



Joint Organisations Net Zero Acceleration Program

# ELECTRIC VEHICLE CHARGING INFRASTRUCTURE ON PUBLIC LAND LOCAL GOVERNMENT GUIDANCE

**ASTROLABE GROUP** 

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#### About Astrolabe Group

Astrolabe Group are the recognised experts in urban growth and change management with a uniquely empathetic approach to client and community.

This report was prepared for Canberra Region, Central NSW, Far North West, Hunter, Illawarra Shoalhaven, Mid North Coast, Northern Rivers and Riverina and Murray Joint Organisations and Riverina Eastern Regional Organisation of Councils.

In preparing the report, Astrolabe has made every effort to ensure the information included is reliable and accurate. Astrolabe is unable to accept responsibility or liability for the use of this report by third parties.

#### Acknowledgement of Country

In the spirit of reconciliation, Astrolabe Group Acknowledges the Traditional Owners of Country throughout Australia and their continuing connections to land waters and community.

We show our respect to elders past and present. We acknowledge that we stand on Country which was and always will be Aboriginal Land.

Cover image credit: NSW DCCEEW

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### INTRODUCTION

#### **Overview**

To support the Joint Organisation Net Zero Acceleration (JONZA) program, Astrolabe Group worked with Canberra Region, Central NSW, Far North West, Hunter, Illawarra Shoalhaven, Mid North Coast, Northern Rivers and Riverina and Murray Joint Organisations (JOs), and Riverina Eastern Regional Organisation of Councils to develop this guidance for local governments on the delivery of Electric Vehicle Charging Infrastructure (EVCI) on public land.

The JO network represents nine regions across NSW supporting a collective of sixty-eight councils.

The aim of the JONZA program is to assist councils and regions in achieving net zero outcomes by:

- Providing opportunities for JOs to establish or progress a net zero pathway plan for member councils
- Increasing capacity of JOs to identify and implement projects that directly reduce emissions for councils, or progress the region's net zero trajectory
- Strengthening collaboration between State and Local Governments to improve delivery of net zero outcomes in line with community expectations.

This resource was developed with funding from the NSW Government.



#### **Objectives**

Through the delivery of the JONZA program, JOs and their member councils have recognised that encouraging the uptake of zero emissions transport is a key element for achieving their net zero commitments.

A significant gap identified in councils' ability to encourage this uptake is the inconsistency in internal processes for identifying suitable public land for Electric Vehicle Charging Infrastructure (EVCI) and varied capacity across councils to effectively deliver EVCI.

In order to address this gap, Astrolabe was engaged to design and deliver a guidance framework for council-facilitated EVCI delivery.

The objectives of Astrolabe's engagement was to:

- Understand the processes required across a range of councils to facilitate the delivery of EVCI
- Engage with council and industry stakeholders to identify different perspectives on the parts of the process that require guidance
- Develop a guidance framework that:
  - Includes a set of tools and templates to assist councils in delivering EVCI
  - Can be replicated across a range of council settings, accounting for differences in placebased dynamics, access to resources and maturity in EVCI delivery policies and experience

This guidance framework is intended for any council staff member involved in the delivery of EVCI. The focus of this guidance is specifically to facilitate Charge Point Operator (CPO) owned and managed EVCI.

#### Methodology

The following methodology was used to ensure set objectives were achieved:

- · Robust desktop research to identify:
  - The existing landscape of government policies and strategies related to EVCI delivery
  - International and domestic best practice in EVCl delivery
  - Gaps between existing processes and best practice.
- Extensive engagement with council and industry to:
  - Validate desktop research findings
- Capture existing processes, pain points and opportunities for improvement.

This report presents a suite of tools and templates to improve capability and consistency in councils when delivering EVCI, in response to the key issues and feedback received during engagement.

Details of engagement activities and a summary of key issues raised can be found in the appendix.



# GUIDANCE - TOOLS AND TEMPLATES

Feedback received during engagement highlighted the typical EVCI delivery process, and identified specific stages where councils require greater guidance. These stages are listed below and highlighted with a red outline in Figure 1:

- Strategy development
- Engagement
- Scoping site selection
- Scoping site design
- Scoping licence agreement
- Implementation operation
- Implementation maintenance

The following sections present a set of tools to guide council in their delivery of EVCI on public land. These resources are intended to help council identify and undertake the different activities that may be involved in each stage.

It is important to note that as processes, reporting and approval requirements, and organisational structures differ significantly across councils, the tools and templates provide guidance that is general in nature, to ensure relevance to each council.

Although EVCI delivery is presented here as a sequential journey, the stages are better viewed as 'modules' that may occur at different and/or multiple points in the process depending on the council.

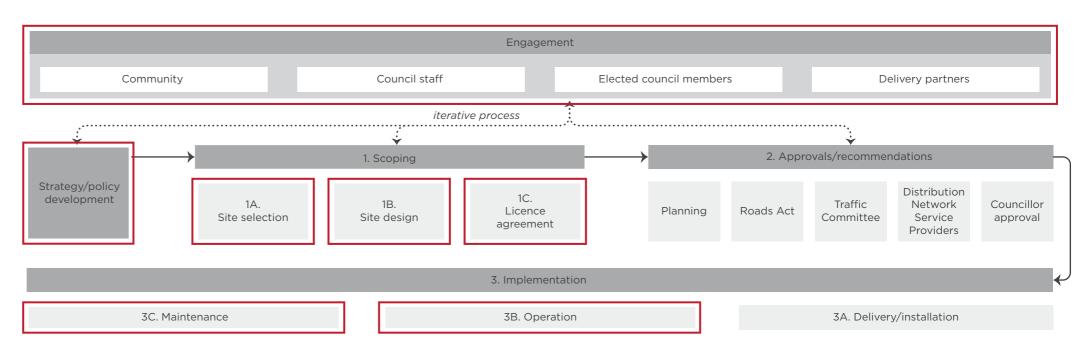


Figure 1



#### Strategy development

Council should use this tool to define their level of involvement in delivering EVCI, and identify which departments or staff will likely be involved throughout the delivery process.

