**ITEM 6 – WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS (C13-105, G4-1-84)**

**RECOMMENDATION**

That Council:

1. Pursuant to Clause 178(3)(e) of the Local Government (General) Regulation 2021, not to accept any quotations received for Contract No. C13-105 for the 60kW charger at VIC, and instead authorise the General Manager to enter into and finalise negotiations with Streamline Engineering Group Pty Ltd to install one 22kW charger at each of the following locations:
   a) Windows on the Wetlands Centre (VIC)
   b) Dubbo Street (Council Administration Centre)
   c) Carter Oval Sporting Precinct Car Park;
2. Confirms that LRCI Phase 4 funding be applied to this revised project scope and authorises the General Manager to finalise contracts with Streamline Engineering Group Pty Ltd;
3. Refers the Dubbo Street site to the Warren Traffic Committee for review of on-street parking arrangements; and
4. Authorises affixing the Council Seal to Contract No. C13-105 to Undertake the Design, Supply & Installation of EV Charger at Visitor Information Centre, Warren NSW.

## Background

Warren Shire Council was advised in July 2023 of its successful allocation under Phase 4 of the Australian Government's Local Roads and Community Infrastructure (LRCI) Program. Administered by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts, the LRCI Program aims to support local Councils to stimulate local economies and deliver long-term community benefits.

The Phase 4 Grant Agreement was executed on 3 July 2023, with the approved Works Schedule confirmed on 3 August 2023. The eligible construction timeframe is from 1 July 2023 to 30 June 2025.

### Funding Allocation & project scope

Warren Shire Council received a total allocation of $1,033,225 under the LRCI Phase 4 program, comprising:

- Part A – $655,258 for use on local roads and community infrastructure projects; and
- Part B – $377,967 for use exclusively on roads projects in rural, regional or outer-urban areas.

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

One of the key Part A projects identified was titled:
"Windows on the Wetlands Centre Precinct – Net Zero", aimed at installing electric vehicle (EV) charging infrastructure to support net zero emissions.

The estimated project cost of $75,000 is to be funded through:

- $37,996 from LRCI Phase 4 – Part A, and
- $37,004 from Council internal reserves.

The installation is proposed at the Windows on the Wetlands Centre Precinct, where a disused 3-phase power supply from a redundant sewage pumping station provides a cost-effective energy source.

## Feasibility Assessment

In April 2023, ChargeWorks Pty Ltd was engaged under the NSW Sustainable Councils Program to assess the viability of EV charging infrastructure across Warren. The November 2023 Report (Refer **Appendix E)** highlighted a critical gap in regional EV infrastructure, referencing the NSW Government's Electric Vehicle Strategy forecasting that over 50% of new vehicle sales will be electric by 2031.

ChargeWorks recommended the installation of Level 2 (7kW to 22kW) chargers across three (3) priority sites (see Table 1), based on:

- Existing power infrastructure
- Proximity to local businesses and tourist attractions
- Council land ownership
- Grant eligibility

*Table 1-Proposed sites with priority*

| Site Description | Site Type | Priority |
|---|---|---|
| Windows on the Wetlands | Destination | High |
| Carter Oval | Destination | Medium |
| Dubbo St - Warren Shire Council | Destination | Medium |
| Victoria Park | Destination | Low |
| Warren Racecourse | Destination | Low |
| Oxley Park | Destination | Low |

The report also encouraged private sector partnerships and openness to hosting higher-capacity chargers in future (e.g. 50kW+), subject to power supply upgrades.

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

## Procurement and Quotation Process

In January 2025, Council has sought indicative budget pricing from EV charger providers to supply and install a fast-charging station (60kW -240kW) at the Windows on the Wetlands Centre Precinct, leveraging the site's existing 3-phase power supply. This aligns with both the LRCI Phase 4 – Part A funding allocation and the recommendations outlined in the ChargeWorks feasibility report.

One EV Charger provider submitted a proposal indicating that 60kW Charger option is suitable as the site has sufficient power capacity and the scope includes the design, supply and installation of the charger and ASP Level 2 work only. Whereas a 240kW Charger option requires a substation upgrade (from 200 kVA to 500 kVA) to meet the higher power demand.

Given the above feasibility assessment and budget information Council decided to call an open quotation for installation of a 60kW Charger at Windows on the Wetlands Centre Precinct with suitable alternative quotes for consideration.

**REPORT**

In accordance with Section 55 of the *NSW Local Government Act 1993*, Part 7 of the *NSW Local Government (General) Regulation 2021*, the *Tendering Guidelines for NSW Local Government*, and Warren Shire Council's *Procurement and Disposal Policy*, a Request for Quotation (RFQ) was issued to undertake the design, supply and installation the for installation EV Charger works at Windows on the Wetlands Centre Precinct (Visitor Information Centre, Warren NSW 2824). The quotation process was initiated by the Infrastructure Projects Manager.

Prior to the release of the RFQ, a Quotation Evaluation Committee (QEC) comprised the General Manager, Divisional Manager Engineering Services and Infrastructure Projects Manager was constituted to ensure a clear and transparent evaluation methodology consistent with Council Policy and procurement best practice.

At the close of RFQ on 27 March 2025, a total of seven (7) conforming quotations were received. This includes a late Quotation received from Streamline Energy Group. Prior to the opening of quotations received, Streamline Energy Group contacted Council advising that they have been "having intermittent issues with our internet recently and I wasn't able to connect to Vendor Panel to upload our quotation this afternoon as confirmed in writing and submitted a quotation via email."
The justification provided confirms that the integrity of the quotation and its evaluation process would not be compromised if the RFQ submitted by Streamline Energy Group is considered.

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

The quotation opening was conducted in accordance with Council procedures, and the submissions were formally recorded and signed off in the Schedule of Quotations by the Quotation Opening Committee (refer to **Appendix A**).

The details of the quotations received are outlined below:

| No | Name of Quoter | ABN | Adjusted Amount Excl GST | Score of Quoter | Recommended Quotation Amount Excl GST |
|---|---|---|---|---|---|
| 1 | Power Press Group - The Trustee for the Press Family Trust | 70 828 361 457 | $69,660.33 | 89.49 | |
| 2 | iEngineering Australia Pty Ltd | 90 165 50 276 | $53,964.00 | 87.50 | |
| 3 | Streamline Engineering Group Pty Ltd | 80 651 383 943 | $57,335.00 | 93.24 | Refer to Recommendation |
| 4 | Zappee Fast Charging – The Trustee for the Ayvazian Trust | 89 033 898 238 | $64,420.00 | 66.88 | |
| 5 | go EV - ZIP EV Pty Ltd | 68 653 468 467 | $91,920.00 | 67.86 | |
| 6 | Jet Charge Pty Ltd | 35 600 116 756 | $108,504.23 | 80.17 | |
| 7 | EVSE Australia - EVE Australia Pty Ltd | 95 614 095 644 | $138,586.40 | 78.43 | |

## Quotation Evaluation:

Quotations were evaluated in accordance with the criteria and weightings outlined in the Request for Quotation (RFQ), as follows:

| Evaluation Criteria: | **Weighting** |
|---|---|
| Quoted Price | 30% |
| Expertise and Previous Record | 40% |
| Compliance to the Conditions of Quoted | 15% |
| Availability to Deliver the Contract | 10% |
| Ability to Satisfy all required Work, Health and Safety Requirements | 5% |

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

All members of the QEC panel signed the declaration of understanding and agreement to *Conflict of Interest & Deed of Confidentiality Declaration* form as part of the Tender Evaluation**.**

A detailed cost comparison of quotations including comparison with Pre-Quotation Estimate (PQE) was undertaken and is documented in **Appendix B**. The analysis confirmed that the lump sum prices submitted by four (4) quoters fell within the available project budget for the 60kW Charger, with likely no funding shortfall identified to complete the scope of works as specified.

Following the initial compliance checks, all conforming quotations proceeded to full evaluation. Each submission was assessed against the non-price criteria, with scores allocated according to the agreed weightings.

The Quotation submitted by Streamline Engineering Group Pty Ltd achieved the highest total combined score of 93.24 out of 100, reflecting a strong performance across both price and non-price criteria. The Quotation submitted by Power Press Group achieved a total score of 89.49, ranking second in the evaluation followed by iEngineering Australia Pty Ltd with a total score of 87.50 ranking third in the evaluation. Refer **Appendix C, D & D1.**

| No | Name of Quoter | Score of Quoter | | | Ranking |
|---|---|---|---|---|---|
| | | Weighted Price score | Weighted Non-Price Score | Weighted Total Score | |
| 1 | Power Press Group | 23.24 | 66.25 | 89.49 | 2 |
| 2 | iEngineering Australia Pty Ltd | 30.00 | 57.50 | 87.50 | 3 |
| 3 | Streamline Engineering Group Pty Ltd | 28.24 | 65.00 | 93.24 | 1 |
| 4 | Zappee Fast Charging | 25.13 | 41.75 | 66.88 | 4 |

Given the site priorities presented in the feasibility assessment and known to the quoters and the option for submitting alternative quotations is called for in the RFQ, the following quoters submitted alternative quotations.

