

# Public Electric Vehicle Charging Infrastructure Guideline

#### **AUTHORISATION & VERSION CONTROL**

| Guideline Number    | GDL-030                           |
|---------------------|-----------------------------------|
| Guideline Owner     | Director Environment and Planning |
| Date Adopted        | 01/05/2024                        |
| Version No          | 1                                 |
| Document ID Number: | 10921177                          |
| Review Date         | 01/05/2028                        |

#### **Council Disclaimer**

Council's Guideline to Public Electric Vehicle Charging in Cumberland City Council (The Guideline) was formulated to be consistent with Council's legislative obligations and within the scope of Council's powers. This document should be read in conjunction with relevant legislation, guidelines and codes of practice. In the case of any discrepancies, the most recent legislation should prevail.

This document is a guide and therefore does not constitute legal advice. Legal advice should be sought in relation to particular circumstances and liability will not be accepted for losses incurred as a result of reliance on this document.

### Contents

| 1.  | BACKGROUND  | 4  |
|-----|---|----|
| 2.  | PURPOSE   | 4  |
| 3.  | SCOPE   | 5  |
| 4.  | PRINCIPLES  | 5  |
| 5.  | RELEVANT DOCUMENTS  | 5  |
| 6.  | APPROVAL PROCESS  | 6  |
| 7.  | DESIGN CONSIDERATIONS                                       | 6  |
| 8.  | ROAD MARKINGS AND SIGNAGE                                   | 8  |
| 9.  | CHARGING SPECIFICATIONS                                     | 9  |
| 10. | SITE SELECTION  | 10 |
| 11. | THIRD PARTY PROVIDER SELECTION                              | 11 |
| 12. | ADVERTISING   | 11 |
| 13. | FINANCIAL COMMITMENTS FOR THIRD PARTY PROVIDERS             | 12 |
| 14. | LEASING AND/OR LICENCING ARRANGEMENTS                       | 12 |
| 15. | APPENDICES  | 14 |
|     | Appendix A: EV Development Consent Flowchart for Applicants | 14 |
|     | Appendix B: Definitions and Acronyms                        | 15 |

#### 1. BACKGROUND

Transport emissions contribute up to one third (~5.8 million tonnes) of Western Sydney's total greenhouse gas emissions, with light vehicles constituting half of the transport emissions (Western Sydney Electric Vehicle Roadmap 2022-2030). This demonstrates that transport is one of the highest emission sectors in the region and thus strongly contributes to the growing need to transition away from fossil fuels and towards zero-emission transportation.

The focus on decarbonisation of transport will serve to provide benefits of reduced emissions and better air quality as well as facilitate sustainable, innovative technologies for mobility. Western Sydney councils are ready to lead regional and localised planning with Cumberland City joining the charge for an electrified future.

The increasing share of EVs highlights the growing community demand for appropriate charging infrastructure. Moreover, the transition to zero-emission transport aligns with Cumberland's community goals and policies, including:

- Cumberland Community Strategic Plan Goal 3 to deliver sustainable infrastructure and services and demonstrating sustainably planned infrastructure to meet our community's current and future needs.
- Cumberland 2030: Our Local Strategic Planning Statement Planning Priority 15 – to plan for a resilient city that can adapt to natural hazards and Climate Change.

Cumberland has developed the Public Electric Vehicle Charging Infrastructure Policy to facilitate and prepare for the growing demand to rollout publicly accessible EV charging infrastructure for our community. The Policy is supported by a Guideline, which is to be read in conjunction with the Policy.

#### 2. PURPOSE

The purpose of this Guideline is to deliver a clear and transparent document for the determination of Electric Vehicle (EV) charging infrastructure installed on public land within the Local Government Area (LGA) as well as to facilitate a fit-for-purpose network of public EV charging stations that provide equitable access for our community.

This document outlines the criteria for the approval process, design considerations, charging specifications, site selection, advertising, financial commitments, and leasing arrangements of public EV charging infrastructure in the LGA.

#### 3. SCOPE

This Guideline and associated policy apply to publicly accessible EV charging infrastructure installed on public land owned or managed by Council including on and off-street parking, whether installed by Council or by third party private operators. It establishes a framework for the provision of public electric vehicle charging infrastructure across Cumberland City for our community.

