **POLICY INTENT**

The main objectives of this Policy are to:

- provide guiding principles for the provision, establishment, operation and management, maintenance and removal of EVCI on appropriate parcels of Public Land in the Wollongong LGA
- 2. clearly outline the roles and responsibilities of the provider and Council in relation to the establishment, operation, management and removal of EVCI
- 3. promote visitation to the region by encouraging the placement of EVCI at desirable tourist locations to address Range Anxiety; and
- 4. support the uptake of sustainable transport options which will aid the community in reducing emissions in the Wollongong LGA.

### **WOLLONGONG 2028 OBJECTIVES**

This Policy supports the delivery of the following Wollongong 2028 goals:

- 'Goal 1 We value and protect our environment'
- · 'Goal 2 We have an innovative and sustainable economy'; and
- 'Goal 6 We have affordable and accessible transport'.

Specifically, it contributes to the following strategies and deliverables:

Community Strategic Plan	Delivery Program		
1.2.1 Reduce our ecological footprint, working together to mitigate the impacts of climate change and reduce waste going to landfill.	1.2.1.3 Methods to reduce emissions are investigated and utilised.		
1.2.2 Government and community work together to mitigate and adapt to the impacts of climate change on our environment and future generations.	1.2.2.1 Our community is proactively engaged in a range of initiatives that improve the sustainability of our environments.		
1.5.1 Participate in the Global Covenant of Mayors and set emissions reduction targets for the city.	1.5.1.1 Set an emissions reduction target and carry out actions to reduce greenhouse gas emissions through the Global Covenant of Mayors.		
2.2.1 Further diversify the region's economy through a focus on new and disruptive industries and green technology.	2.2.1.1 The development of renewable energy products and services is supported.		
2.3.1 Build our city as a tourist destination of choice for conferences, events, and a place to live, learn, work and visit.	2.3.1.2 Support projects that investigate opportunities for the provision of tourism infrastructure.		
6.3.3 Plan for effective future changes in transport including the option for disruptive transport technologies in the future.	6.3.3.1 Investigate the option for disruptive transport technologies and the impact on the future transport network		



**COUNCIL POLICY** 

#### **POLICY**

#### **Public Procurement Process**

Council aims to ensure the appropriate establishment of EVCI on Public Land, that this infrastructure will be installed and operated in a safe, well-managed and sustainable as possible manner and will be an ongoing asset for the wider community.

The installation and operation of EVCI on Public Land requires the completion of a detailed public procurement process. Successful providers will be invited to enter into a lease/licence/agreement (unless other consent pathways are identified) with Council for the site.

Key aspects of the procurement process include:

- · demonstrating experience, skills and resources in establishing, operating and managing EVCI
- · contacting Council to discuss potential sites and design requirements
- obtaining public liability cover to the value of \$20 million
- addressing the site selection criteria for a suitable location as outlined in this Policy
- developing a design layout of the overall EVCI site including details of parking, signage, type of charger/compatibility and requisite power supply in accordance with the design requirements outlined in this Policy; and
- · provision of a suitable management plan for operation and maintenance of EVCI.

In some instances the installation of an EV charging station will fall within the exempt development provisions of the <u>State Environmental Planning Policy (Infrastructure) 2007</u>. However, a Development Application (DA) may still be required depending on the proposed location. It is the provider's responsibility to obtain any required consents or approvals.

#### Site Selection Criteria and Design Requirements

The following site selection criterion and design requirements must be addressed in order for Council to progress the procurement process for the installation and operation of EVCI on Public land.

**Location** – The location of the EVCI must be on suitable Public Land, preferably in an off-street existing car park. Council may consider other areas of Council-owned and managed Public Land where the provider is able to demonstrate that public safety and traffic movement will be managed sufficiently. The location must be compliant with AS/NZS 60079.10.1, *Explosive gas atmospheres*.

The location must meet the definition of a destination charging location; frequented by visitors and showcases Wollongong's diverse destinations, tourist attractions and amenities.

In proposing the location the provider must consider a number of factors, including: the proximity to other EV charging points; potential impacts on the traffic flow and other uses of the area and close proximity to a range of amenities, including but not limited to: restrooms, seating, food outlets, tourist locations and other attractions. The provider must demonstrate how these factors have been addressed/considered in their submission to Council.

Discussion with Council will determine site-specific conditions which the provider will be subject to under the lease/licence/agreement arrangements.

**Power** – Charging stations must have suitable access to existing electrical supply. As chargers draw a significant amount of power, a review of the available electrical infrastructure is required prior to installation to ensure that there is sufficient existing capacity to cater for charging stations. Evidence must be provided to demonstrate the sufficient capacity of the grid, considering the number of charging stations proposed to be installed at any one location. If the existing electrical supply is found to not have sufficient capacity, it is



# **COUNCIL POLICY**

the responsibility of the provider to organise any upgrades that may be required. Exceptions to this may be considered in discussion with Council and if Council is already looking to upgrade electrical supply in proposed locations.

Safety – Destination Charging is likely to be in demand over extended hours and in locations that will be unmonitored. Dedicated EV parking bays shall comply with DCP Chapter E2: Crime Prevention through Environmental Design. The location of the charging stations must be easily seen by pedestrians and vehicles and be adequately lit. Parking signage must be in accordance with Australian Standard 1742. Wayfinding and safety signage are required to highlight the location of the facility and provide information on the use of charging stations, including but not limited to, parking restrictions, costs of charging and instructions. EVCI (including, but not limited to, supporting infrastructure such as signage, bollards, designated charging bay), must be managed and maintained by the provider throughout the operation of the facility to ensure continued good working order and to mitigate risks such as electrocution and trip hazards so that the provider can ensure public safety at all times.