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

| | | Level 3 – DC Fast Charging | | Level 2 AC Fast Charging | | |
|---|---|---|---|---|---|---|
| **No** | **Name of Quoter** | **60kW @ VIC** | **60kW @ Carter Oval** | **22kW @ VIC** | **22kW @ VIC with Load Mngt** | **7kW @ VIC** |
| 1 | Power Press Group | $69,660.33 | $70,940.30 | $35,350.49 | | |
| 2 | iEngineering Australia Pty Ltd | $53,964.00 | | | | |
| 3 | Streamline Engineering Group Pty Ltd | $57,335.00 | | $18,006.77 | $27,485.81 | |
| 4 | Zappee Fast Charging | $64,420.00 | | $29,955.00 | | |
| 5 | go EV | $91,920.00 | | | | |
| 6 | Jet Charge Pty Ltd | $108,504.23 | | | | |
| 7 | EVSE Australia | $138,586.40 | | | | $26,279.67 |

Note that two (2) out of four (4) top raking quoters expressed concern (qualification) in their submission with the power availability (3 -Phase -80A each) at the Visitor Information Centre for making maximum effective use 60kW Charger to it full capacity which requires 100-110A on each phase.

Streamline Engineering Group Pty Ltd – proposed to install load control equipment with hard limit set to draw maximum 80 A available at the site. Streamline also provided costing for 22 kW Charger at VIC.

Press Power Group stated that it has become clear that significant upgrades to the stress infrastructure would be required to support 60kW Charger at VIC and indicated that a L3 ASP and system upgrade for Council would be in the order of $200K. Upon clarification, Press Power group provided a costing with load limit equipment included for consideration.

iEngineering & Zappee Fast Charging did not raise concern. However, on clarification iEngineering confirmed that Load management equipment is not required for their solution to operate a 60kW Charger.

Zappee Fast Charging provided an alternative quotation for a 22kW Charger at VIC with their conforming quotation.

Streamline Engineering Group offered **the most advantageous** submission in terms of price, methodology and responsiveness to site constraints including a proposal to limit load draw to 80A via control equipment. Their alternate quote for a 22kW dual-port charger was $18,006.77 — lower than ChargeWorks' estimate of $18,815.

## Other considerations:

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

Following the quotation evaluation and site feasibility constraints, Council reassessed the viability of a 60kW charger given power limitations and the significant upgrade costs. A revised implementation plan proposes the installation of three (3) 22kW chargers instead:

The following matters were further considered in detail:

- 60kW Charger to perform 100% capacity, major networks upgrade will be required. Additional capital investment in the order of $150K-$200K is required;
- Availability and capacity search of EV Charges within the vicinity of Warren Town Centre shows that majority of EV Charges are of 22kW-50kW Chargers. Nyngan (50kW), Gilgandra (50kW) Trangie (22kW), Narromine (22kW), & Dubbo (22kWs & 50kW);
- Though traffic route via Warren is a state highway, density of tourism traffic is considered moderate. Implementation of EV Chargers will have added advantage to potential travellers with EV Vehicle;
- Given the cost for 22kW EV Charger at VIC is $18,006.77 (Streamline's Quote), and the estimated costs of EV Chargers for Carter Oval Youth Sports Precinct Car Park and Dubbo St- Council Administration Building by ChargeWorks, total cost of investment for three (3) 22kW Charges will be within the budget funding of $75,000.00; Refer Table below.

| | **Location** | **Estimated/Quoted Cost (ex GST)** | |
|---|---|---|---|
| 1 | Visitor Information Centre | $18,006.77 | Quote Price |
| 2 | Dubbo St- Council Administration Building | $33,073.00 | Estimate |
| 3 | Carter Oval Youth Sports Precinct Car Park | $14,961.00 | Estimate |
| | **Subtotal** | **$66,040.77** | |
| 4 | Project Management & Supervision ~3.5% | $2,359.23 | |
| 5 | Contingency ~10% | $6,600.00 | |
| | **TOTAL** | **$75,000.00** | |

- Scope change: Considering the above circumstances, it would be more prudent to install 22kW EV Charger at VIC instead of 60kW EV Charger along with a 22kW EV Charger at Dubbo St in front of Council Administration Office and another one at the Carter Oval Youth Sports Precinct Car Park; and

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

- EV Charging should be offered for free at these locations to encourage visitation and tourism. As EV Charger adoption and use increases implement a fee for service.

**Proposed Site 1: Windows on the Wetlands Centre (VIC)**
This is considered a high priority site in the feasibility assessment. The Visitor Information Centre (VIC) also known as Windows on the Wetlands Centre is a prominent tourist destination within Warren, offering attractions such as birdwatching, walking trails, an art gallery, and café. It is located on the main approach road into Warren (Coonamble Rd) and is frequently visited by travellers for tourism information, travel break etc. Staff at the VIC will have an opportunity to interact with the EV users in turn promoting wider tourism opportunities that Warren LGA offers.
Site is located ~ 880m from the town centre, a 10-minute walking distance.

Despite its popularity, it currently lacks EV infrastructure. The site's high visibility and proximity to key attractions make it ideal for promoting EV tourism in Warren.

The site has redundant power from the nearby sewage pump MSB, which offers 80A 3-phase capacity. ChargeWorks recommends this site as ideal for grant-funded infrastructure with an estimated total cost of $18,815 (ex GST). The preferred quotation cost is $18,006.77.

A 22kW dual-port charger would allow two (2) EVs to charge simultaneously, with usage monitored and billed through a software platform. Typically, 40km to 100km of range per hour is added, dependent on each individual car configuration and charging port usage. Initial charging could be offered free to encourage usage, transitioning to pay-per-use as demand increases.

**Proposed Site 2: Dubbo Street (Council Administration Centre)**
This is considered a medium priority site in the feasibility assessment.
The Dubbo Street location is equally ideal for servicing both local residents and visitors. It is adjacent to multiple shops, cafes, services, and Council's Administration Building. This high-traffic location ensures consistent visibility and usage.

Power supply to Council's Administrative Building is a 200A feed. This has been verified by Essential Energy staff in Warren. Initial assessment indicates that this would be sufficient to run a 22kW Charger installed on the street. However, this site will require more intrusive civil works including trenching beneath footpath pavers. Despite this, it remains technically viable and strategically important.

ChargeWorks projected estimated total project cost is $33,073 (ex GST). Although this could be the costlier of the other two options, the centrality and visibility of this location make it a

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

worthwhile investment in community infrastructure.

Like the VIC, the charger will serve two (2) EVs simultaneously, use a software-based billing platform.

**Proposed Site 3: Carter Oval Sports Precinct Car Park**
This is considered a medium priority site in the feasibility assessment.
Council has made electrical provisions for the EV Charging in the Carpark already by installing conduits underground. Power supply to main switchboard at Carter Oval has 200A feed for flood lighting, amenities and sewage pumping station etc. As the power on this site is predominantly drawn for oval flood lighting, a load limit switch combination and a 22kW Charger would best suit this site.

ChargeWorks recommends this site as ideal for grant-funded infrastructure with an estimated total cost of $14,961.00 (ex GST).

This location proposed is in the dedicated parking space of Carter Oval Youth Sports Precinct and close to swimming pool and other sporting and recreational facilities. This is a high-traffic location during the sporting season which ensures consistent visibility and usage. Site is located ~ 720 m from the town centre, an 8-minute walking distance.

## RECOMMENDATION:

It is recommended that Council:

1. *Pursuant to Clause 178(3)(e) of the Local Government (General) Regulation 2021, not to accept any quotations received for Contract No. C13-105 for the 60kW charger at VIC, and instead authorise the General Manager to enter into and finalise negotiations with Streamline Engineering Group Pty Ltd to install one 22kW charger at each of the following locations:*
    a) *Windows on the Wetlands Centre (VIC)*
    b) *Dubbo Street (Council Administration Centre)*
    c) *Carter Oval Sporting Precinct Car Park*
2. *Confirms that LRCI Phase 4 funding be applied to this revised project scope and authorises the General Manager to finalise contracts with Streamline Engineering Group Pty Ltd.*
3. *Refers the Dubbo Street site to the Warren Traffic Committee for review of on-street parking arrangements.*

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

4. *Authorises affixing the Council Seal to Contract No. C13-105 to Undertake the Design, Supply & Installation of EV Charger at Visitor Information Centre, Warren NSW.*

**FINANCIAL AND RESOURCE IMPLICATIONS**

The project remains fully funded under LRCI Phase 4 and Council Reserves, with sufficient contingency (10%) for signage, bay painting, and software. Works must be completed by **30 June 2025**, with associated project costs finalised by **31 December 2025**, in line with LRCI conditions.

