

Electric Vehicle Charging Policy

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1. Introduction

Electric vehicles (EVs) are a small but rapidly growing segment of vehicles in Australia and have the potential to reduce transport emissions. Charging opportunities are one of main barriers for Australians interested in EVs. Kingston City Council (herein also referred to as Council) is well placed to help facilitate the development of the EV charging network, as Council manages much of the land allocated to parking within the municipality. It is also important to underscore while EVs are an important pathway to enabling a sustainable transport future, other initiatives will also play as critical a role including:

- reducing the number of trips
- reducing average trip distances
- encouraging a mode shift to active transport.

This policy, however, focuses on how Council is committed to maximising the contribution EVs can play in lowering emissions to net zero by 2030.

2. Purpose

This policy seeks to provide guidance for the planning, provision, installation, management, maintenance, and removal of Electric Vehicle (EV) charging infrastructure on public and private land in Kingston City Council, Victoria. Intended users may include groups listed in Table 1 below:

Who is this Policy for?

Intended User	Role and Responsibility is to:
Residents, local businesses, or developers	<ul style="list-style-type: none">• plan, install, and operate EV charging.• ensure standard operating procedures are followed for safe and compliant installation.
Electric Vehicle Charge Point Operators, equipment installers, and service providers	<ul style="list-style-type: none">• plan, install, and operate, and maintain EV charging infrastructure• ensure standard operating procedures are followed for safe and compliant installation.
Strategic and community facility planners, project managers	<ul style="list-style-type: none">• ensure current and future developments have appropriate infrastructure
Transport planners	<ul style="list-style-type: none">• review parking in planning permit applications or development referrals
Engineers and infrastructure teams	<ul style="list-style-type: none">• provide advice on engineering risks• ensure planning considers other civil infrastructure
Parking Services	<ul style="list-style-type: none">• monitor parking compliance• enforce EV charging service level agreement and minimum operating standards
Statutory Planners, Building Surveyors, Consultants	<ul style="list-style-type: none">• advise on development and more specifically EV charging provision• ensure compliance with building and planning scheme requirements
Other government agencies (e.g. Department of Transport and Planning)	<ul style="list-style-type: none">• plan development and manage referrals relating to EV charging infrastructure

3. Scope

This policy is applicable to EV charging infrastructure on public and private land in Kingston City Council. This includes charging infrastructure installed by Council, private businesses, developers, or residents.

This may include:

- private and public car parks
- on and off-street public charging
- Council facilities.

4. Governance Principles

To guide the decision-making for EV charging infrastructure, Kingston City Council:

- supports the delivery of a network of public EV charging stations to encourage a transition away from internal combustion engine vehicles
- considers relevant industry best practices, standards, regulations, research, and trends in EV market adoption
- aims to balance any commercial benefit from EV charging alongside community benefits
- envisions a role as a facilitator of the market to enable equitable, appropriate, and ample EV charging infrastructure
- fosters a competitive multi-operator environment which provides consumers with choice.
- encourages opportunities for the scope of EV charging installations to align with the objectives of Council strategies and plans, such as Integrated Transport, Urban Cooling, Urban Forest, Climate & Ecological Emergency Response Plan, and activity centre plans
- requires charging infrastructure to be well-planned, designed, maintained, and accessible as detailed in Council's *Design and Installation Guidelines* ([24/81346](#))

5. Strategic Alignment

This policy aligns with relevant federal, state, regional, and Council strategies and policies. This includes:

- The National Electric Vehicle Strategy (2023)
- Victoria's Zero Emission Road Map (2021)
- The South East Councils' Climate Change Alliance's (SECCCA) Electric Vehicle Charging Roadmap (Institute for Sensible Transport, 2022)
- The Council Plan 2021-2025 (Kingston City Council 2021)
- The Climate and Ecological Emergency Response Plan (Kingston City Council 2022), Priority Area 3 Transition to Sustainable Transport
- Integrated Transport Plan (Kingston City Council 2020)
- Council's Parking Management Policy (2024 under review)
- Council's Commercial Use of Council Land Policy (2024)
- Council's ESD Policy for Community Buildings (2021 under review)
- Elevating Environmentally Sustainable Design Proposed Planning Scheme Amendment (CASBE 2024)
- Greenstar Buildings (2020)
- Building Practice Note Energy Efficiency EE01-2022 (Victorian Building Authority 2023)
- The National Construction Code J9D4 Facilities for Electric Vehicle Charging Equipment (NCC 2022).

6. Policy Details

6.1 Is it the right location for EV charging and is it feasible?

To assess feasibility and determine the right charger for the right location, a decision to install EV Charging infrastructure should be based on the following criteria:

- current and future population, housing, and EV ownership projections
- proximity to amenities and typical dwell time to match with appropriate charger type (AC/DC)
- land ownership – prioritising Council owned or controlled land or locations where Council has influence
- parking accessibility, availability, and current and anticipated changes to parking restrictions
- safety and visibility
- existing EV chargers nearby
- infrastructure: access and proximity to adequate power supply
- distance and complexity required for ground works such as trenching, boring, and cabling
- integrated charging benefits: co-location with solar and battery solutions
- community and industry feedback
- charging needs of the type of user or EV driver (see figure 1 below and Types of EV Charging, Appendix 7).

