



City of
KINGSTON

Electric Vehicle (EV) Charging Policy and Placement Plan

**Consultation
Summary Report**

June 2024

Over February and March 2024, we asked our community to help ensure Kingston City Council's Draft Electric Vehicle (EV) Policy meets the needs of the community and electric vehicle charging stations are placed in appropriate locations.

Community consultation summary:

- The principles and intent of the policy is supported by the community
- The policy principles are sound
- Some locations are much more popular than others
- More education on various aspects of EV adoption, including costs, vehicle types, battery management, installation processes, suppliers offering solar and battery solutions would be beneficial
- Further requirements for EV charging in new developments should be added
- Transparency concerning cost distribution and advantages must be provided
- Public EV charging will source from 100% renewable energy.

Industry Insights Co-Design workshop summary:

- Council's approach is seen as "best practice, top 2-3% of Councils" – Charge Point Operator
- Placement in high-activity and amenity areas is crucial
- United Energy capacity assessments and grid connection approvals is essential
- Important to match the right type of charger to the specific use case
- Insights into lease and licence agreements
- Integrated Solar, Battery, and EV Charging represents an opportunity.

EV policy and Placement Plan changes

As a result of community consultation, the EV policy and include the following changes:

1. Choosing the right charger in the right location will require an appropriate mix of fast DC charger in activity centres and slower AC chargers in Council buildings, at reserves, or in on-street locations.
2. Council will consider inviting several Charge Point Operators (CPO) to install equipment to:
 - a. Allow specialised installers exercise expertise
 - b. Reduce dependency on a single supplier given the technological and business risk
3. If a CPO includes advertising in the their product offering, it must be in accordance with Council's "Commercial Use of Council Land Policy."
4. Council will explore integrated solar and/or battery and EV charging potential benefits.

A snapshot of the methodology

Community consultation was promoted widely via a variety of channels to build awareness of the draft EV Policy and Placement Plan and multiple opportunities were provided for the community to give feedback.

Platform	Details
Social media	<ul style="list-style-type: none">• March consultation carousel: 3,138• Corporate page reach: 1,558• Story series reach: 218• Business page reach: 77
eNews	<ul style="list-style-type: none">• Kingston eNews• Kingston Business eNews• Your Kingston Your Say eNews• Our Place eNews• Pinboard Kingston staff news
Signage	<ul style="list-style-type: none">• 12 x digital screens, displayed in Council buildings, Hubs and Libraries• 12 Signs at EV charging stations across Kingston for one month with links to the survey
Advertising	<ul style="list-style-type: none">• Chelsea Mentone Mordialloc News
Pop-up	<ul style="list-style-type: none">• 4 x pop-up information sessions
Workshops	<ul style="list-style-type: none">• Industry Insights Co-Design Workshop: 31 attendees• Representative Community Panel: 23 attendees• Kingston library EV information session: 33 attendees

Platform	Details
Stakeholder engagement (Internal)	<ul style="list-style-type: none"> • Environmental Planning • Traffic and Transport • Strategic and Statutory Planning • Property Services • Procurement and Contracts • Local Laws • Parking Services and Compliance • Fleet and Sustainability • Waste Management and City Works • Aquatic Centres (New and Waves) • Roads and Drainage • Open Space • Comms and Engagement • Project Management Office • Urban Design and Place • Engineering Design • Kingston Business • Organisational Equity and Inclusion • Regular Quarterly Project Working Group (with representatives from teams above) • Climate Change and Ecological Emergency Response Group (CEERP)
Stakeholder engagement (External)	<ul style="list-style-type: none"> • Electric Vehicle Council • United Energy (Distribution Network Service Provider, DNSP) • Yarra Energy Foundation (co-location benefits with Community Batteries) • Local community groups (Transition Kingston) • Environment and Open Spaces Advisory Committee • Access and Equity Advisory Committee • Charge Point Operators including but not limited to: Evie Networks, Tesla, Charge Post, Jolt, Beyond EV