**LEGAL IMPLICATIONS**

No known legal risks. Minor risk of low utilisation in early phases, mitigated through free charging and strong site visibility. Infrastructure will include vandal-resistant fittings and protective bollards where required.

**RISK IMPLICATIONS**

Risks include low initial utilisation. The EV Charger in Dubbo St will be located on the pedestrian foot traffic area. Any collision risk is mitigated by installation of bollards. Cost risks from civil works have been estimated conservatively. Infrastructure will include socketed supply equipment to reduce vandalism and damage.

**STAKEHOLDER CONSULTATION**

ChargeWorks Pty Ltd provided feasibility advice. Council staff and community channels were engaged during the planning phase. Final recommendations will be reviewed by the Warren Traffic Committee before implementation.

**OPTIONS**

1. Proceed with installation of all three (3) 22kW EV chargers (recommended).
2. Proceed with two chargers and reassess the third.
3. Reallocate LRCI funding to an alternative infrastructure project (not recommended).

**CONCLUSION**

This project aligns with Council's sustainability, economic development and tourism strategies. Implementing three (3) 22kW EV chargers across key community sites provides high-impact, cost-effective infrastructure to prepare Warren for future transport demands.

**LINK TO POLICY AND / OR COMMUNITY STRATEGIC PLAN**

2035 Strategic Plan Objectives:

1.1.7 Improve transport services within the community;

3.1.3 Ensure that the Shire is well positioned to rapidly adopt new, modern energy technologies as they emerge;

**ITEM 6 - WINDOWS ON THE WETLANDS CENTRE PRECINCT – EV CHARGING STATIONS CONTINUED**

3.4.1 Continually upgrade streetscapes in Warren, Nevertire and Collie to create attractive places to live and to visit;

4.1.1 Promote the Shire as a great place to visit and stay;

4.1.2 Encourage the local community to embrace sustainable living and business practices;

5.2.1 Support environmentally responsible infrastructure.

**SUPPORTING INFORMATION /ATTACHMENTS**

Appendix A – Schedule of Tenders Received

Appendix B – Cost Estimates Summary

Appendix C– Tender Evaluation Score Sheet

Appendix D & D1– Tender Evaluation Sheets

Appendix E – ChargeWorks EV Feasibility Report

Appendix F- Other supporting considerations

Appendix A.

## Warren Shire Council

Record of Tender/Quotation for: **RFQ C13-105 60kW EV Charging Station Installation - Warren Visitor Information Centre**

The following is Schedule of persons or firms who have submitted quotations for the above tender.
This Schedule is in apparent order of price with the Lowest/Highest (purchasing or procurement) or Highest/Lowest (disposal) priced tendered being shown first.

Closed: 4:00 pm 27th March 2025
Date Opened: 4:30 pm 27th March 2025, updated 28/3/25 9.30 am

| Tenderer | | Total Amount (Ex GST) |
|---|---|---|
| Power Press Group. | by V.D | $35,350.49 |
| Engineering Australia | by V.D. | $53,220.00 |
| Streamline Energy Group | (Late by Email) 6.55pm 27.3.25 | $57,335.00 |
| The Trustee for the Ayvazian Trust | by V.P | $63,700.00 |
| 90 EV | by V.P | $91,920.00 |
| Jet Charge Pty Ltd | by V.P | $107,724.23 |
| EVSE Australia | by VD | $138,586.40. |

*As quotations have not been analysed in detail and may contain errors, the listing above cannot necessarily be relied upon as being absolutely accurate. We, the undersigned Council Officers, hereby certify that we undertook the opening of the above tender and the list conforms to the tenders received.*

*Person/s in attendance when opening tenders:*

| Name | Position | Signature |
|---|---|---|
| Stephen Glen by GSW | Acting General Manager | |
| Joe Joseph | Infrastructure Projects Manager | |
| Sylvester Otieno | Divisional Manager Engineering Services | |

| 60kW EV Charging Station Installation - Warren Visitor Information Centre | | | COST SUMMARY | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Schedule of Prices - Lump Sum Comparison** | | **WSC Pre-Quotation Estimate for 60kW Charger** | **iEngineering Australia** | **Press Power Group** | **Press Power Group VIC** | **Press Power Group VIC; With limit switch 38kW** | **Press Power Group CO** | **Streamline Energy Group** | **Streamline Energy Group** | **Streamline Energy Group** | **Zappee Fast Charging -The Trustee For The Ayvazian Trust** | **The Trustee For The Ayvazian Trust** | **go EV** | **go EV with optional extras** | **Jet Charge Pty. Ltd.** | **EVSE Australia CO** | **EVSE Australia VIC** |
| | | | 60 KW @ VIC | 22 KW @ VIC | 60 KW @ VIC | 60 KW @ VIC | 22 KW @ Carter Oval | 21 KW @ VIC | 22 KW @ VIC Incl Load Limit | 60 KW @ VIC | 22 KW @ VIC | 60 KW @ VIC | 60 KW @ VIC | 60 KW @ VIC | 60KW @ VIC | 7KW @ VIC | 60 KW @ VIC |
| Item No | Description | | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) | AMOUNT (ex GST) |
| 1 | 22/ 60KW EV CHARGING STATION | $ 22,000.00 | $ 19,958.00 | $ 19,705.40 | $ 54,015.24 | $ 62,322.71 | $ 55,295.21 | $ 18,006.77 | $ 18,006.77 | $ 57,335.00 | $ 29,350.00 | $ 63,700.00 | $ 34,272.00 | $ 45,878.00 | $ 105,050.00 | $ 7,482.21 | $ 41,279.33 |
| 2 | L2 Work - Installation & Commissioning | $ 30,000.00 | $ 28,112.00 | $ 15,645.09 | $ 15,645.09 | $ 15,645.09 | | | $ 9,479.04 | incl | incl | incl | $ 55,200.00 | $ 55,200.00 | | $ 17,507.46 | $ 95,817.07 |
| 3 | Miscellaneous (Carpark, Trasport, Project Management etc) | $ 15,000.00 | $ 5,150.00 | incl | incl | incl | incl | incl | incl | incl | incl | incl | $ 2,448.00 | $ 2,448.00 | $ 2,674.23 | | $ 81.00 |
| 4 | Others (Operation cost etc.) Operating Cost for 1 year based on estimated $3000 Charge | $ 1,200.00 | $ 744.00 | incl | Incl | Incl | Incl | incl | incl | incl | $ 605.00 | $ 720.00 | | | $ 780.00 | $ 1,290.00 | $ 1,409.00 |
| | **Total (Lump Sum tendered Excluding GST)** | **$68,200.00** | **$53,964.00** | **$35,350.49** | **$69,660.33** | **$77,967.80** | **$55,295.21** | **$18,006.77** | **$27,485.81** | **$57,335.00** | **$29,955.00** | **$64,420.00** | **$91,920.00** | **$103,526.00** | **$108,504.23** | **$26,279.67** | **$138,586.40** |
| | **Contingency ~10%** | **$6,800.00** | | | | | | | | | | | | | | | |
| | | **$75,000.00** | | | | | | | | | | | | | | | |
| | **Total (Lump Sum tendered including GST)** | **$ 82,500.00** | **$59,360.40** | **$38,885.54** | **$76,626.36** | **$85,764.58** | **$60,824.73** | **$19,807.45** | **$30,234.39** | **$63,068.50** | **$32,950.50** | **$70,862.00** | **$101,112.00** | **$113,878.60** | **$119,354.65** | **$28,907.64** | **$152,445.04** |
| | **% Above or below Estimate** | | -21% | | 2% | 14% | | | | -16% | | -6% | 35% | 52% | 59% | | 103% |

| | BUDGET | | Actual/ Forecast Commitment | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LRCI | $ 37,004.00 | | | | | | | | | | | | | | | |
| | Council Internal Reserve | $ 37,996.00 | $53,964.00 | $35,350.49 | $69,660.33 | $77,967.80 | $55,295.21 | | $27,485.81 | $57,335.00 | $29,955.00 | $64,420.00 | $91,920.00 | $103,526.00 | $108,504.23 | $26,279.67 | $138,586.40 |
| | Project Supervision - 3 % | Incl | $ 1,618.92 | $ 1,060.51 | $ 2,089.81 | $ 2,339.03 | $ 1,658.86 | | $ 824.57 | $ 1,720.05 | $ 898.65 | $ 1,932.60 | $ 2,757.60 | $ 3,105.78 | $ 3,255.13 | $ 788.39 | $ 4,157.59 |
| | Contingency - 7% | Incl | $ 3,777.48 | $ 2,474.53 | $ 4,876.22 | $ 5,457.75 | $ 3,870.66 | | $ 1,924.01 | $ 4,013.45 | $ 2,096.85 | $ 4,509.40 | $ 6,434.40 | $ 7,246.82 | $ 7,595.30 | $ 1,839.58 | $ 9,701.05 |
| | Total Project Cost | | $ 59,360.40 | $ 38,885.54 | $ 76,626.36 | $ 85,764.58 | $ 60,824.73 | | $ 30,234.39 | $ 63,068.50 | $ 32,950.50 | $ 70,862.00 | $ 101,112.00 | $ 113,878.60 | $ 119,354.65 | $ 28,907.64 | $ 152,445.04 |
| | TOTAL GRANT/ COUNCIL FUND ALLOCATION | $ 75,000.00 | | | | | | | | | | | | | | | |