This tool helps council address the following matters raised during engagement:

- · Define their role in the delivery of EVCI
- Identify internal roles and responsibilities across different phases

Although this tool identifies a range of staff involved in different stages of delivery, there should be a team or position/s in council that is identified as a primary driver to lead the process.

This purpose of the lead is to drive the progress of council's EVCI initiatives or manage its response to opportunities that arise. The lead is not expected to undertake all activities in isolation, but instead be able to identify and work with relevant stakeholders at each stage of delivery.

In many councils, it is likely that this role is suited to positions associated with sustainability, planning or transport (though this may not always be the case). Define the role council will take in the delivery of EVCI

Engage with key stakeholders to agree the type of role council will play in the delivery of EVCI:

#### Passive, ad-hoc

- Responds to inquiries from industry on an ad-hoc basis as they come through
- No strategic work undertaken to identify opportunities, needs and locations for EVCI

#### Active, strategic

- Sets a vision, targets or commitments to deliver EVCI across the LGA
- Undertake due-dilligence to understand demand and potential locations for EVCI
- Develop a strategic plan and/or actions to deliver on vision

The following questions may help identify which role is most appropriate:

Is increasing electric vehicle uptake a key outcome in Council's strategic documents?

How will Councils allocate budget or staff resources to EVCI delivery?

Does adequate charging infrastructure already exist? Has/will the market continue to meet demand?

#### Allocate responsibilities within council

Regardless of whether or not council decides to play a passive or active role in EVCI delivery, it should allocate responsibilities across each stage of the delivery process so it is prepared for if/when an opportunity arises.

As each council has a unique structure and available resources, a function-based (as opposed to a role-based) approach is suggested to ensure council can allocate responsibilities in a way that is fit-for-purpose.

#### Site selection. Staff that:

- Oversee council owned/managed property
- Undertake planning due diligence
- Develop applications for planning approval
- Manage electricity infrastructure or interface with energy distributors

For example: planners, engineers, GIS specialists, asset and property managers

#### Site design. Staff that:

- Design and manage changes in traffic and/or parking conditions
- Understand transport and design accessibility requirements
- Implement changes in signage of road markings

For example: transport planners, traffic engineers

#### License agreement. Staff that:

- Review, negotiate and execute contracts
- Oversee maintenance and operation of council assets
- Oversee council owned/managed property

For example: procurement, legal and finance professionals

#### Approvals. Staff that:

- Develop applications for planning approval
- Manage electricity infrastructure or interface with energy distributors
- Collaborate with and brief councillors and other council committees

For example: planners, engineers, asset managers

#### Implementation. Staff that:

- Oversee maintenance and operation of council assets
- Interface with electrical and other contractors

For example: engineers, asset managers



#### **Strategy development (cont.)**

Council should use this tool if they are taking an active, strategic role in EVCI delivery. This tool will help council develop a fit-for-purpose approach to setting and achieving their vision.

This tool helps council address the following matters raised during engagement:

- Set their vision
- Highlight activities needed to develop a strategy and/or action plan

#### Strategy examples

Eastern Suburbs Electric Vehicle Infrastructure Strategy

See Strategy <u>here</u>

Lake Macquarie Electric Vehicle Charging Strategy

See Strategy <u>here</u>

Inner West Electric Vehicle Encouragement Strategy

See Strategy here

#### **Ongoing engagement**

The lead of this process should continuously engage with key council and other relevant stakeholders (e.g. industry, State Government) to ensure buy-in on the approach and ultimate outcomes. See Engagement tool for further details.

#### **Set vision**

Define a clear, achievable vision for council's EV charging network. The vision should align with relevant strategic goals, such as those related to transport, sustainability, and community values

#### Demand: Existing and future take-up

Develop scenarios to understand range of potential future EV take up (and demand for charging infrastructure)

Consider demand from a range of users, such as residents, workers and visitors (e.g. seasonal population, peaks associated with major events)

Consider council's policies on EV take up i.e. is it actively trying to stimulate or incentivise demand?

#### Existing resources:

CSIRO EV uptake projections

See projections <u>here</u>

#### Existing supply/ network of chargers

Map current network of public chargers in consideration of their type (i.e. charge speeds)

Consider pipeline of future chargers delivered through programs and grants

Evaluate the reliability and effectiveness of existing network

# **Gap between demand and supply**

Compare demand scenarios with the current and planned supply of charging infrastructure

Identify spatial and functional gaps (i.e. congested locations, charger types/speeds)

#### Existing resources:

NSW EV fast charging infrastructure master plan

See master plan here

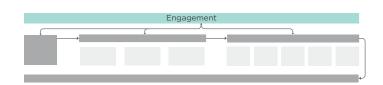
#### Set action plan

Develop a fit-for-purpose plan that aligns with council's vision and investment priorities

Identify council's role in delivering different components of the plan, and key collaborators that council may engage with

Undertake a strategic assessment of opportunity sites (see Site Selection tool)

Identify grants or incentives available to support delivery of action plan



#### **Engagement**

Council should use this tool to identify key stakeholders and decision-makers involved in all stages of EVCI delivery. It is intended to help achieve buy-in from stakeholders (as noted in the Strategy Development Tool) and reduce delays associated with approvals down the line.