The Charging Needs of EV Drivers

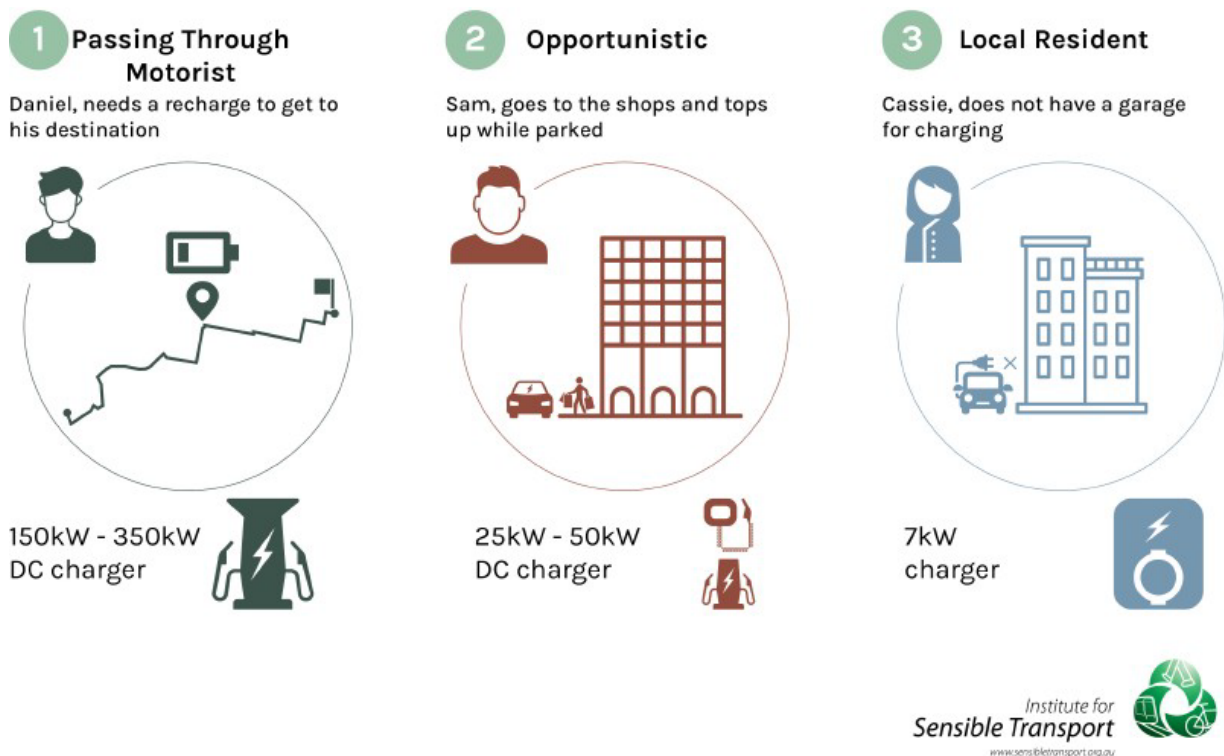


Figure 1 (IST 2022)

The Environmental Planning team can provide referral advice in considering locations and types of chargers. The following sections provide guidance for EV chargers on different types of land.

6.2 Council-Controlled Public Land and Charge Point Operators (CPO)

Research has shown that most charging for private vehicle use happens at home or at the office. Local government has a role in facilitating the development of a network of fast public use chargers for drivers wishing to charge away from home. This includes activity centres, Council car parks and other Council-controlled land, and in some cases on-street kerb-side charging. Local government also has a role in supporting the provision of charging equipment for those who cannot charge at home and for renters.

Council will support initiatives led by the private sector to deliver a network of public EV chargers. Through a public procurement process, Council will work with CPOs and will assist by identifying suitable Council owned land. In some cases, this may be Council-controlled or state-leased land. An evaluation panel will evaluate and prioritise accessibility and equitable coverage across municipality.

Ownership and Funding Model

Council will not own or operate the EV chargers but rather sees its role as the responsible authority to plan, license land for use, and facilitate the market to scale appropriate installation of EV charging infrastructure. The CPO is expected to cover the capital expenditure, cost of installation, maintenance, and decommissioning. Council may charge a rental or licencing fee and in turn CPOs will charge users a pay per charge fee to cover the operational and capital costs and make a profit. In certain circumstances, Council may lead delivery of EV charging infrastructure using state and federal grants when available. Ultra-Fast chargers may be considered in areas with a major freeway.

Licence Agreements

When an appropriate site has been agreed upon, Council will issue a licence to operate an EV Charger on Council (controlled) public land. The licence will include:

- terms and conditions
- maintenance
- decommissioning
- expectations for *service level and minimum operating standards* (see Appendix 4).

Licences will generally be program-level agreements to encourage private sector interest and investment. To encourage the private market uptake, allow specialisation in charger types, and avoid risk over-exposure from a single supplier, Council may choose to allocate more than one license to different operators. Under a license agreement there may be several sites included. Subsequent site licences can then be appended to the overarching agreement and be updated or amended as future sites are agreed. Licences will not limit EV charging exclusivity to a single operator.

