QUEENSLAND GOVERNMENT ACCOMMODATION OFFICE

ELECTRIC VEHICLE INFRASTRUCTURE PROGRAM

PROCUREMENT GUIDELINE

Queensland Government

Contents

Diagram 1: Example EV Transition Plan

Procurement Guideline

This Procurement Guideline is intended to support agencies to develop their Procurement Plan for installing EV charging infrastructure in government owned and leased buildings.

This document should be read in conjunction with the Queensland Procurement Policy and Agency specific procurement policies and procedures.

Preliminary Due Diligence

Before procuring EV charging infrastructure, agencies should have first completed a preliminary due diligence to develop their EV Infrastructure proposal, in accordance with the Technical Guideline.

Quotation

Standing Offer Arrangement

Agencies can access the Electric Vehicle Charging Infrastructure Standing Offer Arrangement (SOA) AFL0003-20 Electric Vehicle Charging Infrastructure and Associated Services via the Queensland Contracts Directory. This SOA covers the provision, installation, commissioning and maintenance of EV charging equipment. Agencies can contact a panel supplier to request a site inspection and detailed quotation itemising the required works, pursuant to the SOA.

Specifications

Specifications for the chargers and works should be identified during the preliminary due diligence process and refined during the panel supplier site inspection. In addition to specifying charger location and typology, agencies should ensure the specifications and works address the following:

Regulatory Requirements:

- Compliance with all relevant regulations, standards and council approvals (if any).
- Compliance with relevant fire safety recommendations.

Design:

- The charging station should be easily accessible for all users.
- Parking bays allocated for use by EVs should be clearly marked with 'EV Charging Only'.
- All public EV charging stations should use appropriate signage and line marking.
- Signage to include clear instructions on how to use the charging station.

- The wall above the installation point of each fire extinguisher and fire hose reel within the carpark, must be mechanically and securely fixed with lettering not less than 20mm high on a contrasting background reading:
  - "Do not attempt to manually extinguish an electric vehicle/charger fire" or
  - "Do not attempt to manually extinguish an e-bike/e-scooter or charger fire"
- Adequate lighting should be provided for

the safety and security of users, and to aid in identification of the charging station, signs, instructions and controls.

- EV charging stations should be positioned to provide access to plugs from two adjoining or adjacent parking bays where possible.
- All accessible parking bays adjacent to and dedicated for EV charging are to be compliant with the Disability Discrimination Act 1992.
- Parking bays should be located to ensure safe sight distances for people walking and cycling and other motorists circulating

the road network or parking facility and are to be designed in compliance with relevant Australian Standards and Council specifications.

- Charging cables, or the location of the charging station in relation to the EV parking bay, should have the capacity to reach all points of the vehicle to cater for all models of EVs.
- The location of the charging station in relation to the EV parking bay should not be so that the charging cables are a hazard for pedestrians or other vehicles.
- The charging infrastructure must as far as possible be protected from mechanical and environmental elements including but not limited to weather, dust and physical impacts.
- Charging stations are to be:
  - compatible for all EV users, including vehicle and system compatibility;
  - consistent with standards for charging connections; and
  - capable of renewable energy integration.

Load Management:

- Charging stations are installed with:
  - capacity to be operational at all times of the day and night;
  - demand response protocols, such as daytime charging (where solar PV is available) or off-peak night-charging should be introduced by providers (using either AS/NZS 4755 or internationally accepted protocols) to manage the expected uptake of EVs, including the associated charging loads and potential for grid stress.
  - demand management systems to mitigate against overloading and optimise charging behaviour as a result.

Carpark Technology:

- EV chargers are OCCP compatible (with ability to upgrade to latest version) to facilitate 'smart' charging technologies capable of carpark booking, billing functionality, load management, time restricted charging, and real-time data collection.
- EV chargers are equipped with an integrated RFID card reader with ISO/IEC 14443-4:2018 preferred, to enable access controls to be implemented.

Note: To facilitate a consistent approach to the provision of carpark technology and associated software, an SOA for EV charging software is currently being considered. In the meantime, agencies should ensure that chargers meet the above carpark technology requirements, which will allow software to be installed at a later date.

Consents/Approvals

Building Owner Consent

If the proposed location for the installation is occupied under a lease or occupancy agreement, consent of the landowner/landlord will be required. The Building Owner will likely need to consider the proposed works as itemised in the quotation, before providing consent. The terms of the consent should be documented via Legal.

Internal Approvals

Agencies should consult with their facilities management team and executive team to ensure all internal approvals have been obtained and any agency specific processes have been followed to allow the works to proceed.

Council Approvals

In the event that council approvals or permits are required, these should be obtained prior to accepting the quotation, and the supplier should be required to comply with all conditions of approval.