Engagement is most effective when undertaken early. It is recommended that comprehensive engagement occurs during strategy development, so feedback and perspectives can be considered in the final vision and action plan. This is more likely to result in buy-in from key stakeholders, and reduce delays during project delivery. Engagement should be led by the primary driver of council's EVCI initiatives.

Even if council is taking a passive, ad-hoc role in EVCI delivery, it is important to develop an engagement plan for when opportunities arise.

This tool helps council address the following matters raised during engagement:

- Develop an approach that is more strategic, to avoid ad-hoc engagement
- Consider different approaches to engagement for different stakeholders

It also seeks to address feedback received from industry that noted difficulty in getting the right decision-makers involved at critical points in the delivery process.

#### Identifying and grouping stakeholders

Identifying and arranging key stakeholders into broad groups will help develop an approach that reflects appropriate levels of engagement for different roles throughout the strategy development and decision-making process.

The process lead should identify key stakeholders within the following groups:

- Council staff: This may include senior management and staff across council's departments that need to provide input or advice at different stages of delivery (refer to allocation of responsibilities in strategy development tool)
- Elected council members: The mayor and councillors responsible for reviewing and endorsing strategic plans and decisions
- Community: Residents, local businesses, community and special interest groups, and representation for visitors and future community
- Delivery partners: This may include Charge Point Operators, Distribution Network Service Providers and Accredited Service Providers (or other council contractors)

#### **Spectrum of participation**

Consider the spectrum of participation and council's corporate position to determine the appropriate level of involvement for each stakeholder group. This will help set expectations of their unique roles and level of influence in the process, and ensures critical decision-makers are identified.

The following aligns with the International Association for Public Participation Spectrum. This should be considered alongside council's policies and any other engagement requirements (e.g. State Government regulations):

- Inform: Council provides the stakeholder/s with balanced and objective information to help them understand context and solutions
- Consult: Council obtains feedback on analysis, alternatives and decisions from stakeholder/s
- Involve: Council works with the stakeholder/s to ensure concerns and aspirations are actively and consistently understood and considered
- Collaborate: Council partners with the stakeholder/s in every aspect, including the development of alternatives and selecting the preferred approach
- Empower: Ultimate decision-making rests with the stakeholder

#### **Engagement plan**

Once stakeholder participation has been defined, it is important to develop a plan for engagement that:

- Identifies which stakeholders need to be involved at each stage of the strategy development and delivery process
- Highlights why they are being engaged (in alignment with their involvement along the spectrum)
- Suggests how that they will be engaged.
   For example:
  - Through surveys or public forums
  - As part of working groups or roundtables
  - Attending briefings or Q&A sessions

It is particularly important to identify decisionmakers that will need to provide input at critical points. Working with these stakeholders early to agree on how best to engage with them will improve communication and reduce delays or misalignment later in the process.

Inner West proposed electric vehicle public kerbside charging locations - Engagement outcomes report

See Strategy <u>here</u>



#### 1. Scoping

1A Site selection

Council should use this tool to identify public land that is most suitable for EVCI. It can be used as a basis for a multi-criteria analysis to filter out sites which are more likely to result in lengthy delays or require significant additional works.

This tool helps council address the following matters raised during engagement:

- Understand how much due-diligence/resources to invest before a CPO is engaged
- Guidance on CPO expectations for an EVCI site

It is recommended that council use this tool for preliminary due-diligence to identify a suite of potential sites before engaging with other stakeholders (such as CPOs or energy distributors).

CPOs are likely to have standard processes for detailed site and feasibility assessments (which are embedded in their project budgets), so it's recommended that councils don't undertake exhaustive assessments prior to engaging with them.

While delivery of EVCI is possible on sites that are constrained by factors identified in this tool, council should seek out sites that have minimal/no constraints to appeal to more CPOs. These sites will improve feasibility and reduce planning and approval requirements (shortening project timelines), which are key to a CPO's decision to progress with delivery.

Council should also implement processes to support continuous improvement.

**Public land category** 

The processes required to deliver EVCI on public land differs depending on the land's designation. When selecting potential sites, council should prioritise sites in the following order:

Council-owned operational land

Council-managed operational Crown land

Where possible, council should avoid selecting sites that fall under the following categories, as approval processes are likely to extend beyond what is feasible for an EVCI delivery project. This is due to more restrictions on permitted uses, lease durations and purposes, and consultation requirements

Council-owned community land

Council-managed community Crown land

Planning/other constraints

Council should avoid sites impacted by planning and other constraints, such as:

Heritage designations

Hazards e.g. sites impacted by flooding or bushfires

Existing Native Title claims

Significant trees and root networks

Sites with the least amount of constraints should be prioritised for lower power chargers, as even minor complications could result in delays or costs that diminish the return on investment and make the project unfeasible

Surrounding activity and co-location

Council should prioritise placing chargers in areas where residents and visitors already frequent. This may include sites close to:

Employment/commercial centres

Retail and shopping centres

Dense residential development with no in-home charging options

Hotels and major tourist destinations

Council should manage the co-location of chargers in areas where parking is in high demand to minimise conflict with the general public. For example, council should avoid exclusive EV charging spaces along main streets where supply is already constrained