Land Abutting State Arterial Roads

Under the *Road Management Act 2004*, permission to install EV charging on state controlled arterial roads must be referred to the Department of Transport and Planning (DTP). Land falling within a TRZ1/2 planning zone is under the jurisdiction of DTP and permission must be sought for installation of any non-exempt infrastructure including EV charging.

6.3 Council Buildings and Facilities

In certain locations, Council may have a role to play in providing EV charging not only for staff, but also for the public at Council buildings and facilities. Council's fleet transition roadmap provides a timeline for transitioning to a fully electric fleet. This is supported by building upgrades to infrastructure that will be required for larger

scale projects that are also supporting degasification of Council buildings and planning for future energy demands. Important consideration needs to be given to ensuring the right type of charger is at the right location.

The following resources may help guide your decisions making:

1. EV Charging Infrastructure Decision Making Process (see Appendix 1)
2. Is it the right location for EV charging and is it feasible? (see section 6.1)
3. Types of EV Charging (see Appendix 7)
4. National Construction Code and Council Infrastructure Requirements for New Developments (see Section 6.8 and Appendix 6)
5. Kingston City Council EV Installation Standard Operating Procedure (see *Design and Installation Guidelines*)

6.4 Parking Restrictions

In most cases parking restrictions for EVs will be the same as surrounding parking spaces. In general, most parking bays will be signed with a time limit and 'Recharging electric vehicles only.' Council does not consider converting parking spaces to EV charging to be a 'loss' of parking capacity. Given the existing and growing presence of EVs in Kingston, new EV charging spaces reallocate spaces from internal combustion engine vehicles that are being phased out.

6.5 Placemaking and Advertising

Council will:

- sign and line mark the EV parking bays in line with industry requirements but also encourage opportunities for placemaking (see *Design and Installation Guidelines*)
- ensure signage and wayfinding is consistent with Council's *Wayfinding Strategy 2023* and relevant streetscape or placemaking guidelines
- provide signage and wayfinding where appropriate to and from the charging location
- not preclude advertising on digital screens that are installed in proximity with charging units. Council will consider the impacts of commercialising public space, commensurate community benefit, the type of advertising, and opportunities to promote Council programs and community information
- ensure advertising will be consistent with Council's *Commercial Use of Council Land Policy (2024)*.

6.6 Private Land

Council supports the installation of EV charging infrastructure on private land. In general, no approval is required from Council when a charger is installed at a private dwelling, exclusively for private use. It is important that any works are carried out in a manner that meets relevant Australian standards for electrical works.

Locations under heritage controls require planning permission for the installation of a visible EV charger if the charger will be visible from the road or park. Council will support the installation of EV charging where it does not impact upon or detract from what is important about a particular heritage place as identified in its associated Statement of Significance.

All EV charging must adhere to Kingston City Council's Planning Scheme and the National Construction Code.

6.7 New developments and Council EV Charging Requirements

The National Construction Code (NCC) mandates a minimum level of EV charging readiness that must be met in new developments. To address gaps in the NCC, this policy outlines Council's additional best practice requirements for EV charging (see Appendix 6). This aligns with:

- Council Alliance for a Sustainable Built Environment (CASBE) Proposed Planning Scheme Amendment (Standard C3, Elevated ESD, 2024)
- Greenstar Buildings (2021)
- EV Council recommendations (May 2024)
- Proposed National Construction Code (2025).

Future parking bays must include 'EV Ready' infrastructure. 'EV Ready' means development that has been constructed to include the enabling infrastructure for EV charging facilities through the installation of end point charging infrastructure that may be provided at a future point in time. To be EV ready, all car parking facilities should:

- include the provision of a minimum of two EV enabled parking spaces if visitor or shared parking spaces are proposed
- future proof and provide EV ready infrastructure, (see Appendix 6 for a full list of requirements and *Design and Installation Guidelines* for technical requirements such as cabling and switchboards)
- locate shared EV charging space(s) in highly visible, priority locations
- provide clear signage indicating that EV charging is available at the shared space(s)
- design car parking facilities to be adaptable to other uses
- adopt flexible car parking spaces to facilitate adaptable uses or transfer of ownership.

Electric Micro-mobility: E-Bikes, mopeds, and scooters

In addition, all development should be designed to support modal shift to more sustainable forms of transport. All car parking facilities should be designed to support the charging of motorcycle, moped, electric bicycle or scooters through:

- providing electrical capacity for appropriate charging outlets at the parking / storage area
- providing a general power outlet for every six vehicle parking spaces to support charging.

6.8 Households not able to install a charger

In areas where many residents are unable to install charging equipment, Council will seek to develop a system to facilitate supply.

Homes without Off-street Parking and Kerbside / Pole-mounted Charging

When considering on-street charging locations, kerbside or pole-mounted charger installations may be suitable in commercial and medium or higher density residential or potentially mixed-use zones. Council anticipates that the Victorian government will be introducing parking reforms that remove minimum parking requirements for new developments in areas that have a good public transport accessibility. This will result in future residents who may not have access to a garage or home charging.

