

Shellharbour City Council

Electric Vehicle Charging

Infrastructure Guidelines

Draft

1. Purpose

The purpose of Shellharbour City Council's Electric Vehicle Charging Infrastructure Guidelines (The Guidelines), is to provide conditions for the design, provision, installation, management, maintenance and removal of Electric Vehicle (EV) charging infrastructure on Council owned or controlled land in the Shellharbour Local Government Area (LGA) by Council or third-party providers.

The Guidelines relate to charging infrastructure that is intended for use by both the public and Council's vehicle fleet.

Requirements have been determined for the identification and assessment of suitable locations, appropriate types of infrastructure and potential partnership opportunities to select the most suitable and cost-effective solutions for Council and deliver the best outcome to community.

The Guidelines do not apply to the provision of EV charging stations on private land.

2. Context

The transport sector contributes significantly to carbon pollution and greenhouse gas emissions (emissions). In 2019 transport was responsible for 28 million tonnes of carbon dioxide equivalent emissions (Mt CO₂e), making up 20% of emissions across NSW (almost 50% of which came from passenger vehicles). Transport emissions are currently projected to become the leading source of emissions by 2035, overtaking both electricity and other stationary energy sources (NSW Electric Vehicle Strategy, 2021).

Increasing the number of EVs and powering them with renewable energy will help to reduce emissions across the transport sector, contributing towards Shellharbour City Council and the NSW Government's objectives to achieve net zero emissions by 2050.

In recent times global demand for EVs has increased dramatically, reaching over 10 million in 2020 compared to less than 20,000 in 2010 (International Energy Agency, 2020). EVs are expected to become more established in the Australian market in the coming decades, with EVs predicted to be similar in terms of upfront costs as early as 2024.

A suitable network of EV charging infrastructure will be required across Australia to support the predicted growth of the EV market. NSW EV drivers currently have access to around 450 public chargers. However, many of these are located too far apart or charge at slower rates, meaning drivers must wait longer before getting back on the road (NSW Electric Vehicle Strategy, 2021).

The preparation of the Guidelines has been informed by industry best practice, legislation and relevant state and local plans and strategies. The NSW Government has several initiatives aimed to facilitate the uptake of EVs in NSW. These include:

- [NSW Electric Vehicle Strategy 2021](#)
- [Future Transport 2056 - NSW Electric and Hybrid Vehicle Plan](#)
- [State Infrastructure Strategy 2018-2038](#)

Council's Local Strategic Planning Statement (LSPS) provides a clear framework of how Council will manage growth and change in Shellharbour City over the next 20 years (2020-2040). The LSPS creates a land use vision for the future of Shellharbour City LGA and outlines

how we plan to achieve the vision through planning priorities and actions. The LSPS assists Council to make land use planning decisions which shape the future of our LGA for our community and visitors.

The Guidelines have been informed by the LSPS Planning Priority 7, identifying Council will *'encourage smart and adaptable use of technology for our transport options'*. Action 7.1 of the LSPS is to *'Provide fast-charging user pays infrastructure throughout the city at key locations for electric vehicles.'* This aligns with Council's commitment under the Cities Power Partnership and supports Council's Net Zero 2050 operational and community targets.

Concurrent implementation of the LSPS and these Guidelines will assist Council to ensure Shellharbour LGA is adaptable and responsive to technological advances. As well as supporting the uptake of EVs by residents, appropriately sited, installed and managed EV charging stations have the potential to encourage more visitors and boost regional tourism in the Shellharbour LGA.

3. Principles

The Guidelines will:

- Support the delivery of EV charging infrastructure on Council owned or controlled land that integrates with local environment
- Support Council's Net Zero 2050 operational and community targets and participation in the Cities Power Partnership
- Respond to community expectation for action on climate change
- Increase the availability of EV charging infrastructure to support growth in the uptake of EVs, locally and nationally
- Provide opportunities both locally and regionally for tourism by encouraging tourists driving EV vehicles, and increasing time spent at local businesses while EV vehicles charge.
- Provide direction for providers of EV infrastructure in the allocation of suitable locations on public land and Council requirements.
- Ensure a fair and equitable selection of providers that supports current EVs and charging types by:
 - Providing universal charging facilities, or reasonable provision made for the adaptation of the infrastructure to support all types of EVs (refer to Section 6.3 for preference of connector types); or
 - Establishing an expression of interest process when an applicant (other than Council) proposes exclusive use of EV charging infrastructure for a particular vehicle type, group of users or any other exclusionary particulars.

4. Application of the Guidelines

Council will consider both Council installed and managed infrastructure as well as third party provider infrastructure for the provision of EV charging. Council will include the location of all charging locations on relevant parking management tools for visibility to the customer, such as parking apps.