Council should consider safe sites that can also meet accessibility requirements (see Site Design Tool) **Electricity network capacity** 

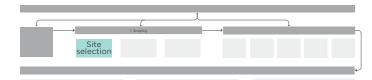
Council should prioritise sites with existing electricity capacity. See Assessing Electricity Network Capacity tool for more details **Continuous improvement** 

Council should implement processes to enable continuous improvement and inform updates to EVCI delivery approaches:

Time tracking against tasks

Tracking different council departments that are involved at different stages/required to respond to unforeseen issues

Sharing lessons learnt with broader cohort, for example through a Community of Practice with other councils



#### **1A Site selection**

Assessing electricity network capacity

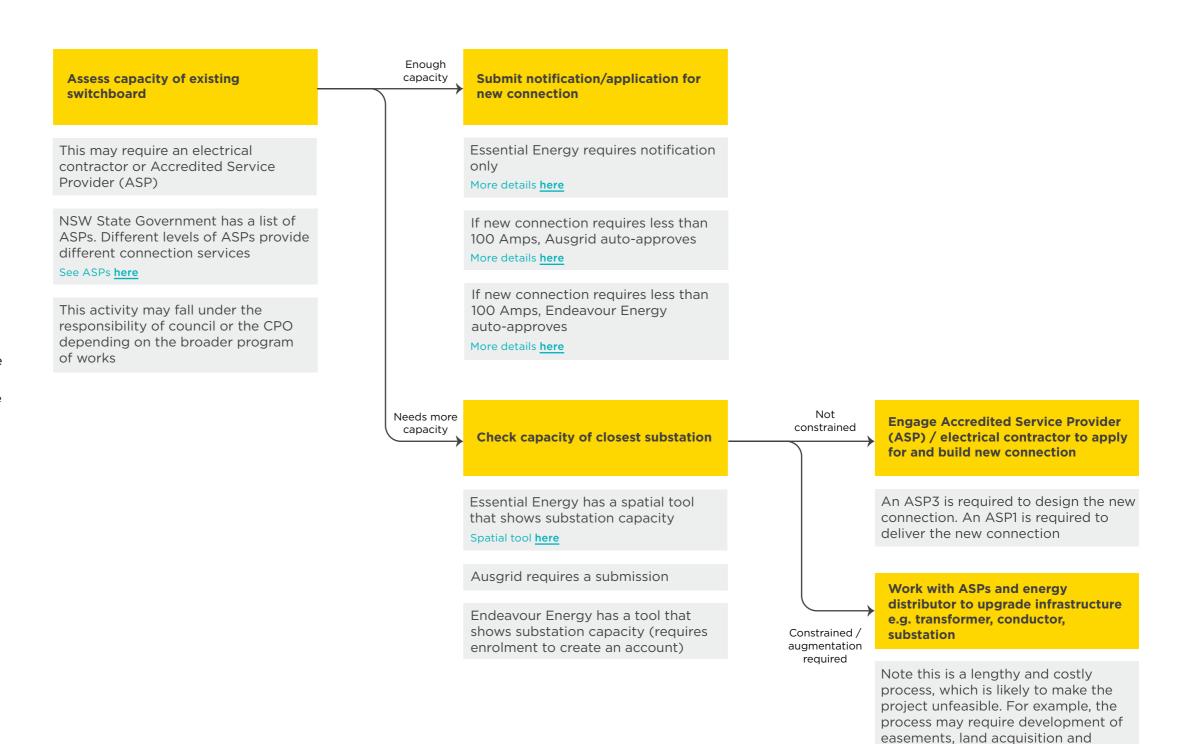
Council should use this tool to assess a site's electricity capacity. Specific steps and available resources vary depending on the relevant Distribution Network Service Provider, so this tool presents a general flow that captures high level requirements.

CPOs will likely undertake detailed electricity assessment as part of their scope, so it's recommended that councils don't undertake exhaustive electricity assessments prior to engaging with them.

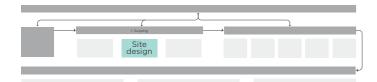
This tool is intended to help council understand the process required and undertake preliminary duediligence to identify a suite of potential sites before engaging with other stakeholders, if required.

This tool helps council address the following matters raised during engagement:

Identify high-level viability from an electricity infrastructure perspective



trenching



#### 1B Site design

CPOs will likely undertake detailed site design as part of their scope. This tool is intended to highlight key considerations or standards that council may want to ensure the CPO meets.

This tool helps council address the following matters raised during engagement:

 Ensuring EVCI locations are usable and inclusive for all members of the community

#### **Electrical and safety standard**

#### Considerations include:

- Compliance with EV charger specifications set by Standards Australia
- Emergency shut-off mechanisms for enhanced safety

#### Parking and signage

#### Considerations include:

- Parking restrictions should suit the expected dwell time at the site and the capacity of the charger to provide EV drivers enough time for a reasonable charge
- Transport for NSW's register standard electric vehicle signs that covers the signage for regulating, warning, informing and guiding road users
- Where appropriate, providing information to users on surrounding amenities, shops or other destinations to visit while charging their vehicle

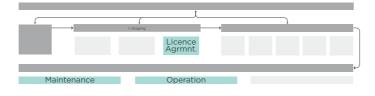
#### Accessibility

Public EVCI should be designed so that it is accessible for all potential users. The following table outlines best practice considerations.