Council will facilitate a trial for on street kerbside or pole-mounted chargers and will aim to:

- align with governance principles and existing framework for evaluating feasible locations

- ensure any charging infrastructure does not compromise current or planned bicycle network
- reserve future options for changes to the streetscape (e.g. bicycle lanes) with consideration for limiting charging only on one side of the street
- consider both current use and how future development will impact use
- consider the impact on street assets including but not limited to trees, street furniture, and footpaths
- facilitate installation of appropriate chargers that match dwell time and parking restrictions in the area.

In addition to facilitating a network of chargers across the municipality, Council may provide fact sheets and information sessions for potential EV owners, renters, and landlords.

6.9 Data Capture and Management

All drivers should be able to locate available and working charge points easily when they need to charge their vehicle. For all DC fast charging sites, the CPO will provide timely and accurate data that can publicly show the availability status and operational uptime of a charging station's charging bays via an online platform. This requirement will be strongly encouraged for all charging sites where reasonable. For chargers installed on Council land, Kingston City Council requires that certain data such as usage of chargers, energy consumed, emissions offset, and pricing be shared preferably via a database link to inform policy planning and reporting. More detailed information may be treated as commercial in confidence by operators.

7. Council Land: Site Approval and Connection

If the EV charger is located on Council (controlled) land, understanding the future load demand for EV charging and existing supply capacity is essential. Council's Buildings Infrastructure team can provide information on existing supply and switchboard capacity. Where a major upgrade is justified, network augmentation or upgrades may be required. A site assessment may be required by the Distribution Network Service Provider - United Energy. A more detailed overview of Council's standard operating procedure for site approval and United Energy's grid connection process is detailed in the *Design and Installation Guidelines*.

8. Risk Management

8.1 Stakeholder Consultation

The installation of chargers on private land requires no stakeholder consultation by Council. Chargers on public land may require consultation. All relevant stakeholders should be identified and consulted as early as possible. This will also help to mitigate potential risks such as community opposition to reallocation of parking.

8.2 Safety and Fire

Important considerations to mitigate safety and fire risks must be considered during design and installation. Council will ensure best practice installation requirements are adhered to and have provided *Design and Installation Guidelines*. Strict enforcement through building and planning compliance mechanisms will minimise risk of fire and electrical problems. These guidelines will be updated periodically as technology and best practice evolves.

8.3 Service Level Agreement / Minimum Operating Standards

As recommended by the Energy and Climate Ministerial Council (2023), Council will seek to establish service level agreements / minimum operating standards (Appendix 4), as recommended by the Energy and Climate Ministerial Council (2023). Council's service level agreement includes:

- number of charging ports
- connector types
- minimum availability (uptime)
- maintenance and decommissioning
- safety issues
- payment
- pricing
- customer service
- interoperability
- accessibility.

8.4 Business Risk, Costs, and Obsolete Technology

To mitigate business risk, Council will consider inviting several CPOs to install equipment to:

- allow specialised installers to exercise expertise
- reduce dependency on a single supplier given the technological and business risk.

Furthermore, to mitigate the risk of obsolete technology, Council's license terms will encourage a review of charging technology, ensure system interoperability, and encourage the provision of design drawings and software should a company cease to operate. To manage the risk of escalation of costs, Council will adopt a business model wherein a private operator installs, owns, and manages the assets.

9. Human Rights Charter

This policy has been reviewed against and complies with the *Victorian Charter of Human Rights and Responsibilities Act 2006*.

10. Policy Review

Given the rapidly changing nature of technology and developments in the EV industry, this policy shall be reviewed every 3 years.

Appendix

1. EV Charging Infrastructure Decision Making Process

The following diagram provides guidance to the decision-making process.