#### 4. PRINCIPLES

This Guideline will:

- Support the development of an integrated and effective Electric Vehicle (EV) charging network within the current and future transport network.
- Provide a fair, equitable and sustainable model that supports current and future EVs and all charging types where possible (i.e. Open Charge Point Protocol).
- Provide inclusive access and equity in the allocation of suitable locations on public land to support the diverse needs, interests, and aspirations of the community.
- Provide direction for providers of EV infrastructure to install, manage and operate EV infrastructure on public land within the Cumberland Local Government Area.
- Facilitate a fit-for-purpose network of public EV charging stations that provides equitable access to infrastructure for our community.

#### 5. RELEVANT DOCUMENTS

There are a number of relevant documents for consideration under this Policy and Guideline. These are outlined below.

#### 5.1 Relevant Legislation

- State Environmental Planning Policy (Transport and Infrastructure) 2021
- The Roads Act 1993
- Local Government Act 1993
- Work Health and Safety Act 2011
- Disability Discrimination Act 1992
- Crown Land Management Act 2016
- Cumberland Local Environmental Plan (LEP) 2021
- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2021

#### 5.2 Relevant Council Policies

- Cumberland City Council Public Electric Vehicle Charging Infrastructure Policy
- Cumberland City Council Community Strategic Plan 2017-2027
- Cumberland 2030: Our Local Strategic Planning Statement (LSPS)
- Cumberland Development Control Plan (DCP) 2021
- Cumberland City Council Smart Places Strategy and Action Plan 2023
- Cumberland Disability Action Inclusion Action Plan 2022

#### 6. APPROVAL PROCESS

Under the State Environmental Planning Policy or SEPP (Transport and Infrastructure) 2021 (Subdivision 3) (2.124), development for an EV charging unit can be carried out without development consent (such as exempt development), by a Review of Environmental Factors (by or on behalf of Council) or through a development application. Further details on the planning pathway process are provided in Appendix A.

#### **6.1 Exempt Development**

• If the proposed works meet the development standards identified in the State Environmental Planning Policy (Transport & Infrastructure) 2021, consent is not required to be obtained. This may be as an exempt development.

# 6.2 Development permitted without consent — public authorities - Review of Environmental Factors

 In instances where development is occurring on or behalf of Council, and is not covered as exempt development, a Review of Environmental Factors will be prepared in accordance with statutory and/or policy requirements.

#### **6.3 Development Application**

 In instances where consent is required, applicants must submit a proposal with supporting documentation including plans to Council or other relevant authority seeking approval to carry out the installation.

Please note that other approvals may be required through the Roads Act, 1993.

#### 7. DESIGN CONSIDERATIONS

There are a number of design considerations for the provision of EV charging infrastructure. These are outlined below.

#### 7.1 Layout and Site Spacing

- All aspects of EV car parking spaces/charging bays shall be designed and constructed in accordance with the relevant standards and guidelines including but not limited to:
  - o Australian Standards 2890 (Set) Parking Facilities.
  - o Australian Standards 1158 Lighting of Public Roads and Public Spaces.
  - Austroads Guidelines for Low and Zero Emission Vehicle Charging Infrastructure Installation.
- The location of on-street EV car parking spaces shall be away from traffic facilities so as not to create traffic congestion or safety concerns in the street.
- The design and construction of an EV car parking space/charging bay must be done in such a way as to ensure safe and easy pedestrian access space around parked vehicles when they are connected to the charging station.
- Angle parking spaces will be required to allow an additional 400mm in width (on top of the requirements in AS 2890) to ensure access to vehicles with side charging ports. This will also apply to parking spaces being designed with an accessible shared space required for disability parking spaces.
- All new EV car parking spaces/charging bays must be constructed in accordance with Australian Standards (AS2890.1/AS2890.5) and the Disability Discrimination Act 1992 including kerb and guttering, kerb ramps, sealing, signage and line marking.
- As part of the application process, detailed civil engineering plans are to be provided for on-street EV charging infrastructure for review and approval by Council. The plans must include all dimensions, line marking and signage and must also demonstrate compliance to the relevant standards and guidelines.

#### 7.2 Accessible Parking

 All EV car parking spaces/charging bays must be compliant with the Disability Discrimination Act 1992 which includes compliance with current standards for access (AS2890.5/AS2890.6). Consideration must also be given to the placement of the charging station to ensure that it does not obstruct any shared spaces that are required for wheelchair access in accordance with AS2890.5 and AS2890.6 and to ensure that all operable parts of a charging station are easily accessible for those with disabilities.

#### 7.3 Access for Maintenance

- The design and construction of EV car parking spaces and charging units must be carried out in such a way as to allow access for maintenance and repairs.
- A maintenance schedule including regular inspections shall be implements by the Provider. The standards for maintenance of EV charging units are outlined in AS/NZS 3000:2018.