Energy Provider

The relevant electricity distributor to the site – Energex or Ergon Energy Network – will be an important collaborator in developing an EV charging arrangement that is safe, fit for purpose and designed to facilitate foreseeable growth in EV numbers and charging demands at the site, without over-capitalising to meet the shorter-term needs. The Queensland Electricity Connection Manual (Queensland Energy Connection Manual - Service and Installation Rules (energex.com.au)) provides important guidance, as do the distributors' connection standards:

- <=1 MVA connection capacity – Ergon Network Connection Policy 2020-2025 (ergon.com.au)
- <=1 MVA connection capacity – Energex Network Connection Policy (energex.com.au)
- >1 MVA connection capacity – Standard for Major Customer Connections STNW3522

Acceptance of Quotation

Once relevant approvals and sufficient detail of the required works and specifications are obtained, the agency can accept the quotation and authorise the installation to proceed.

Installation

The supplier should be required to implement appropriate safety arrangements during installation of the infrastructure.

In the event that any part of the carpark will be inaccessible, agencies should consider whether it is appropriate to issue a notice to tenants and occupants of the building advising of the works and associated arrangements.

Completion

On completion of the works the supplier should provide a certificate of completion evidencing the works meet all necessary legislative requirements, standards and approval conditions. The supplier should provide Operation and Maintenance Manuals (preferably hardcopy and electronic copy), as built drawings, warranty information etc.

On handover, the supplier should provide a demonstration to key agency staff on how to safely use the chargers and any associated technology. The works should not be accepted until an inspection has been undertaken and any defects rectified. In addition the supplier should provide a defects liability period.

Evidence of completion should be provided to QGAO to facilitate payment of the funding contribution.

Other Considerations

Procurement Models

While it is envisaged that under the Program, the charging infrastructure will be predominantly government-owned, agencies should be aware of the different procurement models applying to the provision of charging infrastructure. These are outlined below:

Government-owned: Charging stations that are government owned are usually on government land. They can be for fleet use or publicly accessible for a user-fee or initially for free to incentivise EV uptake.

There is opportunity in the future to partner with commercial providers to supply charging services (e.g. software and/or charger management).

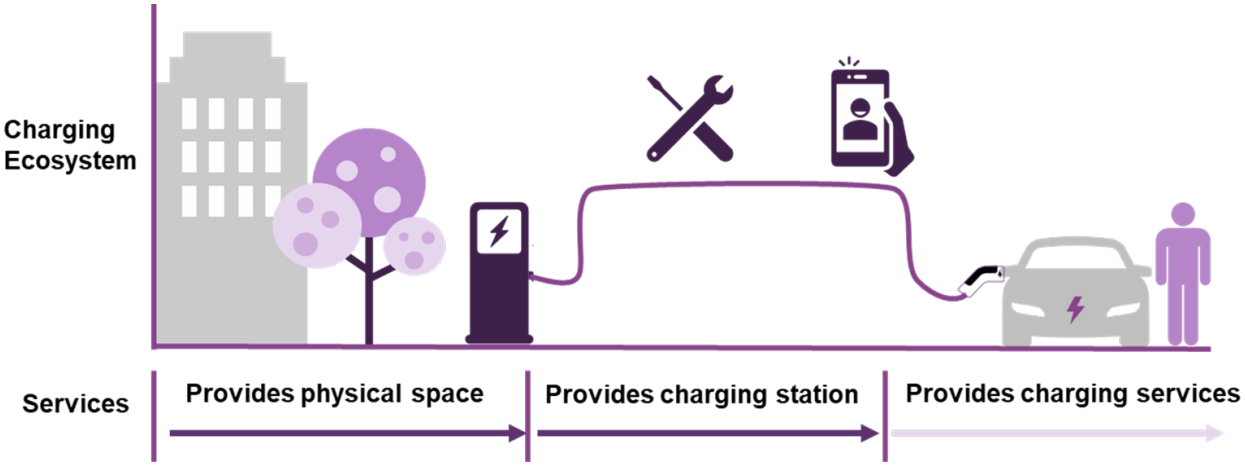
Third party-owned: Charging stations that are privately owned by a commercial provider, but located on host land. They are usually publicly accessible for a fee.

Examples include ChargeFox, NRMA, Evie Networks, Jolt, EVX, Tesla.

Energy utility-owned: Charging stations that are owned by an energy utility provider such as AGL, Origin Enery and Ampol, and located on host land, are usually publicly accessible for a user fee.

Where a commercial provider is engaged to manage the charging stations, it is recommended that an ownership agreement is formed between the agency and the commercial provider. Agencies should seek legal advice on the terms of the agreement.