Access – EVCI should be accessible at all times, available 24 hours a day, seven days a week and therefore must not be subject to traffic movement congestion. The location of charging stations must be connected to the wider transport network and must allow for disability access compliant with the *Disability Discrimination Act 1992*. The EV parking spaces should cater for all types of EV charging connections used by vehicle manufacturers and the location of their charging points on all types of vehicles; this will require two existing car parking spaces per charging bay. The dedicated EV parking bays are to only be used by EVs while charging; appropriate signage and labelling of dedicated EV parking bays must clearly identify this. Appropriate charging time restrictions will be discussed with Council and stipulated in the lease/licence/agreement; this information must be made clear to users of EV charging bays.

**Sustainability** – The provision, establishment, operation, management, maintenance and removal of EV charging stations and supporting infrastructure must be in line with DCP Chapter A2: Ecologically Sustainable Development.

**Types of Charging Stations** – Council will only accept the installation of chargers in accordance with NSW Government's EV charging standards and principles. As a minimum, chargers must meet the following performance criteria:

Fast charge 50kW.

However, it is Council's preference that provider's install:

• Super-fast charge 120kW, or above.

As technology in this area develops, the provider may be required to upgrade existing charging infrastructure to meet community demand.

# Leasing/Licencing Requirements

Providers are subject to the specific conditions and obligations outlined in the leasing/licencing/agreement as agreed with Council. The nature of the lease/licence/agreement will be determined on a case by case basis and will consider factors, including but not limited to, the provider, proposed site and design, maintenance obligations, public safety and legal liability, insurance requirements and desired length of operation of EVCI. Leasing/licencing of sites on Public Land must be in accordance with Council's <u>Leases and Licences of Council Owned and Managed Land, Buildings and Public Roads Policy</u>.

The acquittal process and terms of payment will be determined in lease/licence/agreement arrangements. The provider will be required to provide a security or bond to Council prior to the commencement of the lease/licence/agreement and installation of EVCI. Any further upgrade or expansion of the EVCI will be subject to further consideration and consent from Council.

Council reserves the right to terminate a lease/licence/agreement entered into with a provider of EVCI and require the removal of EVCI and supporting infrastructure if a breach of the lease/licence/agreement occurs. In these circumstances, the provider of EVCI would be required to make good the land.



**COUNCIL POLICY** 

#### Council's Role

#### Council will:

- ensure a fair and equitable selection of providers
- · provide input into the development of site selection and designs for EVCI on Public Land
- review and assess suitable applications for EVCI on Public Land; and
- promote EVCI by making information freely available to the wider community via our website such as the location of charging stations in the Wollongong LGA.

#### Provider's Role

Eligible providers will:

- · be required to enter into a lease or licence agreement with Council
- adhere to the site selection criteria and design requirements set out above, including all operational and environmental controls
- be responsible for the installation (including appropriate power supply), operation, management, maintenance and removal associated with EVCI and all supporting infrastructure
- be responsible for and bear the cost for any upgrades required for the existing electrical supply infrastructure to have the capacity to cater for EV charging infrastructure
- remain responsible for any upgrades in plug and connection hardware that may be required as EV technology develops; and
- provide access by arrangement, for educational or promotional activities in partnership with Council.

#### LEGISLATIVE REQUIREMENTS

The provider is required to comply with all relevant legislation and obtain all applicable approvals and consents. Consideration must be given to Council Policies that may apply to various aspects of the establishment, management, maintenance, operation and removal of EVCI on Public Land.

# **REVIEW**

This Policy will be reviewed every two years from the date of each adoption of the Policy, or more frequently as required.

### REPORTING

Reporting on the continued compliance with EVCI and supporting infrastructure being a safe facility ie any regular compliance certificates required during operation.



# **COUNCIL POLICY**

#### **DEFINITIONS**

Council – Refers to Wollongong City Council.

Provider - A company or organisation which provides/supplies EVCI.

**Public land** – As defined in the <u>Local Government Act 1993</u>, means any land (including a public reserve) vested in or under the control of the council, but does not include:

- a) a public road\*; or
- b) land to which the Crown Lands Management Act 2016 applies\*; or
- c) a common; or
- d) a regional park under the National Parks and Wildlife Act 1974.
- \* For the purpose of this Policy, 'Public Land' includes public roads where Council is the roads authority under the <u>Roads Act 1993</u> and Crown land managed by Council.

**Destination Charging** – EVCI that is installed in locations frequented by tourists and visitors such as hotels, restaurants and points of interest.

**Electric Vehicle (EV)** – This describes a range of different vehicles that are powered by an electric motor with a battery on its own, or accompanied by a fuel-powered internal combustion engine. This includes Plug-in Hybrid Electric Vehicles (PHEVs).

**EV Charging Infrastructure (EVCI)** – Infrastructure that supplies and supports the provision of electric energy to recharge EVs. This includes charging stations, signage, designated parking bays and all other supporting infrastructure.

Range Anxiety – The fear that when driving an EV vehicle, it will run out of charge and the driver will be stranded due to the inability to recharge.

APPROVAL AND REVIEW					
Responsible Division	City Strategy				
Date/s adopted	Executive Management Committee [updated by policy owner]	Council [DD Mmmm YYYY]			
Date/s of previous adoptions	[DD/MM/YYYY]				
Date of next review	[Not more than two years from date of last review]				