# TENDER EVALUATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASSESSOR NAMES: | Gary Woodman | Sylvester Otieno | Joe Joseph | | | | |
| PROJECT NAME: | 60kW EV Charging Station Installation - Warren Visitor Information Centre | | | | | | |
| Quotation/Tender No.: | C13-105 | Closing Date: | Thursday, 27 March 2025 | MANEX Meeting Date | Tuesday, 15 April 2025 | Council Meeting Date | Thursday, 24 April 2025 |

| SCORE | |
|---|---|
| <50 | Fails to meet the minimum requirements. May pass over this ter |
| 50 | Meets the minimum number of requirements of an ideal tender |
| 60 | Meets a reasonable number of requirements of an ideal tender |
| 70 | Meets several requirements of an ideal tender |
| 80 | Meets all requirements of an ideal tender |
| 90 | Meets most requirements of an ideal tender |
| 100 | meets all requirements of ideal criteria |

Notes on how to use this form

Blue & Green cells are locked and can not be edited.

Enter details into grey cells

The cheapest assessed tender, after the Local Supplier Discount is applied, must me inserted into the first column as all other prices are assessed against it.

If the Local Supplier Discount calculation is greater than $15,000 the cell will turn Orange.

In the cell below, insert the amount of $15,000

## PRICE SCORE

| Names of Tenderers<br>Lowest Tender Price to Dearest | iEngineering Australia | Press Power Group | Streamline Energy Group | Zappee - The Trustee For The Ayvazian Trust | go EV - ZIP EV Pty Ltd | Jet Charge Pty. Ltd. | EVSE Australia | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PRICE. EXC. GST | $53,964.00 | $69,660.33 | $57,335.00 | $64,420.00 | $91,920.00 | $108,504.23 | $138,586.40 | | | | |
| PRICE. INC. GST | $59,360.40 | $76,626.36 | $63,068.50 | $70,862.00 | $101,112.00 | $119,354.65 | $152,445.04 | $0.00 | $0.00 | $0.00 | $0.00 |
| Local Supplier Discount Applied = Applied | 0% | 0% | 0% | 0% | 0% | 0% | 0% | | | | |
| Calculated LSD. If the cell changes colour, the amount is greater than $15,000 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 |
| Insert the LSD amount into this row. MAXIMUM Amount is **$15,000** in this row! | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | | | | |
| ASSESSED PRICE Exc. GST | $53,964.00 | $69,660.33 | $57,335.00 | $64,420.00 | $91,920.00 | $108,504.23 | $138,586.40 | $0.00 | $0.00 | $0.00 | $0.00 |
| RAW PRICE SCORE | 100.00 | 77.47 | 94.12 | 83.77 | 58.71 | 49.73 | 38.94 | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |

## NON-PRICE SCORE

| TENDERER | | | iEngineering Australia | Press Power Group | Streamline Energy Group | Zappee - The Trustee For The Ayvazian Trust | go EV - ZIP EV Pty Ltd | Jet Charge Pty. Ltd. | EVSE Australia | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NON-PRICE EVALUATION CRITERIA | | WEIGHTING | | | | | | | | | | | |
| W2 | Compliance to the Conditions of Quoted | 15% | 90 | 95 | 90 | 95 | 95 | 95 | 80 | | | | |
| W3 | Expertise and Previous record | 40% | 80 | 95 | 95 | 50 | 70 | 95 | 100 | | | | |
| W4 | Availability to Deliver the Contract | 10% | 80 | 100 | 95 | 50 | 50 | 100 | 100 | | | | |
| W5 | Ability to Satisfy all required Work, Health and Safety Requirements | 5% | 80 | 80 | 80 | 50 | 60 | 60 | 95 | | | | |
| TOTAL NON-PRICE SCORE | | 70% | | | | | | | | 0 | 0 | 0 | 0 |

## WEIGHTED PRICE & NON- PRICE SCORE

| TENDERER | | | iEngineering Australia | Press Power Group | Streamline Energy Group | Zappee - The Trustee For The Ayvazian Trust | go EV - ZIP EV Pty Ltd | Jet Charge Pty. Ltd. | EVSE Australia | 0 | 0 | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NON-PRICE EVALUATION CRITERIA | | WEIGHTING | | | | | | | | | | | |
| W1 | Price | 30% | 30.00 | 23.24 | 28.24 | 25.13 | 17.61 | 14.92 | 11.68 | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |
| W2 | Compliance to the Conditions of Quoted | 15% | 13.50 | 14.25 | 13.50 | 14.25 | 14.25 | 14.25 | 12.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W3 | Expertise and Previous record | 40% | 32.00 | 38.00 | 38.00 | 20.00 | 28.00 | 38.00 | 40.00 | | | | |
| W4 | Availability to Deliver the Contract | 10% | 8.00 | 10.00 | 9.50 | 5.00 | 5.00 | 10.00 | 10.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| W5 | Ability to Satisfy all required Work, Health and Safety Requirements | 5% | 4.00 | 4.00 | 4.00 | 2.50 | 3.00 | 3.00 | 4.75 | 0.00 | 0.00 | 0.00 | 0.00 |
| TOTAL WEIGHTED SCORE | | 100% | 87.50 | 89.49 | 93.24 | 66.88 | 67.86 | 80.17 | 78.43 | #DIV/0! | #DIV/0! | #DIV/0! | #DIV/0! |