Availability of dedicated charging spaces	There may be a limited number of charging spaces with adequate accessibility features. Like accessible bathrooms, charging stations should adopt a 'use last' policy for spaces with accessible mobility features to ensure their utilisation is maximised	
Charging point placement	Charging points should consider the various sizes and types of vehicles	
Parking barriers	Sites should have a protective barrier to prevent cars from driving too far forward, ensuring safety and proper alignment. Barriers should not obstruct a user's ability to operate the charging station, with placement considering spacing and distance from the charging point	
Space around the vehicle	Parking bays should be designed to enable all users to park, get in and out of their vehicle, move around the vehicle, and access the charging station safely	
Consistent surfaces	Obstacles around the charging station should be removed, and appropriate, level surfaces should be provided	
Physical access	Charging point components should accommodate users with varying heights and mobility aids (such as wheelchairs or canes)	
Visible charging point and interface	The components of the charging point should be visible and easy to see and interact with	
Charging point information	The spacing and lighting of charge point information should be clearly displayed and easily understood	

iMOVE, on behalf of the Australian Government, is currently developing comprehensive guidelines on EVCI accessibility, which are expected to become the national standard. For a detailed overview of the current guidance, refer to their latest consultation document.

See document  $\underline{\text{here}}$ 



1B Site design (cont.)

#### Other

- EVCI meets conditions of any grant or other funding received for its delivery, such as:
  - Public location listing e.g. on Google Maps, Plugshare and Charge@Large
  - Meets government-set software functionality standards
  - Received grid connection approval and has a facilities access agreement from Electricity Supply Authority
- Improving user perceptions of safety through:
  - Lighting around/on site to facilitate use at all times of the day and night
  - Installing CCTV at charge points

#### Scoping

1C Licence agreement

Council should use this tool when reviewing and negotiating licence agreements with CPOs. This may assist council in identifying reasonable terms that prioritise the delivery of EVCI infrastructure.

During engagement, councils highlighted the desire to reduce their responsibilities during the operation and maintenance stages of EVCI delivery. The license agreement is the key mechanism to ensure that these responsibilities are agreed to upfront.

This tool helps council identify reasonable terms for the CPO (as the operator and manager of the EVCI) to reduce the burden on council, and deliver a quality service to customers.

This tool helps council address the following matters raised during engagement:

- Reducing the burden and risk on council during operation and maintenance
- · Reducing costs to councils
- Ensuring market-standard service is provided to customers

#### **Length of lease**

Council should consider the following:

- Longer leases provide CPOs with greater certainty, increasing the viability of delivering EVCI infrastructure. Most leases are currently set up on a 5 + 5 year basis, however existing demand means CPOs are unlikely to see returns on investment until after year 8. Ability to extend to a 10 + 5 year lease (for example), may increase willingness to invest in areas where feasibility is more constrained
- As returns are not anticipated until after several years, CPOs are unlikely to deliver on sites where they can't receive a peppercorn licence (current examples include \$1/year). Council may consider a clause that provides transparency regarding revenue after the payback period (when discussing the option to renew) to reasonably renegotiate the licence and explore revenue sharing or rent payments
- Council may be able to increase leverage by negotiating CPO access to their lowerthan-market rate with energy distributors (if at no additional cost to council). This may also increase feasibility of usage and revenue, to facilitate informed negotiation at licence renewal

#### Operation

Consider the following provisions, CPO responsibility for:

- Meeting predefined infrastructure reliability metrics. It is recommended that CPOs achieve an uptime of 99% (in line with NSW Government recommendations). Council may choose to implement minimum standards for other performance measures, such as customer complaints and charging speeds
- Providing 24-hour customer support helpline (with support contact details clearly displayed on the charge point) to manage issues related to payment and equipment troubleshooting, for example
- Setting and managing charging fees, and processing payments securely (providing accessible, user-friendly methods)
- Customer data and cyber security protection

1C Licence agreement (cont.)

#### Maintenance

Consider the following provisions. CPO responsibility for:

- Regular on-site condition assessments/ inspections. An inspection schedule should be agreed upon prior to the commencement date (e.g. monthly, quarterly), in consideration of the charger type, location and usage. Council may consider additional condition assessment requirements prior to peak demand periods (such as public holidays, peak-tourism periods or events)
- Resolution of charge point issues. Agree reasonable response times and reactive maintenance plans to cater for unforeseen outages
- Repair of any physical damage to the EV charging station, including the removal of graffiti and other acts of vandalism
- 24/7 availability for software fault repairs

Council may consider the inclusion of additional enforcement mechanisms for failure to meet maintenance requirements. For example, the retention of security deposits, with thresholds for utilisation tied to uptime performance and response rates of CPOs. If the agreed thresholds are not met, an independent assessor may be engaged with the costs deducted from the security deposit.