Engagement summary

How People Participated



Online engagement

3,138 March consultation carousel

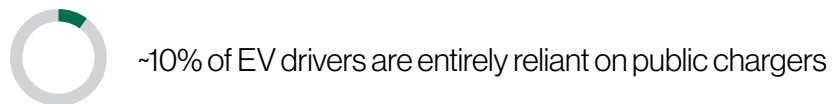
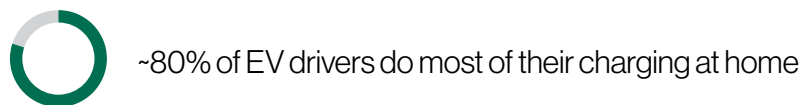
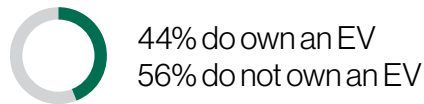
1,558 Corporate page reach

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Demographics

46–55 years Median age



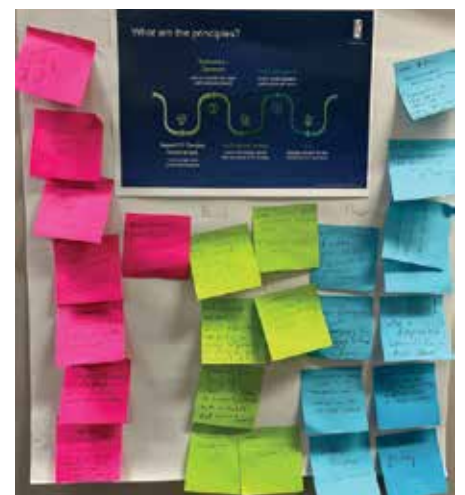
Face to face engagement

102

Data points on locations submitted through workshops via feedback at pop-up information sessions and workshops

93

Comments on post it notes through workshops.





What we heard

Positive Community Response to the draft Electric Vehicle Policy

Community feedback on the draft Electric Vehicle Policy and Placement Plan was predominantly positive, with residents expressing appreciation of the guiding principles shaping the draft EV policy. The opportunity to advocate for increased sustainable transport options was also taken up by the community.

When asked to review the draft EV policy and the key principles, more than 7 out of 10 residents agree with Council taking a role to support the delivery of a network of public EV charging stations and approximately 6 in 10 support the role of Council as a 'facilitator' of private market delivery. The overall response underlined a supportive stance towards the policy's key principles.

Broad support for policy principles

Policy Principle	Agree
Supports the delivery of a network of public EV charging stations to encourage a consumer transition away from internal combustion engine vehicles	72%
Requires charging infrastructure to be well-planned, designed, maintained, and accessible as detailed in Council's Design and Installation Guidelines	65%
Recognises that while EVs are an important way to enable a sustainable transport future, other initiatives such as promoting walking, cycling, and public transport play a critical role	59%
Envisions Council's role as a facilitator of the private market to enable equitable, appropriate, and ample EV charging infrastructure	57%
Fosters a competitive multi-operator environment which provides consumers with choice	56%
Aims to balance any commercial benefit from EV charging alongside community benefits	52%
Considers relevant industry best practices, standards, regulations, research, and trends in EV market adoption	51%
Encourages opportunities for the scope of EV infrastructure installations to align with the objectives of Council strategies and plans	46%

Fantastic to see Council working on this. We purchased an EV in May 2023. While we charge at home from rooftop solar it is helpful to have fast charging options in our community. Thank you.


An EV is not suitable for the majority of people, so let the market decide what should be done.

Great to have the principles driving the EV policy!

Community Concerns in User Experience and Ample Charging Infrastructure

Despite the overall positivity, specific areas of concern were highlighted by the community, particularly regarding availability of charging, reliability, and user experience. In the community workshop, issues such as data privacy and ensuring seamless payment processes were highlighted as critical elements for enhancing user satisfaction. Moreover, the necessity for reliable and safe on-street charging infrastructure raised considerations around safety measures for cables and trip hazards, maintenance, visual clutter, equity for individuals without off-street parking options, and mitigating parking reductions for non-EV users, all reflecting the community's focus on usability and accessibility.