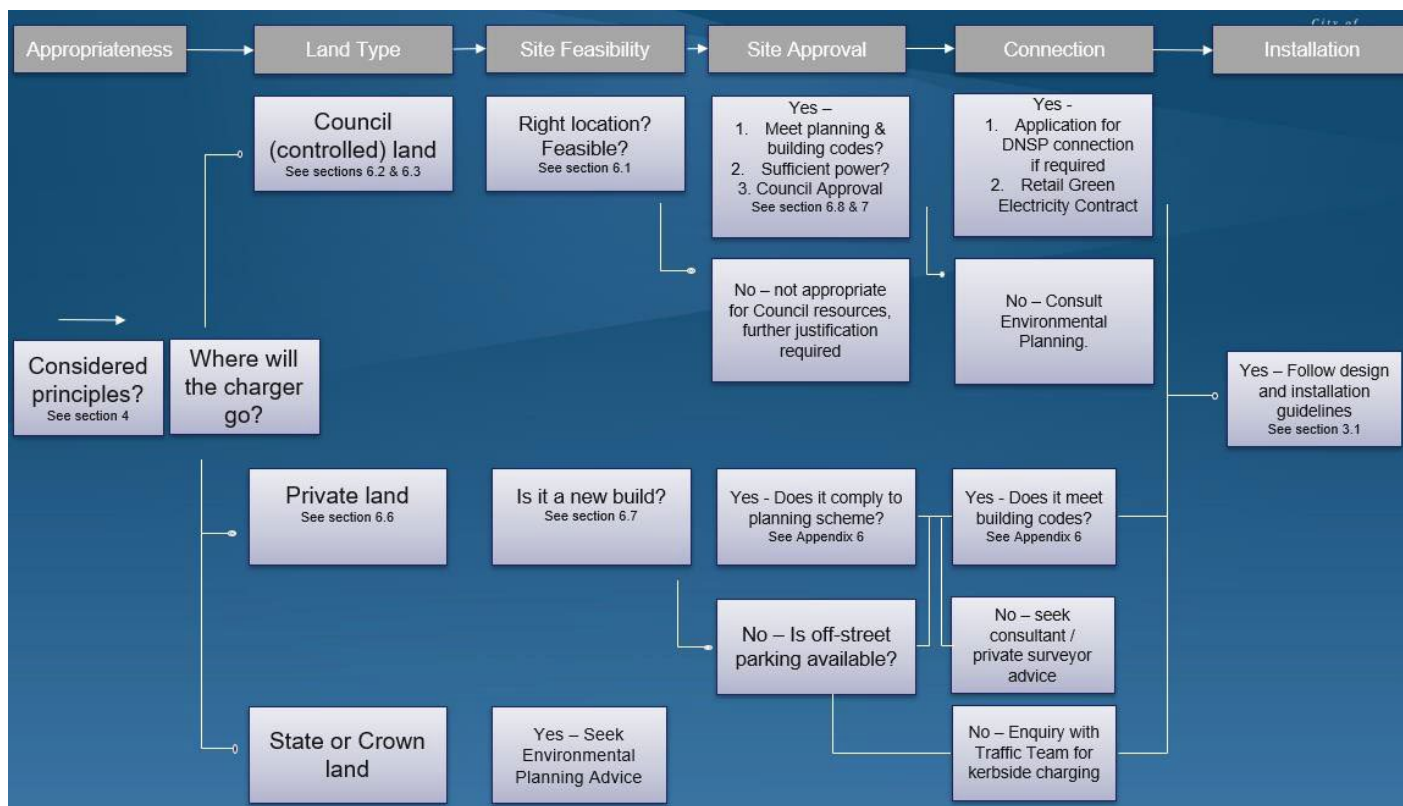


Diagram 1: Kingston City Council EV Charging Decision Making Tree (2023)

2. Additional related documents

Resources, guidelines, and policies reviewed include:

- The State of Electric Vehicles (The Australian Electric Vehicle Council 2023)
- Guidelines for Electric Vehicle Charging Infrastructure on Council Land (The City of Paramatta 2022)
- Electric Vehicle Charging Infrastructure Study (Winchester City Centre 2018)
- Electric Vehicle Charging Policy (City of Darebin 2022)
- Merri-Bek (Mooreland) Low Emission Electric Vehicles Standard (2021)
- The City of Stonnington EV Charing Infrastructure Policy (2022)
- City of Kingston Design and Installation Guidelines (2024) CM-24/81346

3. Key Stakeholders

The following stakeholders have been consulted and have contributed to the development of this policy:

Internal stakeholders	External Stakeholders
Councillors	Residents
Executive Leadership Team	Representative Community Group
Environmental Planning	Environment and Open Space Advisory Committee
Traffic and Transport	State Government

Strategic Planning	Department of Transport and Planning (DTP)
Statutory Planning and Environmentally Sustainable Design Specialists	Department of Energy Environment and Climate Action (DEECA)
Urban Design	Local government areas & councils
Open Space / Public Space	Merri-Bek Council
Project Management Office (PMO)	City of Stonnington
Property Services	Bayside City Council
Parking Services and Compliance	City of Port Phillip
Engineering Design Infrastructure	City of Melbourne
City Works	EV charge point operators / industry experts
Active Kingston	Jolt, CPO
Kingston Business	Energy Australia, Energy Retailer
Procurement and Contracts	Beyond EV, CPO
Equity and Inclusion	Evie, CPO
Local Laws	The Institute for Sensible Transport (IST)
Aquatic Centres	JetCharge, CPO
Municipal Buildings Surveyors Department	The Electric Vehicle Council