At a minimum Council will ensure that no less than two dedicated EV charging car parking spaces are provided at each location.

Council installed and managed infrastructure

i) Provision of Service

- Council will install publicly accessible EV Charging infrastructure in locations of its choosing based on demand and strategic decision criteria, inclusive of community feedback.
- Council reserves the right to charge all users equally across the sector, based on the service provided.
- All data collected as part of the service will be stored securely locally in line with Council's Information Management criteria.
- Council will provide universal charging systems that are not assigned to any particular vehicle manufacturer, that are designed to provide top up charging and will be time restricted to ensure equitable access. This may be achieved through hardware, software, legislation options and varied between time of day, location, and technology used.

ii) Cost Recovery – Fees and Charges

- Whilst Council may fund the infrastructure from capital sources or grants, the operational cost will be recovered from the customer.
- Usage charges will be set by decision of Council in the annual fees and charges, based on the electricity cost projection for the corresponding period and apportionment of costs of asset ownership such as depreciation, operation and maintenance.

Third party provider electric vehicle infrastructure management

Any provision of EV charging stations on public land will be subject to licensing/leasing arrangements, or similar, between the provider and Shellharbour City Council, in compliance with all relevant Council policies. The provider must obtain all applicable approvals and consents. 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 lease agreements.

i) Eligibility of provider

- Any provider wishing to deliver EV infrastructure within the Shellharbour LGA must express their interest to Council.
- Where necessary, the eligibility of a provider will be determined through an Expression of Interest (EOI) process that is open to the market and will be evaluated by Council based on the Schedules detailed in the EOI.
- Council will determine proposed locations for EV infrastructure.

ii) Obligation of provider

- It is the provider's responsibility to abide by the relevant legislation and technical requirements in order to operate within the Shellharbour LGA.
- It is the provider's responsibility to financially commit to the cost of the EV infrastructure, rent (if applicable), maintenance and repairs, capital improvements, essential services, site outgoings and ensuring that the site is operational at all times.
- It is the provider's responsibility to ensure that the site is safe and accessible for all users at all times. The provider must meet all legislation and statutory obligations.
- The provider must enter into a data sharing arrangement with Shellharbour Council to

- provide real time access to usage and membership information.
- Council reserves the right to terminate the agreement between Council and the provider according to the terms and conditions within the agreement, such as conflict of interest from the community. Written notice should be provided with 6 months notice by Council. A provision will be included within the agreement in which Council has the opportunity to purchase the structures erected on the land. Both the provider and Council will obtain an independent valuation and an agreement to be decided by way of negotiation accordingly to the valuation reports.

iii) Lease arrangement

- Any provision of EV charging stations on public land will be subject to licensing/leasing arrangements, or similar, between the provider and Shellharbour City Council. Licence and/or lease terms shall be in accordance with Council's related Policies.
- Subject to obtaining the required planning approval/s, 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.
- Council reserves the right to require appropriate remuneration for use of Public Land for the apportionment of user fees or through a fee structure, or other. This is to be determined on a case-by-case basis as part of any licence/lease (or other) arrangement and in accordance with Council's annual Fees and Charges.
- Council may consider a Public/Private Partnership with relevant providers to deliver EV charging stations on Public Land. This will be subject to negotiation on a case-by-case basis.
- The provider must not transfer the agreement between Council and the provider without Council consent.
- The provider must allow access to Council to the site if Council provides reasonable notice.
- The provider must only use the site for the permitted use in the agreement.

iv) Installation, maintenance and removal

- The installation, maintenance and removal associated with the installation and operation of any given EV charging station is the responsibility of the provider, unless by prior agreement with Council. This includes ancillary infrastructure such as dedicated car parking spaces, signage, line marking, pavement marking, lighting and the like, and the future reinstatement of the site to match the existing surrounding domain, when required.
- Under the lease agreement the provider shall implement a maintenance schedule which includes regular inspections. All maintenance and works shall be carried out in a timely manner to avoid delays to service, with a requirement for providers offering 24/7 customer service based in Australia to be confirmed in the application submission. Third party providers should produce and maintain relevant insurances and all other hazards relating to the facility should be considered by them and managed appropriately.
- Support mechanisms including number of staff for customer service and response, response times for technical issues and faults and locations of servicing providers must be located within- or within reasonable proximity to the Shellharbour LGA and must make immediate effort to rectify any risks from electrical hazards and notify Council immediately. Information on these response times is to be provided to Council with reports on usage to demonstrate compliance.
- Non-compliance with this provision may lead to the termination of any agreement between the provider and Council and may result in the forced removal of all infrastructure and make good of the land, at the cost and responsibility of the provider. Anything not removed becomes the property of the Council who can keep it or remove and dispose of it and charge the provider for all works carried out by the Council.

v) Security deposit and/or bond

- Prior to the commencement of any works on public land, Council will 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/EV charging station operator, with further details to be specified within the lease or licence agreement, including alternative arrangements if the creation and maintenance of a security bond for the duration of the lease/licence is not the preferred or most suitable option for Council.
- Council reserves the right to amend the security bond/deposit payment at any time.