#### **Data sharing**

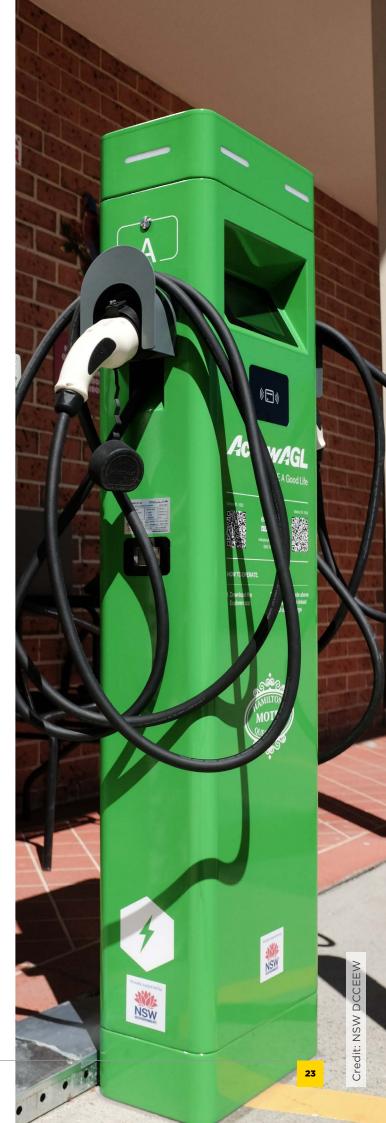
Council should consider data sharing arrangements throughout the life of the infrastructure asset. This will help inform future EVCI investment decisions and delivery by identifying trends in user behaviours and demand, as well as ensuring CPOs are meeting agreed operating and maintenance thresholds.

Council may seek to specify sharing of data on:

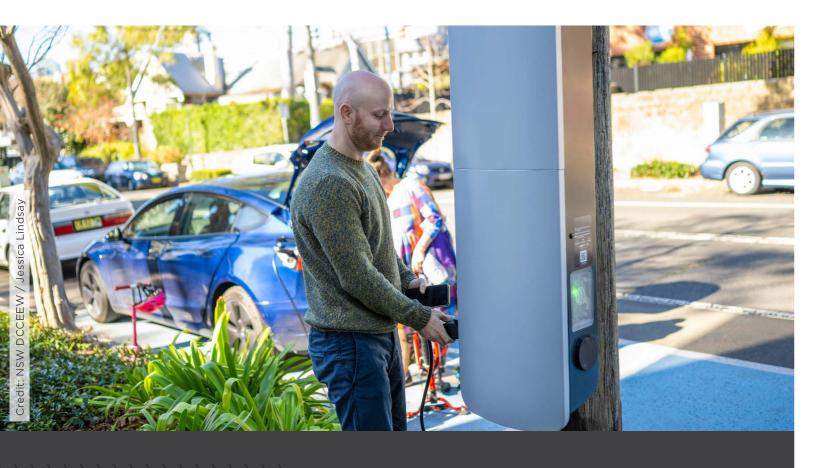
- Customer demographics
- Patterns of usage including day, time, total charge events and duration
- Percentage uptime
- Charger speeds
- Charger health and faults (to feedback into maintenance schedule and improve reliability)
- Number and nature of queries or complaints received
- Average time taken to respond to queries or complaints
- Estimated emissions reduction

The Electric Vehicle Council (EVC) maintains a template licence agreement for EV charging services and infrastructure. Although many of the terms in the template agreement are to be structured in a way that generally favours the interests of CPOs, the template provides relative guidance as to the base terms typically expected in the industry and can serve as a starting point for developing customised licence agreements.

See licence agreement <u>here</u>



## **APPENDIX - ENGAGEMENT FINDINGS**



# Understanding the needs of different council functions

To gain a comprehensive understanding of existing council processes, pain points and opportunities when delivering EVCI, Astrolabe engaged with over 40 staff members from councils within the Joint Organisation Net Zero Acceleration (JONZA) network.

Each session focussed on insights and feedback from specific staff members, organised by their involvement at different stages of EVCI delivery. Council staff were organised by their involvement in:

 Session 1: Site selection, design and approval – such as sustainability professionals, planners, transport planners and GIS specialists

- Session 2: Infrastructure delivery such as engineers and asset or infrastructure managers
- Session 3: Operations and leasing such as property managers, procurement, legal and finance professionals.

The following table presents the number of staff that attended each session, as well as a general summary of the departments or teams in council that they represented.

Name	Council departments	Approx. staff engaged
Site selection, design and approval	Economic Development	15
	Engineering and Infrastructure	
	Planning and Community Development	
	Sustainability, Climate Resilience and Net Zero	
Infrastructure delivery	Procurement and Strategic Projects	13
	Sustainability, Climate Resilience and Net Zero	
	Transport and Infrastructure Planning	
	Water, Energy, and Resource Management	
Operations and leasing	Economic Development	11
	Procurement and Strategic Projects	
	Property and Legal Services	
	Sustainability, Climate Resilience and Net Zero	

In each session, participants were presented with a journey map that reflected the general stages involved in EVCI delivery (see Figure 1).

Participants were invited to respond to three key questions related to the journey:

- 1. Does this journey adequately represent the stages of EVCI delivery?
- 2. What barriers and/or pain points have you experienced at different stages in the journey?
- 3. What opportunities or lessons learnt can you share from previous experience delivering EVCI?

# Journey map

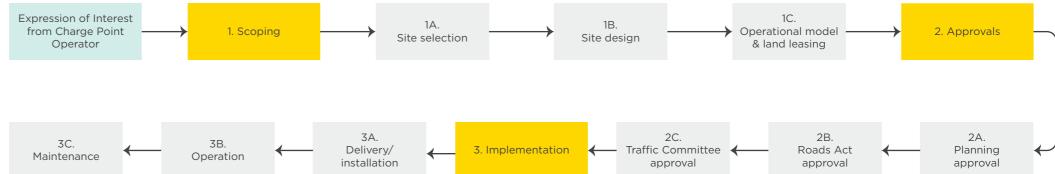


Figure 1

Through their responses, participants highlighted stages that were missing in the journey map.
Following engagement, the journey map was updated to address these responses (see Figure 2).