#### 7.4 Ingress and Egress Points

 The location of the charging station shall be such that it allows for vehicles of all charging port configurations (front, back or side charging ports) to park wholly within a parking bay to charge their vehicles without obstructing traffic in the travel lane.

#### 8. ROAD MARKINGS AND SIGNAGE

EV charging infrastructure, including signage and parking bays, are to be easily visible and accessible for users to locate, with consideration of the following:

- All EV car parking bays are to display pavement symbols that is consistent with the requirement of current standards and relevant legislation (Transport for NSW Electric Vehicle Pavement Marking).
- Adequate lighting is to be provided for the safety and security of drivers, passengers, vehicles and EV charging infrastructure. Lighting must be adequate to easily read associated signage, instructions, controls on EV charging infrastructure and identify all possible EV charging inlet locations and for charging cable visibility.
- EV parking spaces are to be located to ensure safe sight distances for users, pedestrians and bicycles and on-street spaces. For EV parking spaces on the road network, these will also need to be approved by the Cumberland Local Traffic Committee.



Figure 1. Transport for NSW pavement marking to be displayed on dedicated EV parking spaces.

**Note:** Liability of EV charging infrastructure is the responsibility of the third-party private operator. Cumberland City Council will not be held liable under any circumstances.

 All EV car parking bays are to display 'No Parking; Electric Vehicles Excepted While Charging' (Transport for NSW sign no. R5-40-1n) signage unless otherwise directed by Council. The signage is to be consistent with the requirements of current standards and any legislation. An additional sign (e.g., Transport for NSW sign) to restrict the maximum duration of stay may be displayed when the existing parking in the location is time restricted. The maximum duration of stay of an EV parking bay is to be consistent with the parking restrictions in the area.



Figure 2. Transport for NSW signage to be displayed at EV parking spaces.

#### 9. CHARGING SPECIFICATIONS

EV charging infrastructure is to be provided with consideration of the following specifications:

- The installation of EV charging on public land within the LGA shall be consistent with the NSW State Government Policy Future Transport 2056 – NSW Electric and Hybrid Vehicle Plan and at a minimum include:
  - Consistent standards for charging connections based on European CCS2 and CHAdeMo for DC fast chargers, and Type 2 (Mennekes) for AC charging.
  - Connected, networked and smart chargers to be prioritised to allow the most efficient energy use for both consumers and network operators.
  - Public access and open payment options platforms (credit/debit cards).
  - The charging cable must have the capacity to reach all points of the carparking space, to cater for EVs with all charging configurations (front, rear or side charging points) where possible and in accordance with current industry practices and guidelines. Cables should not be a hazard for pedestrians or other vehicles at any given time.

- All kerbside charger installations must be completed by licensed electrical contractors in compliance with AS/NZS 3000:2018 Electrical installations and require a Certificate of Compliance for Electrical Work.
- The provider may be required to upgrade existing EV charging infrastructure to meet new industry standards and requirements. Council will bear no cost or responsibility for this upgrade.
- All EV car charging stations to consider renewable energy sources, such as solar panels, storage battery and accredited GreenPower, where possible.

**Note:** Provision may be altered where future EV charging infrastructure supersedes that which is written in this Guideline if an alternative is demonstrated to be at the satisfaction of Council.

 EV charging infrastructure is to demonstrate open interoperability which refers to the principle of open communication and data exchange between EV hardware and software.

#### 10. SITE SELECTION

Aligning with Cumberland's Smart Places Strategy and Action Plan, Council will be considering EV charging infrastructure in strategic locations within the LGA. These include key centres and corridors in Cumberland, Council owned landholdings with community based facilities and public car parking areas.

These strategic locations have been identified due to their proximity to key social and business destinations, as well as traffic volumes, dwell times, number of available parking spots and percentage of non-detached dwellings in the area.

Analysis against the criteria outlined below must be considered when selecting location(s) for EV charging infrastructure. The provision for public place EV charging infrastructure will be facilitated by Council.

- Council owned or managed land.
- The land classification has been considered. Community land may be considered suitable where the proposal is in accordance with the Local Government Act 1993, Crown Land Management Act 2016 and the relevant Plan of Management for that land.
- Environmental considerations and amenity have been accounted for.
- The electricity supply capacity of the existing supply network is suitable (or can be reasonably upgraded).
- The EV charging infrastructure is safe with adequate lighting and availability for pedestrian, vehicle and bicycle access at all hours.
- Existing car parking availability considered.
- Minimal impact on car parking availability for non EV's.
- Not adversely impact road safety or traffic movements.