5. Site Selection

Council will initially consider locations that are in strategic and tourism destinations for EV charging infrastructure. Council will consider a site based on the following factors:

- There must be existing and/or potential demand for EV charging;
- That any site considered for the provision of EV charging infrastructure is desirable location for the user to stop, spend time in the area or use local amenities;
- A safe location for access to the proposed charging infrastructure; and
- Access to a suitable power supply.

The ongoing implementation of the Guidelines will be scaled up as the ownership and usage of EVs increases across the area, to allow a convenient charging network to be used by residents, visitors and businesses, especially in areas where there is a high demand for charging infrastructure.

A third party owned publicly accessible EV Charging site may be considered suitable for an EV charging infrastructure where the proposal demonstrates to Council's satisfaction that:

- The land is Public Land, as defined in the Local Government Act 1993 and Roads Act 1993 respectively
- Considers land classification. Land classified as *operational land* is preferred, however *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; and
- EV charging stations are permissible under the relevant legislation (Shellharbour Local Environment Plan 2013, State Environmental Planning Policy (Infrastructure) 2007, Crown Land Management Act 2016, The Roads Act 1993, Disability Discrimination Act 1992) at the proposed location. Note: the provider is responsible for securing development consent or approval, where applicable, from the relevant planning authority or a case-by-case basis; and
- Environmental constraints, characteristics and amenity have been considered; and
- There must be existing and/or potential demand for EV charging; and
- The electricity supply infrastructure capacity of the existing electrical supply network is suitable (or can be reasonably upgraded). Note: Council will not contribute to the cost or be responsible for the provision, or upgrade to, electrical supply infrastructure to service a

- proposed EV charging site, unless by prior agreement; and
- The land has reasonable connection to the wider road network; and
- The facility and its operation will not adversely impact upon the amenity of surrounding development or the public domain; and
- The facility is safe with adequate lighting, and pedestrian, vehicle and bicycle access available at all times of day and night; and
- The facility is compliant with relevant Australian standards and road design guidelines; and
- The facility is compliant with relevant Australian standards and regulations for workplace health and safety. Charging station hardware must be located a safe distance away from hazards (e.g. dangerous goods and fuels); and
- Consultation with the local community and relevant stakeholders is satisfactorily undertaken in conjunction with site selection; and
- 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 facilities on nearby land or through the use of 'Smart Poles' or similar infrastructure, with or without charging fees to end users.

6. EV Charging Design Considerations

6.1 Visibility and Identification

The provider (whether Council or Third Parties) is responsible to ensure that the facility and all ancillary infrastructure (including signage, parking bays and charging infrastructure) shall be easily visible and accessible for users to find, with consideration of the following:

- Wayfinding signage will be required to allow users to find the EV charging station from the main road network, similar to wayfinding signs for car parking. Wayfinding signage shall be consistent with relevant industry standards, best practice installations and applicable guidelines and technical directions from both local and State Governments and their agencies, as well as kept to a minimum to avoid unnecessary visual pollution; and
- All EV dedicated parking bays shall be clearly labelled with the words 'Electric Vehicle Parking Only While Charging' or similar as a minimum, painted on the ground (or the like according to best industry practice and other successful case studies in operation at the time of each proposed installation) and approved by Council prior to installation. An exemption to this provision may be considered in areas where it is inappropriate or not possible, provided that sufficient alternative identification can be provided to the satisfaction of Council in a manner that allows for more widespread charging including the use of 'Smart Poles' or other similar infrastructure; and
- Appropriate pole signage must be installed to indicate the parking spaces are allocated for 'Electric Vehicle Parking Only While Charging' or similar as approved prior by Council. Pole signage shall be provided in accordance with relevant technical directions from Transport for NSW and other relevant authorities. Should an EV not be charging, or another car parked on the dedicated parking bay, including a non-plug-in hybrid EV, the driver could incur a fine (Disobey No Parking Sign); and
- Adequate lighting must be provided for the safety and security of drivers, passengers, vehicles and associated infrastructure. Lighting must be sufficient to easily read related signs, instructions, controls on vehicles, controls on EV infrastructure and to identify and provide visibility of all EV charging inlet locations and for charging cable visibility and proper management, preventing trip hazards and must not obstruct traffic sightlines or pedestrian mobility or footpath access; and
- Parking spaces shall be located to ensure safe sight distances for pedestrians, vehicles