Challenges owning or charging an electric vehicle in Kingston	Total
There are not enough public EV chargers across the city	25
EV chargers often occupied when I need to use them	20
EV chargers not reliably working	16
Finding an affordable energy retailer for charging my EV	4
I do not have off-street parking such as a garage and convenient EV charging at home	4



New developments should include a higher percentage of new buildings (regardless of type of infrastructure) to include EV charge stations.

The future is EV and the Council MUST increase charging station installation standard rates to meet demand and sustainability expectations of future generations and EV purchase rates.

Townhouses are the most common form of residential development (alongside apartments) but are not mentioned in section 5.7. Developers of townhouses should be required to install one EV charging port per four households.

My apartment building is only 18 months old – but as far as we can see, there were no planning requirements to install any charging station which is such a lost opportunity to help facilitate the EV transition. It also now makes it more difficult for us to choose an EV (over a hybrid) as next car because of the carpark.

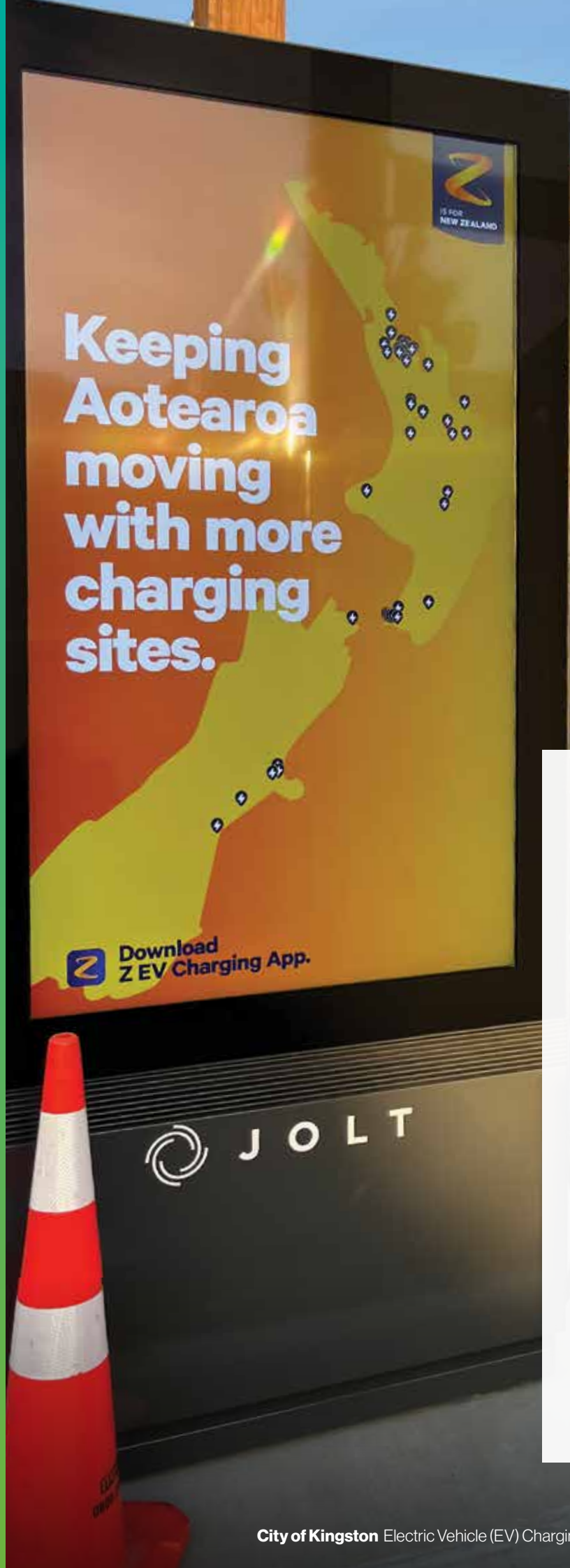
So am very keen to see Kingston will support the rollout of community charging stations.

On-street Chargers

The community is supportive of the need to ensure equitable charging for residents without off-street parking, which as future development continues to densify may include renters and apartment dwellers. They also expressed numerous concerns regarding on-street kerbside or pole-mounted chargers. Key issues include worries about visual aesthetic implications, potential clutter, and congestion in the public realm. Safety is also a significant concern, encompassing worries about cables and trip hazards, as well as the risk of flooding. Vandalism and maintenance of the chargers are also significant worries. Residents are calling for a clear process to address objections raised by the community. Moreover, there is a need to strike a balance between competing uses, especially regarding future bicycle paths. Concerns have also been raised about the potential 'loss' of parking spaces for non-EV users.