Table 2: Key Stakeholders

4. Service Level Agreement and Minimum Operating Standards

Category & Outcome	Minimum Requirement	Comments and Future Considerations
Number of charging ports All EV drivers should be able to have access to a reliable supply of charging equipment within a designated site to avoid excessive delays or competition over these resources.	At a minimum, each site hosting Direct Current (DC) chargers should have two DC charging units, with at least two plugs/ports (and two bays) each. At least one bay per site needs to meet disability accessible parking bay (DAPB) compliance with respect to parking and charging accessibility ¹ . The number of charging ports for Alternating Current (AC) charging sites will be determined on a site-by-site basis in the relevant funding program.	Number of charging ports for AC charging sites will be determined on a site-by-site basis in the relevant program.
Connector types To enable and reflect the present and future EV charging technology needs.	At least 70 percent of each DC fast charging site must include Combined Charging System (CCS) Type 2 plug connectors (see design and installation guidelines).	CHAdeMO connectors can be installed at the site should the CPO provide the case to do so.
Minimum availability (uptime) EV consumers should feel confident that the charging infrastructure in Kingston is reliable to use.	Each plug at each site will have at least 98 percent annual uptime - calculated as follows: $(\# \text{ of hours in available period} - (\sum \text{Outage hours} - \sum \text{Excluded Time hours}) / \# \text{ of hours in available period}) \times 100$ Available period = total number of hours the plug is available to the public (e.g., if this is limited by opening hours of the site host, the available period is limited to the standard opening hours of the site). Excluded Time = includes evidenced time attributable to planned and unplanned network outage, time attributable to site inaccessibility that is the responsibility of the CPO. Outage = time when the plug is not available to supply charging services, such as loss of communications.	This will be calculated on a 12-month (annual) period. Reported on a quarterly basis for the previous 12 months.
Maintenance Ensure public chargers are in good working order	CPO is expected to: Undertake 6 monthly preventative condition inspections, including servicing and through cleaning Undertake upgrades to software and hardware as required to ensure continuity of a service that meets customer needs Undertake reactive inspections, maintenance, works, and repairs including rectifying damage caused by vandalism and acts of nature Agree that if a site is inoperable for three months, Council reserves the right to ensure its removal within 28 days at the cost of the CPO.	
Performance and	Notify Council of planned or unplanned outages when EV	

<p>Reporting Ensure Council and the public have visibility to the performance of public assets</p>	<p>chargers are offline for more than 24hrs. Notification to occur within 24hrs of contractors being aware of the outage and shall include the details of the proposed rectification and weekly updates until resolved</p> <p>Not later than 20 business days following the end of the month send to Council a statement specifying the following information:</p> <ol style="list-style-type: none"> a. Vehicle charging data (timing, kWh, avoided Greenhouse gas emissions, user costs) b. Details of system outages c. Details of inspections, servicing, and repairs d. Proposed actions and timelines for rectifying faults and/or planned inspections and works. 	
<p>Customer service EV consumers should have the ability to access support for their charging issues/incidents.</p>	<p>Each DC fast charging site should clearly communicate a method of communicating/reporting issues and reaching customer support. Each Owner will maintain a support service line that is accessible to those with disabilities (e.g., hearing impairment). This requirement will be strongly encouraged for AC charging sites where reasonable and practical to do so.</p> <p>Expected response times to respond to any complaint regarding a Kingston City Council Charger within 10 days.</p> <p>Upon fixing an issue within 24hrs the CPO will also update comments on Plug Share to notify the public the station is operational.</p>	
<p>Safety Issues</p>	<p>Safety issues must be addressed within 24hrs of being reported. A site visit must be made by a technician and a plan for rectifying the issue(s) along with expected timelines for fixing the problem must be communicated to Council.</p> <p>All relevant standards for electrical safety will be met. EV charger site installations should encourage consideration of:</p> <ul style="list-style-type: none"> · sites that are near local amenities, shops, cafes, toilets, playgrounds, residential areas · the EV charging areas to be well illuminated and meet standards in accordance with AS/NZS 1158. 	
<p>Payment Consumers should be able to charge their vehicle and pay with ease, as they would for any other service.</p>	<p>All DC charging sites must provide an option for contactless payment that supports credit and debit card transactions that does not require a payee's mobile or internet signal. This requirement will be strongly encouraged for AC charging sites where reasonable and practical to do so. Each site should also provide an alternative method of payment such as smart phone or website applications, or over-the-phone credit or debit card payment systems.</p>	
<p>Pricing Consumers should be able to access and understand the pricing offers across the charging network in Australia.</p>	<p>For all DC fast charging sites, the charging unit's pricing should be clearly expressed in cents per kilowatt hour and visible without the payee requiring mobile or internet signal to access the pricing. This requirement will be strongly encouraged for AC chargers where reasonable and practical to do so.</p>	
<p>Graffiti and vandalism Ensure public chargers are in good working order</p>	<p>Graffiti or vandalism must be assessed within 48hrs of being reported. A site visit must be made by the operator and a plan for rectifying the issue(s) along with expected timelines for fixing the problem must be communicated to Council. Graffiti is expected to be cleaned within 3 weeks of being reported.</p>	
<p>Interoperability We want to enable an evolving EV charging infrastructure to support future technologies, and existing capabilities available overseas.</p>	<p>The minimum Communications & Security Standards should support: · OCPP2.0.1 compliance (and able to be updated to newer version) · ISO15118 compliant (Vehicle-to-Grid future capability).</p> <p>Council will encourage escrowed design drawings and software to be made available if a company ceases to operate.</p>	<p>To manage supplier risk (e.g., business failure) hardware and software ideally should be relatively easily transferred between different operators.</p>
<p>Accessibility All consumers should be able to have access and the ability to Australia's public EV</p>	<p>In relation to disability accessible parking bay requirements, chargers must meet the relevant standards in accordance with AS/NZS 2890.6 Cl. 2.2.2 or AS/NZS 2890.6 Cl. 2.2.1, Cl.3.2 b) 11) as applicable.</p>	