Discussion amongst participants also highlighted that the journey to delivering EVCI is often not linear, requires iterating and that the order of each stage may vary based on the council. Although it is presented here as a sequential journey, the stages are better viewed as 'modules', in that they are essential in the delivery of EVCI, but may occur at different and/or multiple points in the process depending on the council.

#### Journey map

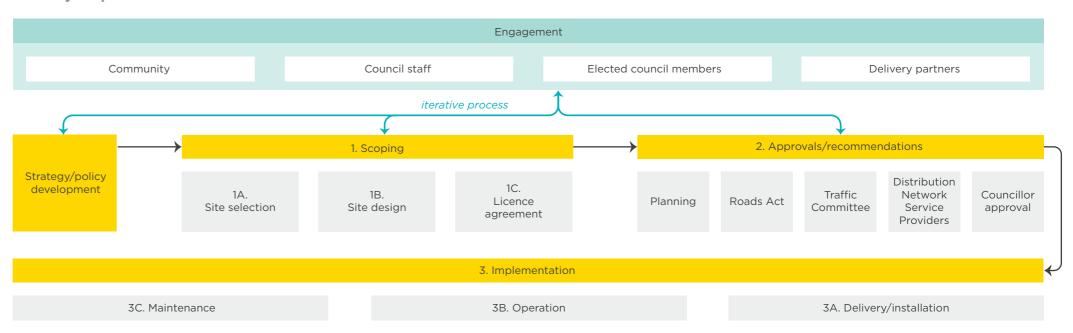


Figure 2

# **Summary of engagement findings**

#### **Strategy development**

Participants came from a diverse range of councils, each with varying levels of commitment to delivering EVCI and maturity in their processes to do so. Participants highlighted that their councils often didn't have a defined 'position' on delivering EVCI and noted the need for a stage at the start of the journey that identified the role they would take, such as being an active or passive actor, and the different responsibilities that would need to be undertaken. Defined as 'strategy or policy development', discussion on this topic included the following:

- Councils emphasised the need for an initial phase tailored to the local context, market conditions, and existing groundwork. This includes engaging internal staff internally to ensure feasibility and alignment. This may also include inclusion of charging infrastructure into Council's asset management plans
- Defining internal responsibilities within Council is not always clear, often there is a lack of coordination regarding who is responsible for activities at each stage. This often leads to a significant burden placed on sustainability teams within Council, as they are left to lead all stages of EVCI delivery, including the day-to-day engagement with CPOs. Sustainability teams may not always be the most suitable leads for this process as they don't have the necessary resources or expertise
- The implementation of an internal EVCI delivery team, with representatives from each relevant department within Council participating and providing feedback showed positive results

#### Quotes

I'm a sustainability officer, I'm not a project delivery person, and to know all the different things that have to happen is difficult

[There is a] big burden on sustainability teams when the assets move from delivery through to operation, and the sustainability team get stuck with day-to-day operational back and forth with CPOs..

#### **Engagement**

Participants described a wide range of approaches to internal (e.g. councillors, staff and committees) and external engagement (e.g. community and industry) during EVCI delivery. Discussion on this topic included the following:

- Approaches to community consultation on EV charger installations vary across councils. Some view community consultation as essential, others noted the difficulty in adequately engaging with the community on a site within a short time frame, instead opting for a 'communication instead of consultation' approach
- Concerns around who is responsible for community engagement also arose, specifically whether council or the CPO should be responsible for it
- Engagement with key stakeholders is generally ad hoc, which contributes to a disconnect between council, CPOs and electricity distributors
- Some councils have introduced collaborative processes for engaging on EVCI by establishing committees, either composed solely of council staff, or expanded to include external members like NSW Police, Transport for NSW, and other non-Council staff. Council noted that this model had been successful in enabling stakeholders to provide relevant feedback early in the process

#### Quotes

It's not feasible to undertake community consultation in such a short delivery window

We need to engage staff before we even try to roll it out to the community. Because we are such a big shire, staff don't even believe EVs can work out here

We will need to have an engagement plan. Staff first, and then the community



Participants emphasised that most of the challenges in delivering EVCI were experienced in the 'scoping' phase. Participants generally expressed uncertainty and inexperience in defining their role and responsibilities in EVCI delivery across site selection, site design and developing licence agreements.

#### Site selection

- Councils find it difficult to understand how much due-diligence work should be invested before the site is 'picked up' by CPOs. Councils may expend significant time and resources in investigating a site to determine its appropriateness for EVCI, only to be unable to progress due to unforeseen limitations down the line. Feedback to council from CPOs has suggested some prefer that council do not undertake feasibility studies, as they will undertake them anyway and price their proposals to include this
- Councils need clear guidance on CPO expectations, and the standard of due diligence they are expected to meet
- Grants often serve as the catalyst for CPOs to initiate EVCI projects. Without established processes in place, council is often not agile enough to work with CPOs to implement EVCI within the timeframes defined by the grant guidelines. When grants are not active, there is less demand from CPOs to implement EVCI
- Council is often unclear if sites are viable from an infrastructure perspective (e.g. electrical feasibility). Clarity from electricity distributors is required at early stages, to ensure that the selected site has enough capacity to support EVCI. Electricity distributors may also require the development of easements which requires a