I think that council has a role in ensuring public charging is offered and the cost of charging is kept low especially in lower socio-economic areas, so those communities are not forced to only charge at home due to cost. I would also love staff pool cars to be electric at all sites and offer charging from their homebase e.g. Meals on wheels, home library delivery, local laws etc.





Advertising and Digital Displays

Community feedback also touched on concerns related to advertising strategies and calls for transparency in charging initiatives. Discussions surrounding advertising and digital displays called attention to aesthetic considerations, environmental impacts, and guidelines for appropriate content, advocating for a balance between commercialisation and public space preservation. Additionally, the community emphasised the importance of clarity about ownership, maintenance responsibilities, and benefits associated with public chargers, with a strong interest in understanding the distribution of costs and advantages among stakeholders and users.



Prioritising EV Education and Sustainability

A crucial component of community feedback centred around the need for enhanced EV education and sustainable charging practices. Discussions highlighted the importance of educating residents on various aspects of EV adoption, including costs, vehicle types, battery management, installation processes, suppliers offering solar and battery solutions, storage, disposal practices related to old batteries and EVs, safety considerations, and compliance with national construction codes. Furthermore, considerations for locating charging stations, implementing parking restrictions for non-EV users, and exploring opportunities for car sharing and collaborative charge sharing initiatives were key priorities for the community, expressing a collective interest in promoting sustainable and accessible EV infrastructure.

Interested in attending information session on the following topics	Total
Residential battery storage systems	27
Purchasing an electric vehicle	13
How to install solar in your home to charge an electric vehicle	12
E-bikes and E-scooters	11

We also heard

A small number of residents also advocated for various viewpoints including that space or property for EV charging should be private or funded by the EV user themselves. Questions were also raised about the destination of profits generated from EV charging infrastructure, highlighting concerns about financial allocation. Privacy issues were also mentioned, with residents questioning the potential presence of cameras in EV charging stations. Additionally, some residents advocated for free EV charging, reflecting a desire for accessible and cost-effective charging solutions in the community.



Council's Industry Insights Co-Design Workshop

In March 2024, an Industry Insights Co-Design workshop with industry stakeholders was also held aimed at ensuring the numerous and rapidly evolving technological, investment, and regulatory challenges were examined.

Industry peak body, the EV Council, EV manufacturers such as Tesla, Charge Point Operators (CPOs) including Evie Networks, Charge Post, BP Pulse, and Jolt, energy retailers such as Energy Australia offered valuable insights into technical requirements and regulatory barriers, while representatives from solar power and energy storage companies contributed expertise related to renewable energy integration and grid management. United Energy provided input on grid connection processes and Council leveraged this opportunity to:

1. Gain insights into the viability of Council's shortlist of selected sites and whether Council may need to make a financial contribution to ensure equitable coverage across the municipality.
2. Better understand the constraints of commercial CPOs and their ability to engage with United Energy to assess power capacity at sites.
3. Understand the market's potential to deliver integrated EV charging solutions that may include Solar, battery, and EV charging.

Industry Insights

Optimal EV Charging Locations and Industry Site Selection Criteria

CPOs emphasised that to successfully attract more people and ensure efficient utilisation of EV chargers, placement in high-traffic areas is crucial. Data illustrates that these chargers can draw newcomers to a community, boosting foot traffic for businesses like retail stores and cafes. Identifying locations with spare transformer capacity, such as those found in places like the DFO, facilitates faster approval processes for instalments.

Housing and demographics play a key role in determining the need for AC/DC charging stations, considering factors like residents' preferences for shopping destinations. Assessing existing competition is vital, especially with the high capital costs associated with DC chargers, as entering an area already serviced by competitors could slow down the payback period. Moreover, availability of energy load capacity influences decision-making, with locations lacking suitable capacity potentially facing extended lead times of up to 12-18 months. To address concerns about community loss of parking, CPOs such as Jolt reframe concerns about 'losing a car space' as 'relocating' or 'reallocating' a car space.