Evaluation Panel Members

Gary Woodman

Joe Joseph

Sylvester Otieno

APPENDIX D

Tender Evaluation — Contract: C13-105

Non-Price Criteria Assessment

| No: | Non-Price Criteria | Max Score | iEngineering Australia | | Press Power Group | | Streamline Energy Group | | Zappee - The Trustee For The Ayvazian Trust | | go EV - ZIP EV Pty Ltd | | Jet Charge Pty. Ltd. | | EVSE Australia | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Information provided/ Review comments | Score (**/100) | Information provided/ Review comments | Score (**/100) | Information provided/ Review comments | Score (**/100) | Information provided/ Review comments | Score (**/100) | Information provided/ Review comments | Score (**/100) | (ALTERNATIVE) Information provided/ Review comments | Score (**/100) | Information provided/ Review comments | Score (**/100) |
| W2 | Compliance to the Conditions of Quoted | 100 | **RFQ form** submitted ($53,220.00).<br>**Scope of Works** - submitted & met. **Propose** to install load control equipment.<br>**Itemised cost breakdown** and labour & material cost - submitted.<br>**Payment schedule** - 30% advance, 60% on FAT doc, 10% after commissioning.<br>**Additional Fees** - Per port $16 + 4%per transaction - 8% payment gateway charges.<br>**Scope of Warranty** - submitted - 2 years. Spares free of cost during warranty. Engineers are deputed at an extra cost. Arrangements for delay & facilities on account of customer + claim procedure. | 90 | **RFQ form** submitted ($35,350.49 - 22kW, $54,015.24 (VIC) & $55,295.21 (CO) - 60kW,<br>( $200,000 - ASP Level 3).<br>**Scope of Works** - submitted & met.<br>**Itemised cost breakdown** and labour & material cost - submitted.<br>**Payment schedule** - 10% deposit to order, 50% once order arrived. 14 days from date of invoice. Nil retention.<br>**Scope of Warranty** - submitted - 2 years warranty with option for Extension, Workmanship warranty of 5 years. No claim procedure. | 95 | **RFQ form** submitted ($57,335.00).<br>**Scope of Works** - 60kW Charger with hard limit 0f 80-90A, install load control equipment.<br>**Itemised cost breakdown** and labour & material cost - submitted.<br>**Payment schedule** - 14 days from date of invoice. **Scope of Warranty Coverage** - N/A. | 90 | **RFQ form** submitted ($63,700.00 - 60kW (VIC), $29,000.00 - 22kW (VIC)).<br>**Scope of Works** - submitted & met. Option for 60kW double gun and 22kW.<br>**Itemised cost breakdown** in bulk and No labour & material cost. **Payment schedule** - 14 days from date of invoice. Subject to AUD Fluctuations.<br>**Additional Fees** - Annual Platform Fee per ChargePoint: $240.00 Per/Charge point, Charger management Fees: $0.10 per kWh + AC Charger annual maintenance: $125.00 ex GST per Charger, DC Charger annual maintenance: $240.00 ex GST per Charger.<br>**Scope of Warranty** - No scope. 2 years and extension can be negotiated + No claim procedure. Manufacturing and production of EV charger will be 1 month and 1 month to sea freight/ airfreight for additional costs. | 95 | **RFQ form** submitted ($91,920.00).<br>**Scope of Works** - submitted & met.<br>**Options:** 60kW charger & 60kW charger + Ac Connector with additional warranty: 3 nos. **Itemised cost breakdown** in bulk and No labour & material cost. 2 options: 60kW CCS2 two gun and 60kW CCS2 two gun + 1<br>**Scope of Warranty** - submitted - 2 years and 3 year extension can be purchased. No claim procedure. | 95 | **RFQ form** submitted ($107,724.23).<br>**Scope of Works** - submitted & met.<br>**Itemised cost breakdown** and labour & material cost - submitted.<br>**Payment schedule** - 35% deposit upon acceptance of the quote.<br>**Additional Fees** - Monthly subscription (1-5 yrs): $2,674.23.<br>Maintenance Subscription: $770 per annum + travel charges if 50km from CBD **+** Software Subscription: $100 per annum, free if maintenance subscription taken. Load management CORE: $100 per annum.<br>**Scope of Warranty** - submitted - AC: 3 years & DC:2 years & optional to Extend to 5 years + claim procedure. | 95 | **RFQ form** submitted ($138,586.40 - 60kW (VIC), $26,279.67 - 7kW (CO)).<br>**Scope of Work**s - submitted & met. Custom built 250A MSB, takes **8-10 weeks** to procure, extending project timeline.<br>**Itemised cost breakdown** and labour & material cost - submitted.<br>**Additional Fees** -$1409.00/60kW, 1290/7kW per annum maintenance. custom built 250AMSB.<br>**Scope of Warranty** - submitted - 2 years and can extend up to maximum of 5 years + No claim procedure. | 80 |
| W3 | Expertise and Previous record | 100 | **Full Company Background** - Yes. Feasibility study of 14 sites for EV installations<br>**Similar Completed Projects** - 3 Project details provided. Also mentioned that 22kW & 7kW are in the line up of installation<br>**Team Structure & Key personnel** - Submitted. **Referee** - Contact details, Project description & Outcome, Client testimonials: **Pending**. | 80 | **Full Company Background** - Yes. Since 2018.<br>**Similar Completed Projects** - 3 Nos in 2024.<br>**Team Structure & Key personnel** - 3 Nos.<br>**Referee** - 1 Nos, Contact entails, Project description & Outcome, Client testimonial. | 95 | Details provided on request;<br>Lachlan Shire Council - 2x 22kW 3 phase chargers and 1x 7kW single phase charger<br>Weddin Shire Council - 1x 22kW 3 phase charger<br>Bathurst Regional Council - 1x 7kW single phase charger<br>Orange Waratah Sports Club - 1x 22kW 3 phase charger<br>Shearing Shed Motor Inn Dubbo - 1x 22kW 3 phase charger | 95 | Not Provided | 50 | **Full Company Background** - N/A.<br>**Similar Completed Projects** - N/A.<br>**Team Structure & Key personnel** - N/A.<br>**Referee** - 3 Nos, Contact details | 70 | **Full Company Background** - Yes.<br>Since 10 years.<br>**Similar Completed Projects** - 3 Nos ongoing projects.<br>**Team Structure & Key personnel** - Yes.<br>**Referee** - 3 Nos, N/A other details. | 95 | **Full Company Background** - Yes. Since 10 years<br>Big list of Councils, 32 identified where they have provided EV chargers.<br>**Case study of completed Projects** - 3 Nos submitted<br>**Team Structure & Key personnel** - N/A.<br>**Referee** - N/A, project description and solutions. | 100 |
| W4 | Availability to Deliver the Contract | 100 | Available.<br>**Detailed Project Timeline** - Submitted.<br>**Resource Allocation Plan** - Submitted.<br>**Completion Dates for Each Phase** - Submitted. | 80 | Available.<br>**Work Schedule** - Submitted.<br>**Resource Allocation Plan** - Submitted.<br>**Completion Dates for Each Phase** - Submitted. | 100 | Not Provided | 95 | Not Provided | 50 | Not Provided | 50 | Available.<br>**Work Schedule** - Submitted.<br>**Resource Allocation Plan** - Submitted.<br>**Completion Dates for Each Phase** - Submitted. | 100 | Available.<br>**Work Schedule** - Submitted.<br>**Resource Allocation Plan** - Submitted.<br>**Completion Dates for Each Phase** - Submitted.<br><br>As our proposal has the sourcing of a 250A Custom Main Switchboard for the Warren Council Visitor Centre, procurement for this custom switchboard takes approximately 8-10 weeks, which may extend the overall project timeline. | 100 |
| W5 | Ability to Satisfy all required Work, Health and Safety Requirements | 100 | **Company Registration** Certificate, Licence: Electrician, **Workers Insurance**, Personal Indemnity: Certificate of Currency, Business Park: Certificate of Currency, WHS Policy Statement AS/NZS 4801, Risk Assessment Document, SWMS, Quality Management Plan AS/NZS ISO 9001:2008 | 80 | NSW Fair Trading : **Contractor Licence**, **Workers Insurance** : Certificate of Currency provided | 80 | Not Provided | 80 | Will provide once offer accepted. | 50 | Business park Insurance: Certificate of currency. | 60 | OHS Management Plan,<br>Quality & Environmental management Plan, | 60 | NRMA Vehicle Insurance, **workers insurance**, Certificate of currency: combined general liability &error & omission, **Modern Slavery Policy**, Risk Management Plan, SWMS & Risk Assessment, HSEQ Management Plan, WHS, EGS Policy, Compliance Plan, COVID-19 Safety Plan, Australia Quality Policy, SWP, Gender Equity Policy | 95 |
| | Other comments and observations | | Payment Terms Q&D<br>Completion dates inconsistencies to be clarified<br>L3-ASP design resources available<br>Not flagged an issue with power availability on site.<br><br>Yes, we can install the 60kW charger using the existing infrastructure. We are able to adjust the current for our charger to 80A, thereby eliminating the need for upgrades to the electrical infrastructure.<br>Load management is not required for our solution. We can install the 60kW charger using the existing infrastructure without the need for load management equipment | | Flagged the issue of power limitation 22 kW option proposed for VIC with pricing for 60kW for VIC & 60kW for Carter Oval<br><br>Would require to be hard limited to 38kW to prevent overloading and ensuring there is space for spare to prevent nuisance tripping | | Full current for the 60kW is 108A per phase. I have attached the brochure from Ocular with a datasheet in it.<br>80A would provide approximately 44kW, 90A would provide 50kW and 95A would provide approximately 53kW | | No labour & material cost break up provided.<br>Q&D on payment conditions<br>Additional platform fee | | | | Q&D on payment terms<br>Additional payment clauses | | Additional Annual Fees & Charges<br><br>Flagged that current power limitations at the Visitor Information Centre upgrades are essential to support the efficient and safe operation of a 60kW DC fast charger at the site. | |