- lengthy and costly legal process to set up and potentially remove at the end of the infrastructure lifecycle
- CPOs prefer high-traffic areas for EVCI to maximise return on investment, however, allocating parking spaces for EV charging in these locations may trigger negative responses from the local community as it can be seen as removing valuable parking spaces
- Different land categories can present unique challenges for EVCI implementation, with council managed Crown Land that is categorised as community land identified as the most complex to navigate
- Depending on the specific conditions of the site, Council may also be required to meet additional criteria prior to development e.g. sites that have a heritage overlay will require a heritage assessment, and sites with a native title claim will require a native land title assessment
- Tourism destinations may face challenges in gaining CPO interest as the demand fluctuates seasonally despite council seeing value in delivering EVCI in these locations. Ratepayers may also be concerned about utilising council resources to cater to tourists and seasonal resident populations

#### Quotes

It's tricky to understand how much effort to put into each site, and at what point

We won't know whether or not a nominated site is feasible within that amount of money until CPOs receive their grants and start doing detailed designs

There is a huge demand for on-street parking, anything relating to preferential parking for EV charging may be seen as negative by the community

How do you address [cases] where there are 30,000 extra people living in the area for parts of the year

#### Site design

- Accessibility is a key consideration in site design, with Council responsible for ensuring that EVCI locations are usable and inclusive for all members of the community. Grants may also include specific accessibility requirements, with accessibility guidelines currently in development by iMOVE on behalf of the Australian Government
- Site designs typically involves input from various departments, each of whom may request different design elements. This can lead delays in finalising EVCI site design
- Different types of charging infrastructure should be matched to the specific characteristics of each site. In some locations, pole-mounted EVCI may be the most suitable option, while others may be better suited to dedicated parking-based installations. Pole mounted chargers are looked upon favourably in areas where the space that is taken up by EVCI needs to be minimised. However, condition of poles, the proximity of the pole to parking spaces, design of the area are all complex challenges
- Site design should be directed by the demand profile of the specific area. This may include considerations relating to charging speed
- Site design must account for the potential risks associated with hazardous scenarios, particularly in areas more vulnerable to natural disasters such as flooding or bushfires

#### Quotes

Trying to overlay all the considerations to find a perfect site that meets all the criteria is very difficult

We have to make sure that there is equity of access distributed across all members of the community within the LGA

#### **Licence agreements**

- Profit driven motives from CPOs can often result in unfavourable conditions for development of EVCI on public land
- Cost recovery is a core issue for Councils, with CPOs benefiting from the utility of grant funding and private enterprise, whilst there are public costs to Council and the community (resourcing, physical infrastructure, legal costs, devaluing Council/Crown land) that are not being recovered
- Profit sharing was discussed as a potential inclusion in agreements, to ensure costs to Council are recovered, and there is equity between CPO and Council contributions
- Councils often lack clarity on what to look for in standard agreements to ensure their interests are adequately protected. Standard agreements provided by industry (specifically the Electric Vehicle Council) tend to be heavily weighted in favour of CPOs. Lease agreement tenure, data sharing, maintenance, 24/7 management support, security deposits were all identified as aspects of the agreement that should be scrutinised
- Strong interest across all participants for a standard agreement that Councils may use as a template when engaging with CPOs
- Considering the length of lease agreements (often 10+ years), Councils may take the approach of ensuring there are reviews within the term of the contract, to ensure that CPOs are meeting their responsibilities under the agreements

#### Quotes

10-year lease agreements are too long to trust that everything will be ok

Standardised conditions would be a great idea - with the ability to tailor the site/
Council level requirements as needed

#### Approval, implementation and operation

Participants noted that the approval and delivery stages had very few challenges as key barriers were likely to have been addressed during scoping. Participants highlighted challenges related to the ongoing operation and maintenance of EVCI once delivered, particularly in regional areas.

#### **Operation**

- Joint procurement (where one CPO delivers EVCI regionally across multiple LGAs) was discussed as a potential approach, however issues relating to strategic procurement amongst different LGAs, demand for specific sites within the region, electricity distribution variances were identified as potential challenges
- Whilst some Councils prefer to retain full responsibility for managing EVCI, the preferred option from Council is to take a 'hands-off' approach (leasing a parking space to CPOs and limiting their involvement). This approach is undertaken to reduce risk, and maintain distance from operational responsibilities
- Many Councils highlighted negative experiences with taking on EVCI as Council assets, and as a result do not want the burden of maintaining operational responsibility, preferring to shift these responsibilities to the CPO
- 24/7 maintenance from CPO's was identified as an important element, with Councils noting that relying on CPOs to respond to issues with EVCI was favourable

#### **Maintenance**

- EVCI maintenance and delivery can be more difficult in regional areas, which generally have less access to accredited technicians, causing Council to have to leverage less experienced local contractors, or incur additional costs to bring technicians from metropolitan areas to ensue that their EVCI is operational.
- Some Councils have a couple of different CPO providers, and having to go to each of the manufactures for different maintenance requirements and updates can be quite challenging and cause an increase in the administrative and resource burden on Council
- In the CPO-led delivery model, maintenance considerations should be addressed up front in the agreement. CPOs should provide a maintenance schedule that they will have to meet
- Enforcement of these considerations within the lease agreement does not always occur/is not always possible

#### Quotes

In our experience, the delivery phase is by far the easiest phase to do. Once you have that approval and shovel in the ground, its is very simple infrastructure to put in, with almost no problems in delivery. All the issues have come in the planning, design and approvals phases

We wont be managing any charging infrastructure, essentially the agreement from our point of view is the leasing of a car space, and that is it

It's hard to get the resources in regional areas, all the manufacturers are based in [high density cities], and sending contractors up can cost quite a bit in fees to get them to attend a site





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