- and bicycles are met; and
- The use of advertising by any provider is to be disclosed to Council in the initial Application process and disclosed as part of the community engagement process. Separate planning approvals may be required for the presence of advertising. Advertising must comply with relevant standards. Advertising that contains tobacco, nicotine, alcohol and gambling will be prohibited from any EV charging infrastructure and site in the Shellharbour LGA; and
- All wiring is to be undergrounded before the proposed property boundary and any new private poles and additional overhead wiring within parks/road reserve should be avoided wherever possible for installations proposing independent electrical connections to power the EV charging infrastructure.

Providers will be required to prepare detailed concept designs and works as executed drawing packages to Council approval for the optimal installation of the proposed EV charging infrastructure in accordance with requirements for development applications involving works on public domain. These requirements will include footprint and setbacks, mounting systems proposed for the chargers, trench works and alignment (if required), relocation of assets on public land (if applicable), and proposed electrical connections with existing power supply or details on proposed electrical upgrades.

6.2 Parking configuration

The following must be considered:

- All aspects of EV charging bays are to be designed and constructed in accordance with relevant Australian Standards and current industry best practice; and
- All EV parking spaces / charging bay pavements shall be constructed to Council's specifications including sealing, kerb and guttering, pram ramps, signage and line marking;
- Preference will be given to the provision of inclusive EV charging infrastructure that can cater for different transport modes and user needs, and that can serve two or more adjoining / adjacent parking spaces with mounting systems requiring minimum floor or wall space, observed the constraints of each location and the benefits for community;
- If through the proposed EV dedicated parking bays within a Council-owned carpark requires a new car park layout, the providers may be required to fund the new design and line marking.
- The provision of on street charging must be installed in accordance with the delegations to Council will be subject to TfNSW guidelines and Local Traffic Committee approval.

6.3 Electric Vehicle Charging Technology

Council's objective is to facilitate the provision of EV charging infrastructure in an efficient, inclusive and accessible manner.

The installation of EV charging on Public Land within Shellharbour City LGA shall be consistent with the NSW Electric Vehicle Strategy 2021, State Government Policy Future Transport 2056 – NSW Electric and Hybrid Vehicle Plan, the State Infrastructure Strategy 2018 - 2038 and current industry practices and at a minimum include:

- Consistent standards for charging connections based on European CCS2 and CHAdeMO for DC fast charges and Type 2 for AC charging. These provisions aim to provide universal charging facilities, with necessary provisions made for the adaption of the proposed infrastructure to cater for all types of EVs and connecting plugs; and
- Preference for connected and smart EV charges that allow the most efficient energy use for both consumers and network operators, as well as remote and live monitoring of the

- usage of the EV chargers through user friendly software; and
- Preference will be given to EV charging infrastructure to have a minimum power capacity of 22 kW AC (Level 2), however alternative arrangements involving slower charging speeds will be considered depending on the overall benefits indicated under each proposal; and
- Charging cables shall have the capacity to cater for EVs with front, rear or side charging points, and appropriate cable management solutions to address and prevent hazard for people utilising the chargers, pedestrians, passers-by, or other vehicles at any given time. As the technology evolves, smarter solutions will be available including wireless EV chargers, and will take preference over proposals involving cables; and
- The provision of a cloud-based monitoring system software to allow regular monitoring and reporting of the usage of the EV charging infrastructure by users over time, preferably free of charge to Council; and
- Anti-vandalism solutions to protect EV chargers and their components, particularly charging leads and screens; and
- Load management smart system to manage power supply and demand per location as appropriate

The provisions and requirements under this item may be altered where future EV charging infrastructure technology supersedes the minimum criteria covered in this Policy, particularly if smarter and more sustainable alternatives are demonstrated to be suitable to the satisfaction of Council.

7. Environmental Considerations

To support Council's Net Zero 2050 Operational and Community targets Council installed and managed EV charger will use only renewable energy sources or purchased accredited GreenPower, wherever practical.

Preference will be given for applications from third party providers proposing to use renewable energy sources to power EV chargers on public land or alternative arrangements to purchase accredited GreenPower. Demonstration of this ongoing power or offset registration is required to be submitted to Council annually and include total tonnes of CO2 equivalent.

8. Review

The Guidelines will be reviewed every two years to ensure relevant industry and regulation changes are addressed.