Tender Evaluation

Contract: C13-105

| | Tender Schedules Submission compliance | Submitted complying documentation | | Submitted complying documentation | | Submitted complying documentation | | Submitted complying documentation | | Submitted complying documentation | | Submitted complying documentation | | Submitted complying documentation | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Part A: Documents to be Lodged at close of Tenders | iEngineering Australia | YES/NO | Press Power Group VIC; With limit switch 38kW | YES/NO | Streamline Energy Group | YES/NO | Zappee Fast Charging -The Trustee For The Ayvazian Trust | YES/NO | go EV | YES/NO | Jet Charge Pty. Ltd. | YES/NO | EVSE Australia VIC | YES/NO |
| | Quoted Price | $53,220.00 | | $69,660.33- 60kW | | $57,335.00 -60kW (VIC) | | $64,420.00 - 60kW (VIC) | | 91920- 60 kW (VIC) | | 105830 - 60 kW (VIC) | | $138,586.40 - 60kW (VIC) | |
| | | | | $35,350.49 - 22kW | | $27,485.81 - 22kW (VIC) | | $29,955.00 - 22kW (VIC) | | | | | | $26,279.67 - 7kW (CO) | |
| | Non-Price Criteria | | | | | | | | | | | | | | |
| A | **Compliance to the Conditions of Quoted** | | | | | | | | | | | | | | |
| I | **RFQ Tender Form** | Submitted complying documentation | Yes | Submitted complying documentation | Yes | Submitted complying documentation | Yes | Submitted complying documentation | Yes | Submitted complying documentation | Yes | Submitted complying documentation | Yes | Submitted complying documentation | Yes |
| II | **Scope of Works** | Submitted and met | Yes | Submitted and met | Yes | Submitted: 60kW with hard limit 0f 80-90A, install load control equipment | Yes | Submitted and met | Yes | Submitted and met | Yes | Submitted and met | Yes | Submitted and met | Yes |
| III | **Technical Requirements** | Submitted and met | Yes | Submitted and met | Yes | | - | Submitted and met | Yes | Submitted and met | Yes | Submitted and met | Yes | Submitted and met | Yes |
| IV | **Financial Details** | | | | | | | | | | | | | | |
| | Itemised Cost Breakdown | Completed | Yes | Completed | Yes | Completed | Yes | Completed in Bulk | Yes | Completed in Bulk | Yes | Completed | Yes | Completed | Yes |
| | Labour & Material Costs | Completed | Yes | Completed | Yes | Completed | yes | | No | | No | Completed | yes | Completed | Yes |
| | Additional Fees or Charges | Monthly: Per port $16+4%per transaction-8% payment gateway charges | Yes | | No | | No | Annual Platform Fee per ChargePoint: $240.00 Per/Charge point, Charger management Fees: $0.10 per kWh<br>AC Charger annual maintenance: $125.00 ex GST per Charger, DC Charger annual maintenance: $240.00 ex GST per Charger | Yes | Options: 60kW charger & 60kW charger + Ac Connector with additional warranty: 3 nos | Yes | Monthly subscription (1-5 yrs): $2,674.23. Maintenance Subscription: $770 per annum + travel charges if 50km from CBD.<br>Software Subscription: $100 per annum, free if maintenance subscription taken. Load management CORE: $100 per annum | Yes | $1409.00/60kW, 1290/7kW per annum maintenance | Yes |
| | Payment Schedule | 30% advance, 60% on FAT doc, 10% after commissioning | Yes | 10% deposit to order, 50% once order arrived. 14 days from date of invoice. Nil retention | Yes | 14 days from date of invoice. | | 14 days from date of invoice. Subject to AUD Fluctuations | Yes | | No | 35% deposit upon acceptance of the quote. | Yes | | No |
| V | **Warranty Information** | | | | | | No | | | | | | | | |
| | Scope of Warranty Coverage | Submitted | Yes | Submitted | Yes | | No | | No | Submitted | Yes | Submitted | Yes | Submitted | Yes |
| | Duration of Warranty | 2 years | Yes | 2 years warranty with option for Extension, Workmanship Warranty of 5 years | Yes | | No | 2 years and extension can be negotiated | | 2 years and 3 year extension can be purchased | | AC: 3 years & DC:2 years & optional to Extend to 5 years | Yes | 2 years and can extend up to maximum of 5 years | |
| | Terms & Conditions | Spares free of cost during warranty. Engineers are deputed at an extra cost. Arrangements for delay & facilities on account of customer. | Yes | 5 years workmanship don't include malfunction of material or parts | Yes | | No | Manufacturing and production of EV charger will be 1 month and 1 month to sea freight/ airfreight for additional costs | No | | No | Submitted | Yes | Submitted | Yes |
| | Claim Process & Procedures | Submitted | Yes | | No | | No | | No | | No | Submitted | Yes | | No |
| B | **Expertise and Previous Record** | | | | | | No | | No | | | | | | |
| I | **Company Information** | | | | | | No | | No | | | | | | |
| | Full Company Background | Submitted | Yes | Submitted | Yes | | No | | No | | No | Submitted | Yes | Submitted | Yes |
| | Portfolio of Similar Completed Projects | Submitted | Yes | 3 similar projects in 2024 | Yes | | No | | No | | No | 3 ongoing projects & 1 under DLP submitted | Yes | 3 projects Submitted | Yes |
| | Team Structure & Key personnel | Submitted | Yes | 3 Key Personnel | Yes | | No | | No | | No | Submitted | Yes | | No |
| | Years of Operation in the Industry | 30 years | yes | Since 2018 | Yes | | No | | No | | No | 10 years | | 10 years | |
| II | **Reference Documentation** | | | | | | No | | No | | | | | | |
| | Minimum 3 References | 3 referees | Yes | 1 referee | Yes | | No | | No | 3 referees | Yes | 3 referees | | | No |
| | Contact Details for Previous Clients | Submitted | Yes | Parks Shire Council | Yes | | No | | No | submitted | Yes | | No | | No |
| | Project Descriptions & Outcomes | Submitted | Yes | Submitted | Yes | | No | | No | | No | | No | Project description and solution Submitted | Yes |
| | Client Testimonials Where Available | All pending | No | Submitted | Yes | | No | | No | | No | | No | | No |
| | | | | | | | | | | | | | | | |
| C | **Availability to Deliver the Contract** | WS: Contract award & Initial Planning (1/5/25) - Handover (30/6/25). Hence, available. | Yes | WS: Site Visit (1/5/25) - Handover (21/5/25). Hence, available. | Yes | | No | | No | | No | WS: Site Establishment (2/5/25) - Handover (30/6/25). Hence, available. | Yes | WS: Project Initiation (1/5/25) - Handover (26/6/25). Hence, available. | |
| I | **Project Timeline** | | | | | | No | | No | | No | | | | |
| | Detailed Schedule Showing Key Milestones | Timeline submitted | Yes | Gantt Chart submitted | Yes | | No | | No | | No | Submitted | Yes | Submitted | Yes |
| | Recourse Allocation Plan | Submitted | Yes | Submitted | Yes | | No | | No | | No | Submitted | Yes | Submitted | Yes |
| | Completion Dates for Each Phase | Submitted | Yes | Submitted | Yes | | No | | No | | No | Submitted | Yes | Submitted | Yes |
| | | | | | | | | | | | | | | | |
| D | **Ability to Satisfy all Required WHS Requirements** | | | | | | No | Available upon Acceptance of Offer | No | | | | | | |
| I | **Documentation** | | | | | | No | | No | | | | | | |
| | All current Business Licences | Company Registration Certificate, Contractor Licence: Electrician | Yes | NSW Fair Trading : Contractor Licence | Yes | | No | | No | | No | | No | | No |
| | Industry Specific Certifications | | | | - | | No | | No | | No | | No | | No |
| | Insurance Certificates | Workers Insurance | yes | Workers Insurance : Certificate of Currency | Yes | | No | | No | | No | | No | NRMA Vehicle Insurance, workers insurance | |
| | Professional Accreditations | Personal Indemnity: Certificate of Currency, Business Park: Certificate of Currency | yes | | - | | No | | No | Business Park: Certificate of Currency | Yes | | No | Certificate of currency: combined general liability &error & omission | |
| | Schedule of Compliance for Dealing with Modern Slavery | | No | | No | | No | | No | | No | | No | Modern Slavery Policy | Yes |
| | WHS | WHS Policy Statement AS/NZS 4801, Risk Assessment Document, SWMS | | | | | No | | No | | No | OHS Management Plan | | HSEQ Management Plan, WHS, EGS Policy, Compliance Plan, COVID-19 Safety Plan | |
| | Quality | Quality Management Plan AS/NZS ISO 9001:2008 | | | | | No | | No | | No | Quality & Environmental management Plan | | Australia Quality Policy, SWP, Gender Equity Policy | |

# EV Charging Feasibility Assessment

Prepared by ChargeWorks Pty Ltd

November 2023

# Contents

# Glossary of terms

| | |
|---|---|
| **AC Charging** | Level 1 or level 2 charging of an EV using an ‘alternating current’ EVSE |
| **ATDW** | Australian Tourism Data Warehouse |
| **CCS** | Combined charging system - a fast charging plug/cable system which is all but standard in all new EVs in Australia. It comprises both an AC port (usually Type 2) and a DC port. |
| **CHAdeMO** | A fast charging system that has become all but superseded by CCS. |
| **DC Charging** | Level 3 fast charging of an EV using a ‘direct current’ EVSE |
| **EV** | Electric Vehicle |
| **EVSE** | Electric Vehicle Supply Equipment (often referred to as a ‘charger’) |
| **Level 1** | Power level suitable for trickle charging an EV using non-dedicated equipment. |
| **Level 2** | Power level suitable for destination charging an EV using dedicated equipment. |
| **Level 3** | Power level suitable for fast charging an EV using dedicated DC equipment. |
| **RCD** | Residual current device – an electrical safety device that detects earth faults in electrical equipment. It is a requirement for dedicated EVSEs. |
| **Type 1** | AC plug/cable system which has been superseded. |
| **Type 2** | AC plug/cable system which is now standard for all new EVs in Australia. |
| **7kW charger** | De-facto standard ‘single-phase charger’ referring to a 32A single-phase EVSE. |
| **22kW charger** | De-facto standard ‘three-phase charger’ referring to a 32A three-phase EVSE. |
| **32A** | De-facto standard current rating for level 2 charging. |

# Introduction

In June 2021, the NSW Government released its Electric Vehicle Strategy which outlines the state plan to accelerate the electric vehicle (EV) transition in NSW. Under this strategy, EV sales are forecast to increase to more than 50% of all new passenger vehicles by 2031.