Diagram 1: Government owned procurment model provides physical space and charging station



Need help

For general information about the program please email QGAO on:
qgao-evinstallationenquiries@epw.qld.gov.au

QBuild have an active EV program delivery team and are ready to provide technical assistance in developing your EV Infrastructure Proposal.

For assistance from QBuild please email:
MyQBuild@epw.qld.gov.au
or contact your customer relationships manager.

QGAO manages one of the largest property portfolios in Queensland.

$2.1 billion in owned property

179 owned assets

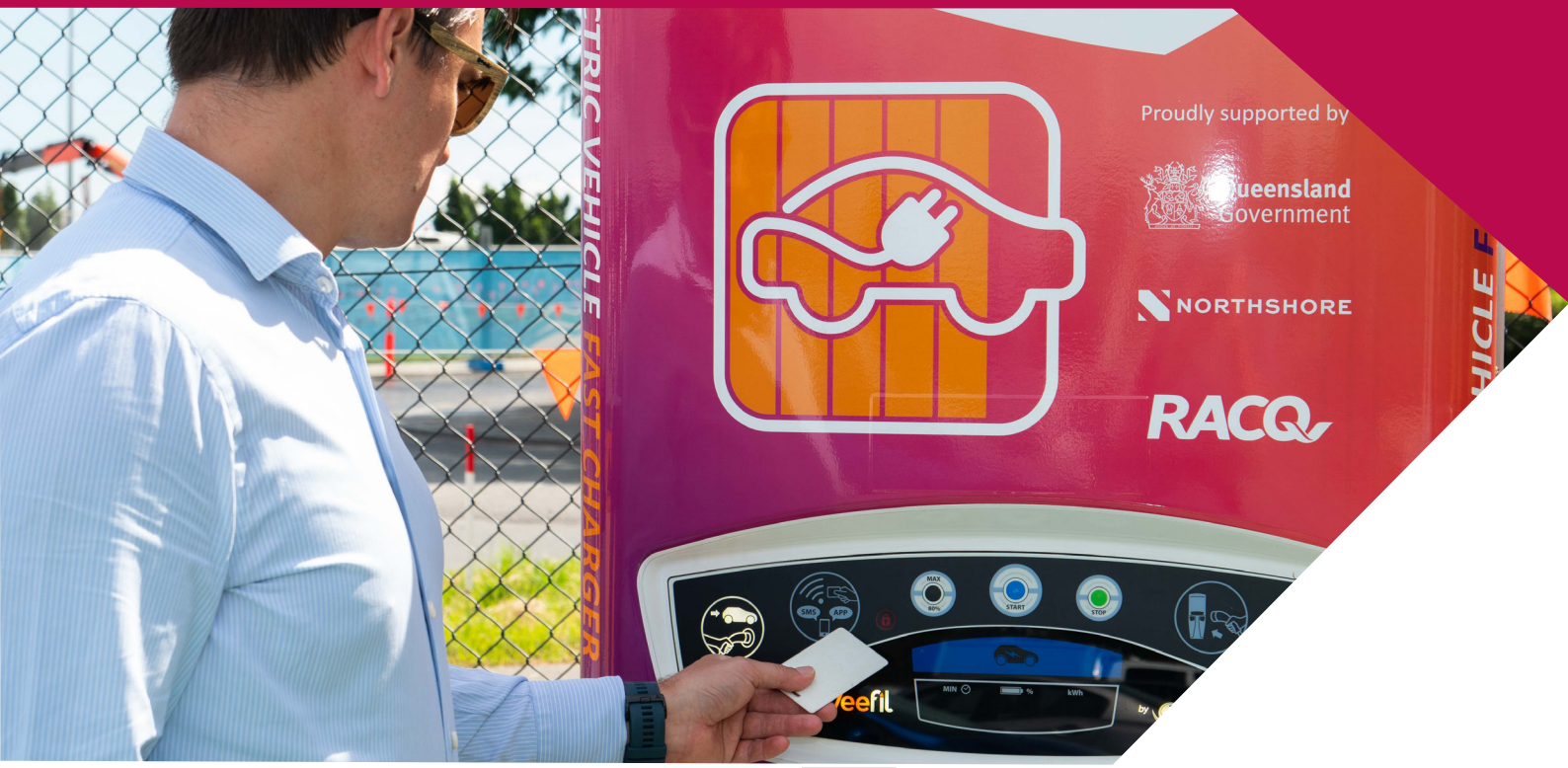
over **700** leases

across over **540** private buildings

1 million square metres of office space
(145,000 m² owned and 877,100 m² leased)

1,769 houses & **1279** apartments for Qld Gov employee housing

Figures are approximates only



www.epw.qld.gov.au/QGAO

Queensland Government