- Compliance with relevant Australian Standards.
- There is a demand and future growth in the proposed location specific to the charging type.

#### 11. THIRD PARTY PROVIDER SELECTION

Selection in relation to third party private operators is subject to Council's procurement processes and procedures. Any proposals from providers will undergo case-by-case review and observe all criteria requirements under this process. The selection of successful applicants or submissions by providers will be decided by Council in a fair and equitable manner and will be at the discretion of Council to approve or reject.

The following key aspects of the procurement process for selecting a third-party provider include:

- Have demonstrated experience, expertise and resources to establish, operate and manage EV charging infrastructure.
- Sites are to be selected from a list of pre-determined sites/s provided by Council
  or using Council's site selection criteria in consultation with Council.
- The design layout and provision of management for operation, maintenance and removal should be in accordance with the requirements outlined in this Guideline.
- Successful providers will be required to enter into a lease/licence agreement with Council.

#### 12. ADVERTISING

The use of advertising by any third-party private provider is to be disclosed to Council in the initial application process. Separate planning approvals will be required for the presence of advertising in compliance with the State Environmental Planning Policy (SEPP) (Transport and Infrastructure) 2021.

Under the SEPP (Transport and Infrastructure) 2021; advertising integrated into the EV charging unit is permitted as exempt development in certain locations. The following conditions are stated in Section 2.124D Exempt development—certain premises for advertising of the SEPP (Transport and Infrastructure) 2021.

- '(h) for an advertising-enabled EV charging unit: the screen or display of the unit—
  - (i) is integrated within the frame of the unit; and
  - (ii) does not have a surface area greater than 3m<sup>2</sup>; and
  - (iii) complies with AS/NZS 4282:2019, Control of the obtrusive effects of outdoor lighting; and

#### 13. FINANCIAL COMMITMENTS FOR THIRD PARTY PROVIDERS

The following considerations are provided in relation to financial commitments for third party providers:

- Any costs associated with the supply, design, installation, operation, ongoing
  maintenance, and removal or relocation of any given EV charging infrastructure
  on public land is the responsibility of the third-party private operator, unless
  agreed in writing or otherwise with Council. This includes ancillary
  infrastructure, such as dedicated car parking spaces, signage, line marking,
  pavement marking and, lighting as well as the reinstatement of the site to match
  the existing surrounding domain, when required.
- Prior to the commencement of any works on public land, Council may require a
  security bond or other security mechanism to be paid by the provider together
  with all applicable insurances and warranties. This security payment will be of
  sufficient value to cover all works required to reinstate the site to its original
  condition and might be held by Council for the duration of any lease or licence
  agreement.
- Any costs incurred by Council in excess of the security amount will be borne by the applicant/third party private operator, with further details to be specified within the lease or licence agreement.
- The provider is also responsible for securing development consent or approval from Cumberland City on a case-by-case basis and at their own cost.

#### 14. LEASING AND/OR LICENCING ARRANGEMENTS

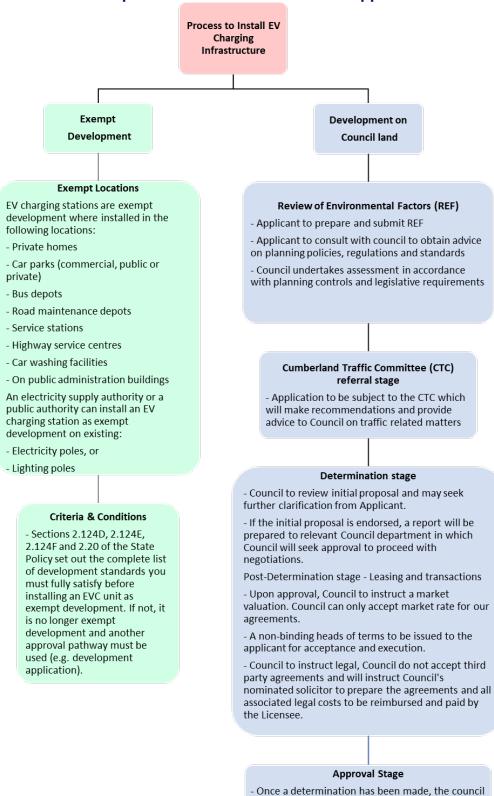
The following considerations are provided in relation to leasing and/or licencing arrangements:

- Council manages all requests regarding the leasing and licencing of Council assets. Any provision of EV charging stations on Council owned/managed land will be in accordance with Council's Property Policy and leasing process.
- The provider will be required to submit a proposal with supporting documentation including plans, development consent or approval, to Council for consideration.
- Following the endorsement of all relevant stakeholders, Council will commence
  the leasing process. All costs associated with the utilisation of Council owned
  /managed land for the installation and operation of an EV charging station, will
  be borne by the provider.
- Council reserves the right to require appropriate remuneration for use of public land for the purposes of EV charging stations. An independent registered valuer will be engaged to determine the current market value.

- Costs associated with the preparation, negotiation and finalisation of any lease
  or licence agreement will be at the cost of the provider. Licence and/or lease
  terms shall be in accordance with Council's Property Policy and leasing process
  and where appropriate, those terms and conditions required by the relevant
  Minister as it relates to Crown Land.
- If Council propose to grant a lease or licence, a public notification may be required to be undertaken in accordance with Section 47 of the Local Government Act 1993 (NSW).
- A maintenance schedule including regular inspections shall be implemented by the provider. All maintenance and works are to be carried out in a timely manner to avoid delays to service. Information on the maintenance response times is to be provided to Council to demonstrate compliance. Further requirements will be specified as part of any licence/lease agreement. The standards for maintenance of EV chargers are outlined in AS/NZS 3000:2018.
- Information on the levels of use of the car spaces and charging are to be provided to Council every 6 months to assist Council in monitoring the demand for such parking spaces.
- Entering into a lease or licence agreement with Council to utilise public land for installation and operation of an EV charging station in no way guarantees development consent or approval. All risk, public safety and legal liability issues will be specified via any condition of any development consent and where applicable, the licence/lease agreement. Costs associated with the negotiation and finalisation of any lease or licence agreement will be at the cost of the provider.
- Non-compliance with the Policy and/or Guideline may lead to the termination of any agreement between the provider and Council and may result in the forced removal of EV charging and ancillary infrastructure, at the cost and responsibility of the provider.
- Permission granted by Council for the provision of a charging station on Council land will not preclude Council from allowing other providers, including Council, to offer charging infrastructure and services on nearby land or integrated to multifunction smart poles or similar infrastructure, with or without charging fees to end users.

#### 15. APPENDICES

#### **Appendix A: EV Development Consent Flowchart for Applicants**



ensures that the conditons of approval are met and that the development is carried out in accordance

with the approval plans

## **Appendix B: Definitions and Acronyms**

| LGA  | Local Government Area  |
|--|--|
| The Act                                      | Local Government Act 1993  |
| AS   | Australian Standards   |
| Vehicle                                      | Applies to vehicles of any type whether powered or not. It includes motor vehicles, bicycles, motorcycles, trailers and caravans                                       |
| EV   | Electric Vehicle   |
| DC   | Direct Current   |
| AC   | Alternating Current  |
| EV Charging Unit                             | Refers to the type of infrastructure that is used to recharge the battery in electric vehicles   |
| Charging Infrastructure                      | All infrastructure involved in the charging of electrical vehicles including but not limited to charging stations, charging cables, bollards, line marking and signage |
| CPO/Third Party Private<br>Operator/Provider | Charge Point Operator. A company or organisation that owns, operates and manages electric vehicle charging infrastructure  |
| Public land                                  | Any land vested in or under the control of Council   |
| Greenhouse Gas Emissions                     | Emissions of gases into the Earth's atmosphere that trap heat  |
| On-street parking                            | Car parking spaces on the side of a public street or road  |
| Off-street parking                           | Car parking spaces anywhere other than a public street or road   |
| Smart Charger                                | Chargers which can be connected to a network or the internet   |
| CCS2   | Combined Charging System 2 is a DC fast charging-plug standard   |
| CHAdeMo                                      | Abbreviation of "CHArge de MOve," is a DC fast-<br>charging plug standard  |
| Type 2 (Mennekes)                            | AC Charging plug standard developed in Europe  |

| OCPP       | The Open Charge Point Protocol (OCPP) is an open-source communication protocol for networked electric vehicle chargers. It can be considered a syntax language in which EV chargers are able to communicate between electric vehicle charging points and central control systems |
|------------|--|
| GreenPower | Electricity produced from solar, wind, geothermal, biogas, eligible biomass, and low-impact small hydroelectric sources  |