Pros and Cons of Public and Private Land for Charging Stations

When considering installing charging stations, the choice between public and private land comes with distinct advantages and drawbacks. Private land offers a quicker process compared to public land due to the bureaucratic procedures and consultation requirements that councils typically must adhere to. However, renting land from private landlords can pose challenges, particularly in negotiating rental costs, which may not be a concern when using council-owned land that is often provided at low or no cost. Tesla's preference for sites with private landlords reflects this preference for efficiency, albeit with potential financial implications.

Industrial Sites and EV Charging Opportunities

Repurposing old industrial sites for EV charging stations presents unique advantages. These sites often have underutilised, larger energy load capacity connections, making the installation process easier and potentially more cost-effective. However, the absence of other amenities at industrial sites necessitates quick charging options and raises safety concerns due to limited activities available for people waiting.

Ensuring a balance of amenities, safety standards, and convenience is crucial when establishing charging stations in industrial areas. Despite the lack of existing amenities, success stories like the Tesla supercharger in Brighton demonstrate that targeted demographics can attract users solely for charging purposes. Furthermore, industrial areas present opportunities for food van pop-ups, like in Coburg, catering to people waiting for their vehicles to charge, enhancing the overall charging experience.

Matching Chargers to User Needs

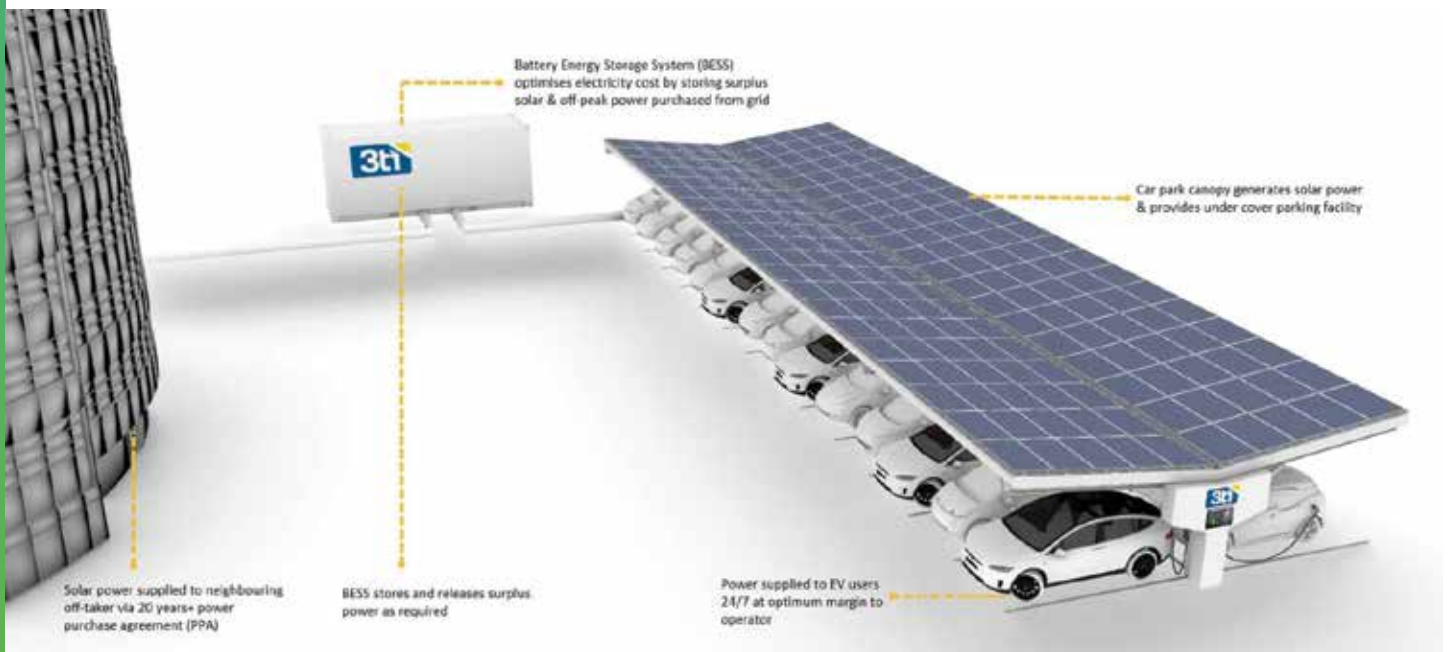
To ensure optimal functionality, it is crucial to match the right type of charger to the specific use case. Different users, such as leisure customers, apartment dwellers, business users, taxi operators, last-mile delivery services, and convenience drivers, have varying charging needs based on their charging duration at a site. For instance, high-power chargers would be suitable for those with shorter visit times, such as convenience drivers, while fast chargers may not be necessary for individuals spending several hours at a location like a football game. Incorporating a mix of AC and DC chargers at charging stations not only caters to different charging speeds but also contributes to democratising the EV charging landscape, with AC kerbside chargers proving valuable for renters, apartment residents, and station carparks.