charging infrastructure.	<p>The CPO must also:</p> <ul style="list-style-type: none"> · Demonstrate that access for people with disability has been considered, including the height and access to use screens and the usability of digital and physical infrastructure for people with various types of disabilities, in compliance with relevant guidance and standards. · Ensure that no other fees from co-located businesses can be asked of drivers to access a location (such as a shopping centre carpark fee). · Ensure parking bays are clearly marked and easy to find through use of way-finding technology or signage. · Ensure that reassurance and location signage is provided for charging infrastructure located on National and State Highways. · ensure infrastructure, including cables, do not impede footpaths, bike paths, roads, carparks, recreation space, or pedestrian and cyclist access in any way. · Enable EV charging bays to have sufficient length and width to allow for larger EVs which have front, side and rear charging points. · Ensure that all charging stations of a capacity greater than 150kw constructed from 1 Jan 2025 should include at least one 'drive-through' / pull-through charging bay, larger in dimension than minimum DAPB dimensions, to cater for all vehicles (including larger vehicles) and those towing where there is sufficient physical space. 	
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Table 3: Service Level Agreement and Minimum Operating Standards

5. Key definitions

Charge Point Operator (CPO): An organisation which owns and/or operates charging infrastructure, including the hardware and software systems needed to manage them. The CPO may also be:

1. involved in the installation of the charging infrastructure, and
2. generally contracted by the Charge Point Owner (Owner) to be responsible for ensuring effective maintenance, safety, ongoing compliance, payment systems, customer information and customer support.

A CPO may also be a Charge Point Owner.

Charge Point Owner (Owner): An individual or organisation that owns and provides EV charging infrastructure at a public or private location (such as a shopping centre, public carpark, or workplace). An Owner:

1. is responsible for financing the charging infrastructure
2. dictates branding, and once complete
3. remains in possession and control of the infrastructure.

An Owner may also be a site owner and/or a Charge Point Operator.

Charge site owner: The landowner of the charge site (which may or may not be the Charge Point Owner / Operator). Depending on the location (public, private) the energy is purchased by the charge location owner or by the CPO. Depending on commercial arrangement, a charge location owner may responsible for ensuring access and safety of the broader location (e.g. access and fire stairwells of a multi-story carpark).

Charging bay: A designated parking spot where a single EV can charge using the electric vehicle supply equipment (EVSE) of a charging station or charging unit. Vehicles other than electric vehicles (or electric vehicles that are not charging) are not allowed to use this parking spot.

Charging infrastructure: An overarching term which refers to the equipment (hardware and physical assets) which collectively supports EV charging, including but not limited to charging bays, Electric Vehicle Supply Equipment such as charging stations, including charging plug(s) and port(s), electrical equipment, on-site battery, renewable energy generation equipment.

Charging station: A term used to describe a collective bank of one or more charging bays operated by a CPO.

Charging unit: A unit that supplies electricity to an Electric Vehicle. It is usually the unit that sits outside the vehicle on the wall or ground. Each EVSE unit may:

- have one or more charging cords/plugs/ports.
- refer to stand alone charging units, or modular systems (referred to as Satellites or Dispensers).

Electric Vehicle Supply Equipment (EVSE): The overarching term to describe the system - that includes both hardware and software - which provides electric power to an electric vehicle and recharges the vehicle's batteries. EVSE systems include the electrical conductors, related equipment, software, and communications protocols that deliver energy to the vehicle.

EV Ready: EV Ready means development that has been constructed to include the enabling infrastructure for EV charging facilities through the installation of end point charging infrastructure to be provided at a future point in time (see *Design and Installation Guidelines* for technical notes).

Placemaking: Placemaking is a process and a philosophy that aims to create public spaces that improve urban vitality and promote people's well-being. Placemaking is based on collaboration and participation of the local community and makes use of urban design principles. Placemaking can be either official or grass roots and can involve various interventions to transform public spaces.

Plug/connector: A general term to describe the standard plugs used in Australia - the end of the flexible cable on the charging unit, that interfaces with the socket outlet on the EV, and is integrated into all DC fast and ultra-fast charging units.

Port/socket: The port on the charging unit (where a cable is not integrated), that interfaces with the users BYO cable.

Public EV charging infrastructure: The EV charging infrastructure is public if it is:

1. intended for use by members of the public (including those situated in public car parks, whether those car parks are available only to consumers of specific goods or services); and
2. not intended for:
 - a. exclusive use in respect of a vehicle produced by a specific manufacturer
 - b. use by persons engaging in specific occupations
 - c. use by persons whilst at their place of employment (including visitors); or
 - d. exclusive use by occupiers of, or visitors to, residential premises.

Site: An area defined with an address, which is used to describe the specific location of a publicly accessible EVSE. A site may contain one or more charging stations, from one or more CPO to support EV charging.