Navigating Lease / Licence Agreements and Connection Standards

Workshop participants noted that lease and license terms play a crucial role in the efficient operation of charging stations. CPOs will aim to negotiate favourable terms, such as 10-15 year leases or 9+5 year agreements with local councils, to ensure they have a viable payback period. Tesla's emphasis on user experience is evident in their minimum requirement of three charging posts with at least six leads for superchargers. Standardising connection plugs to CCS2, adopted by most modern vehicles, and integrating with protocols like OCPP for third-party applications streamlines the charging process. Moreover, considerations around approval timelines, such as an expected 6-12 month timeframe with United Energy, and site-specific regulations, such as export restrictions for quicker connection approval, all contribute to the efficient establishment and operation of EV charging infrastructure. In summary, 10-year licence agreements are preferred and open protocols are important.

Exploring Integrated Solar, Battery, and EV Charging Opportunities

Integrating electric vehicle charging with solar and battery technologies are increasingly becoming viable options in the market, with solar car parks particularly cost-effective when integrated into existing car shelter structures, offering a seamless upgrade path. Various use cases, such as hotels, wineries, council offices, train stations with extended daytime dwell times, and entertainment venues like basketball stadiums with sporadic nighttime usage, are ideal environments for incorporating solar and battery solutions. Leveraging solar and battery energy for services like Frequency Control Ancillary Services (FCAS) may even present additional potential revenue opportunities for organisations implementing these technologies. In summary, there is an opportunity for Council to facilitate innovative funding models to enable high capital expenditure to be delivered.



Source: 3ti (2023)

Locations the Community would like EV Charging

The following suburb locations received the most votes from the community survey. This has informed site prioritisation of 12 locations are part of our Expression of Interest.

Location	Votes
Southland	42
Cheltenham	37
Mordialloc	27
Mentone	25
Highett	24
Moorabbin	23
Mentone	22
Parkdale	22
Chelsea	14
Dingley Village	14
Patterson Lakes	13
Aspendale	13
Carrum	10
Edithvale	9
Clarinda	6
Aspendale Gardens	5

A close-up photograph of an electric vehicle (EV) charging port. The port is a circular opening with a silver-colored metal ring. A black charging cable with a gold-colored connector is plugged into the port. The background is a blurred green, suggesting an outdoor setting with foliage.

Conclusion

In conclusion, the community expressed overall support for the policy's principles and found them to be robust.

Certain locations were identified as more desirable for charging stations than others, highlighting the need for strategic placement. Community feedback emphasised the necessity for increased education on various aspects of EV adoption, additional EV charging requirements in new developments, and transparent information on cost distribution and benefits.

The Industry Insights Co-Design workshop affirmed Council's approach as best practice and stressed the importance of a mix of fast and slower chargers in placed in the right areas. Key insights included the need for proper capacity assessments and grid connections, matching charger types to specific needs, understanding lease agreements, and exploring integrated solar, battery, and EV charging solutions. As a result of the consultation, the EV charging policy and placement plan will incorporate changes such as diversifying charger types based on location needs, inviting multiple Charge Point Operators for installation, outlining guidelines for advertising, and exploring the advantages of integrated solar, battery, and EV charging setups.