6. National Construction Code and Council Planning Application Requirements for New Developments




Building Type	National Construction Code (NCC 2022)	National Construction Code Proposed Changes (NCC 2025)	Council requirements for provision of EV charging infrastructure
Apartment Buildings	100% EV Ready parking bays sized to support the future installation of a 7 kW (32 A) type 2 EV charger (Class 2 building)	EV charging equipment sufficient to serve the daily driving needs of all building occupants (Class 2 building, see J1P4)	<ul style="list-style-type: none"> 100% EV Ready parking bays which includes visitor and car share spaces if proposed EV charging equipment shall be installed will be, at minimum, the lesser of: 10% of the total number of all parking spaces in the development or the total number of shared parking spaces (EV Council 2024).
Single dwellings / Two or more dwellings on a lot	Not addressed	Where a building is provided with one or more car parking spaces, the main switchboard must be provided with at least one single-phase circuit sized to support a load of 32 A, with active conductors of at least 6 mm ² cross sectional area, that terminates at one of the car parking spaces with: <ul style="list-style-type: none"> (a) a general purpose outlet of at least 15 A labelled to indicate that its purpose is for electric vehicle charging; or (b) electric vehicle charging equipment. 	<ul style="list-style-type: none"> 100% EV Ready parking bays which includes visitor and car share spaces if proposed The main switchboard must be provided with at least: One single-phase circuit sized to support a load of 32 A, with active conductors of at least 6 mm² cross sectional area, that terminates at one of the car parking spaces with: <ul style="list-style-type: none"> (a) a general purpose outlet of at least 15 A labelled to indicate that its purpose is for electric vehicle charging; or (b) electric vehicle charging equipment.
Other development <i>Under 5,000 sqm including Council buildings (Class 5 or 9)</i>	10% EV Ready parking bays 20% EV Ready parking bays for Class 3, 7b, 8, 9 Buildings (NCC 2022)	<ul style="list-style-type: none"> A carpark or carparking area with 40 or less carparking spaces associated with a Class 3 building or Class 5 to 9 building must have at least one electric vehicle charger with a capacity of at least 7kW (32A). 	<ul style="list-style-type: none"> A carpark or carparking area with 40 or less carparking spaces must have at least one electric vehicle charger capable of servicing two bays with a capacity of at least 7kW (32A). 25% EV Ready staff car parking spaces (or a minimum of one space). 100% EV Ready car share spaces if proposed.
Other development <i>Over 5,000 sqm including Council buildings (Class 5 or 9)</i>	10% EV Ready parking bays 20% EV Ready parking bays for Class 7b, 8, 9 Buildings (NCC 2022)	In a carpark or carparking area with more than 40 carparking spaces, electrical vehicle charging equipment with a capacity of at least 7kW (32A) must be installed to serve at least: <ul style="list-style-type: none"> 10% of carparking spaces associated with a Class 5 or 6 building; or 15% of carparking spaces 	<ul style="list-style-type: none"> 10% of all car parking spaces with installed EV charging equipment complete with chargers and signage 25% EV Ready staff car parking spaces (or a minimum of one space). 100% EV Ready car share

		associated with a Class 3, 7b, 8 or 9 building; and <ul style="list-style-type: none"> 10% of carparking spaces required to be accessible associated with a Class 3, 5, 6, 7b, 8 or 9 building. 	spaces if proposed.
New Train Station car park	See <i>Design and Installation Guidelines</i> for distribution boards requirements	<ul style="list-style-type: none"> See <i>Design and Installation Guidelines</i> for distribution boards requirements 	<ul style="list-style-type: none"> Advocate for 5% installed EV charging infrastructure complete with chargers and signage Advocate for 20% EV Ready parking spaces.

Targets for Council requirements reference Standard C3, Elevated ESD Planning Scheme Proposed Amendment (Council Alliance for a Sustainable Built Environment CASBE 2024).

Targets from the National Construction Code reference J9D4 Facilities for Electric Vehicle Charging Equipment (ACBC 2023), [Building Practice Note Energy Efficiency EE01-2022](#) Victorian Building Authority (2023),

7. Types of EV Charging

	Level and Description
	<p>Level 1 – AC single or three phase power point</p> <ul style="list-style-type: none"> slowest rate of charge, approximately 10-25kms of range per hour of charging using an 'electric vehicle supply equipment (EVSE) cable, an EV can be connected to a normal household power point – usually 10-15 amps. power is supplied by EVSE cable to the vehicle's onboard inverter, which converts AC grid power to DC power, the type stored by the traction battery.
	<p>Level 2 – fixed AC charging unit, 7 kW or 22kW</p> <ul style="list-style-type: none"> faster rate of charge, approximately 30-40kms of range per hour of charging. a connected wall-mounted charging alternating current (AC) unit at 7kW (single phase) or 22kW (three phase). Installed in homes, apartment buildings, shopping centres & other public spaces. May be installed close to solar panels and domestic battery energy storage systems. level 2 chargers require 40 amps per phase x the number of ports (single or dual ports are both available) power is supplied by the unit to the vehicle's onboard inverter, which converts AC grid power to DC power, the type stored by the traction battery.
	<p>Level 3 – DC charging unit, 25kW – 350 kW</p> <ul style="list-style-type: none"> fastest rate of charge, upwards of 150kms of range per hour of charging. known as rapid or ultra rapid, DC units are large floor mounted chargers popular in commercial locations or roadside services. May be installed near large scale solar carports and battery storage systems. level 3 chargers require 50 – 500 amps per phase x the number of ports (single or dual port units are available). AC grid power is supplied to the DC unit, where it is converted to DC power before being supplied directly to the vehicle traction battery. This speeds up the charging process.