To prepare councils for the upcoming EV transition in their region, the NSW Sustainable Councils program is supporting councils to identify and assess sites for charging suitability.

Sustainable Councils has engaged ChargeWorks to assist councils in assessing suitable council-owned destination charging sites and identify opportunities for councils to lease car spaces to fast charging providers.

As part of these services, ChargeWorks is engaged to:

- Conduct feasibility assessments of shortlisted sites (this document).
- Assist with destination charging grant applications.

ChargeWorks worked with council stakeholders to identify suitable sites for EV charging and visited each council area to assess the key locations and gain an understanding of EV driver experiences.

# About ChargeWorks

ChargeWorks is an independent engineering consultancy based in Sydney that specialises in energy systems and the transition to electrified transportation.

We are leaders in EV infrastructure, providing expert advice on EV charging systems, EV fleets, community EV use, and EV tourism and have been providing support to NSW councils since 2017.

We have no financial interest in any brand or product. Our advice is based solely on providing the best possible outcome for councils and the community.

# Aim of this report

The recommendations in this report can be used to inform applications to the **NSW destination charging grant funding rounds** for council sites. This report may also inform council discussions with fast-charging providers for future fast-charging grants.

The recommendations in this report are based on the site suitability in terms of:

| Use Case | Site Constraints | Cost vs. Benefit |
|---|---|---|
| Why do drivers visit this location?<br><br>How long do they stay?<br><br>Is it also convenient to recharge in this location? | Can charging infrastructure be safely installed adjacent to parking bays?<br><br>Is there suitable council-owned electrical infrastructure nearby? | Would charging in this location support the ‘***NSW visitor economy’***?<br><br>Can expensive new connections and trenching be avoided to minimise cost? |

## The role of councils

Council's role in supporting this transition is to ensure that adequate infrastructure is available for the community and the region as the EV transition accelerates.

Councils can support the installation of EV charging infrastructure in a variety of different ways, as explained in the graphic below.

### Install destination chargers

By taking advantage of the NSW Government funding, councils can install chargers at a range of **council owned destinations.**

These public chargers will attract visitors, enhance their experience, and have the potential to generate revenue. Under this model, councils will be responsible for the ongoing operation and maintenance of these assets. This is often the simplest way of implementing EV charging.

### Encourage local businesses

The destination charging funding is open to councils as well as **private businesses** such as motels, restaurants, clubs, and wineries.

Councils should encourage suitable local businesses to apply for the funding to enhance their business.

Councils may support these businesses by facilitating quotations from electricians or even providing further financial incentives.

### Site host for fast charging

Councils may also choose to submit an expression of interest to become a site host for fast charging.

Under the fast-charging funding stream, **providers are currently searching for suitable locations** throughout NSW to install infrastructure that is available to the public.

Councils may be able to lease parking locations to fast charging providers for the benefit of tourists and the local community.

### Destination charging site host

While this business model is very much in its infancy, some council sites with high visitation numbers (more relevant to metropolitan councils) may be attractive for third party providers to install and operate destination charging infrastructure.

Council could lease this land without having the responsibility of managing the asset. Examples of this model include Newcastle and Wollongong Councils who are currently trialling partnerships with electricity network operators for pole mounted EV charging.

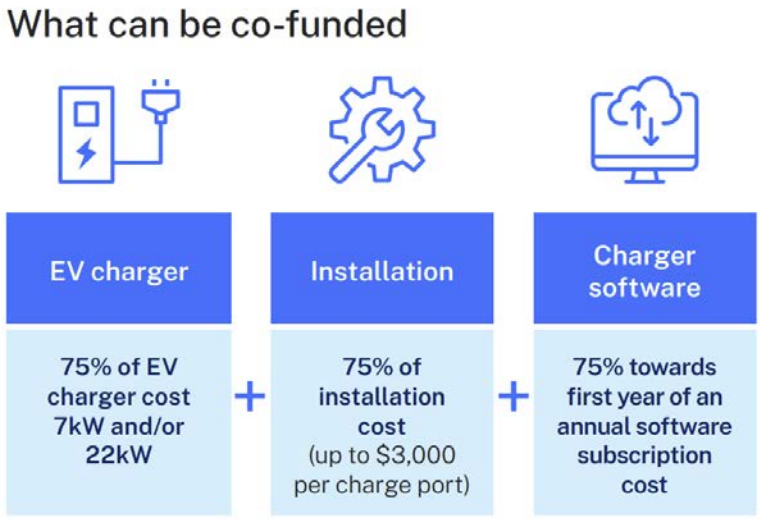
## EV charging grants overview

Under the Electric Vehicle Strategy, NSW has committed to a $171 million investment over 4 years to develop a world-class charging network across the state.

Of the total investment:

- $131 million is for **ultra-fast** charging infrastructure to establish **EV Superhighways**
- $20 million is for charging infrastructure in or near **commuter carparks**
- $20 million is for **destination** charging infrastructure at **regional tourist locations**, such as motels, restaurants, wineries, libraries, and galleries (this is the grant most suited to regional councils)
- $10 million is for **kerbside charging** to support local governments and charge point operators in metropolitan NSW.

The second round of Destination Charging Funding is currently open to councils and businesses until Friday 3rd of May 2024. A third round of funding is expected later in 2024.




Councils may consider an application for grant funding at sites within its portfolio, or support local businesses such as hotels, motels, attractions, and clubs to apply.

To be eligible for destination charging grant funding, sites must have a live ATDW (Australian Tourism Data Warehouse) listing. The ATDW is a national platform for digital tourism marketing where sites may be listed for free. Eligible council destinations include but are not limited to:

- Visitor Information Centres, libraries, art gallery, museums
- Parks and gardens in the middle of town
- Public carparks nearby to a destination – with existing power
- Pools and sports facilities
- Caravan and holiday parks.

A well-placed charger at these locations, while not necessarily an EV driver's primary destination, will facilitate access to nearby shops, restaurants, and other local businesses. Public destination charging will encourage regional tourism and stimulate the local and visitor economy.

**Visitor economy**

The term 'visitor economy' refers to the direct and indirect contributions to the economy resulting from a person (a visitor) travelling outside their normal place of residence.

## Electric vehicle charging overview

The rate at which an EV can charge depends on both the vehicle and the power capacity of the electric vehicle supply equipment (EVSE).

EVSEs can be understood simply as devices that supply electricity to EVs. Although the power levels vary, general power outlets and dedicated charging points are both examples of EVSEs.

An EVSE is not a 'charger', or at least no more of a charger than a power point is. The battery charger is in fact located on-board an electric vehicle and it is the vehicle that controls the charging process.

The charging power of the equipment is broadly categorised into three levels:

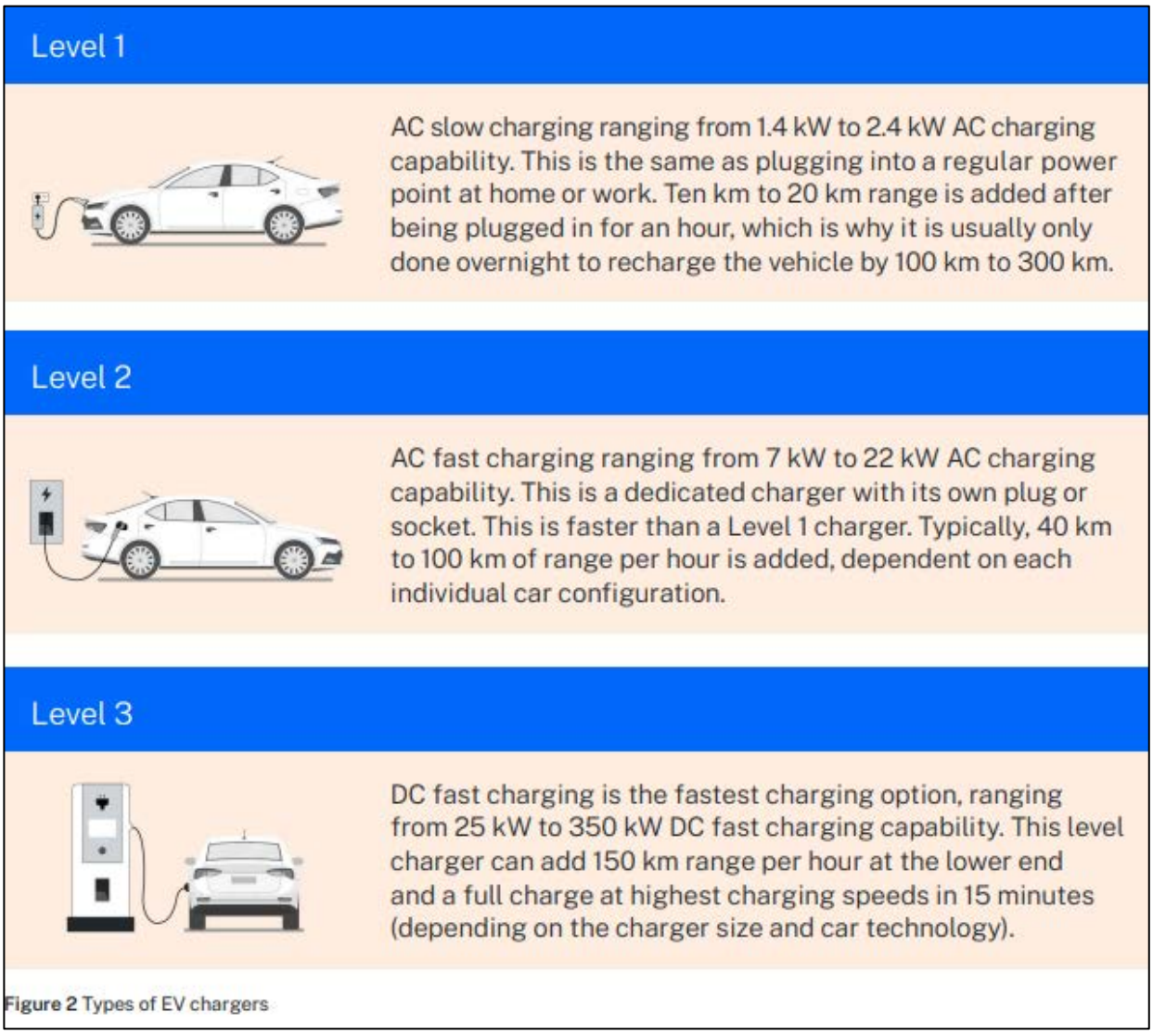



**Figure 2** Types of EV chargers

*Source: Drive electric NSW EV destination charging grants: funding guidelines 2022*

**Benefits of EV destination charging**

Electric vehicle charging provides benefit for both the site host and EV drivers.

- Acquiring new visitors
- Enhanced visitor experience
- Improved travel planning
- Extended length of visit
- Promotion of destinations.

## Level 1 – Trickle charging

Level 1 charging is performed using AC power from general power outlets and is suitable for charging an electric vehicle overnight.

Public level 1 charging is commonly found in caravan parks and council showgrounds where visitors are parked for long durations.

*Gloucester Public Car Park – Level 1 Charging*

Level 1 charging is slower and less convenient than using a dedicated level 2 charger and cannot be easily monitored or controlled.

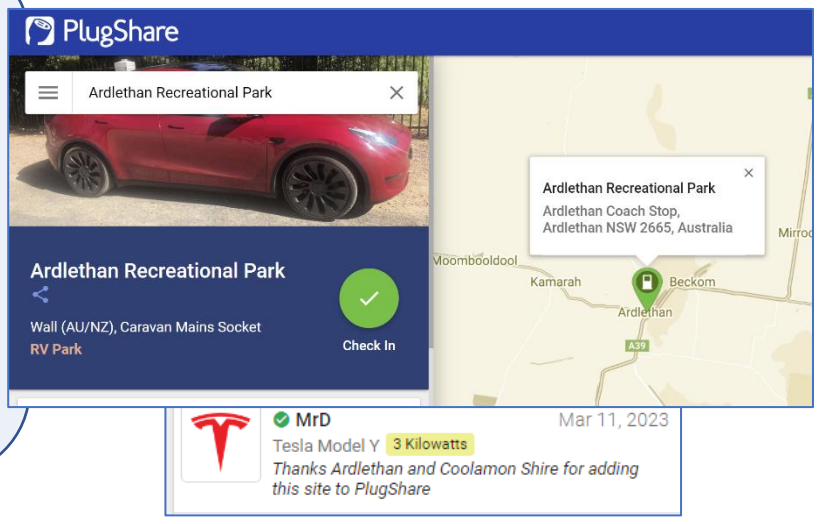
While early adopters of EVs often carry the necessary cables or extension cords, most EV owners will prefer to use a dedicated level 2 charger when in a public setting.

**Council caravan parks**

Powered caravan parks are already full of level 1 EV charging infrastructure!

Councils may add existing sites to plugshare.com to encourage electric vehicles to visit.

A $10 payment is a fair value to cover the cost of electricity.



## Level 2 – Destination charging

The majority of EV charging is performed using AC power from Level 2 EVSEs either at home, work, or in a public setting. Public level 2 charging is commonly referred to as “destination charging”.

Both local and visiting drivers will specifically seek to use destination chargers when it is convenient to do so while completing other tasks. Examples may include visiting a shopping centre, tourist attraction, or staying overnight at a hotel.

| Example destination | Coffee | Winery | Museum | Restaurant dinner | Trip to the zoo | Overnight accommodation |
|---|---|---|---|---|---|---|
| Example dwell time | 10 min | 1 hr | 1.5 hr | 2 hr | 5 hr | 12 hr |
| Average driving range added from a 7 kW charger | 7 km | 40 km | 60 kms | 80 km | 200 km | Full charge |
| Average driving range added from a 22 kW charger* *Range added is dependant on the individual car's charging capability. Not all EVs can charge at 22 kW AC. | 6 km – 22 km | 40 km – 130 km | 60 km – 198 km | 80 km – 260 km | 200 km – full charge | Full charge |

**Figure 4** Average range provided by 7 kW AC and 22 kW AC EV destination chargers

*Source: Drive electric NSW EV destination charging grants: funding guidelines 2022*

EV drivers will often select their destinations based on availability of charging infrastructure. Chargers will be visible on car GPS, mobile apps, or online such that installing a charger in a small town may serve to “Put it on the map”. Destination chargers may be installed by councils or private businesses.

The examples below show destination chargers provided by Bathurst Regional Council at popular tourist locations. Level 2 chargers may be mounted on walls, posts, or be free standing.

*Bathurst Regional Council – Level 2 destination charging (‘wall mount’ left, dual port right)*

**Plugs and cables**

All electric vehicles currently sold in Australia have a standard “Type 2” plug that is used for level 2 charging. Public chargers may be fitted with a tethered plug-and-lead or, be socketed which requires you to Bring Your Own (BYO) cable. Socketed units are recommended for public charging.

## Level 3 – Fast charging

Level 3 charging, commonly referred to as “fast charging”, provides DC power to a vehicle and enables very high charging speeds (50-350kW).

Fast charging is similar to the conventional petrol station model where drivers specifically go to recharge for between 5 and 30 minutes.

Fast charging is **not** the norm for EV drivers except for very long journeys. Fast charging sites should be close to major roads and be quickly and easily accessed.


*Bathurst Visitor Information Centre – Tesla + NRMA fast charging*

Councils typically do not own or operate fast charging infrastructure, however, they may choose to be a site host and enter a leasing arrangement with a fast charging provider. Councils may reach out to providers directly or submit an EOI on the electric vehicle fast charging grants portal for a specific site.

**Vehicle compatibility**

All new electric vehicles sold in Australia (with the exception of the Nissan Leaf and Mitsubishi Outlander Hybrid) use a standard CCS (Combined Charging System) plug for fast charging.

Tesla brand chargers, which also use a CCS plug, have recently enabled access for non-Tesla vehicles at some charging stations in NSW.

Under the NSW government funding scheme, **all** Tesla charging stations installed under the program must service **all** brands of EVs.

Further information has been provided around EV charging infrastructure in Appendix 3.

## Operating cost and considerations

Councils should consider the ongoing operational requirements of EV charging infrastructure.

**Maintenance**
Electric vehicle destination chargers have no moving parts and require very little maintenance.

ChargeWorks recommends councils use a charge management software platform to assist with the maintenance and operation of infrastructure. Councils (and the software operator) will automatically be alerted of any system faults via the monitoring software. Depending on council's service level agreement, an electrician can be engaged by the software operator to immediately repair any issues.

Recommended maintenance practices include:

- Basic physical inspections
    - Check for physical damage
    - Check for water ingress in charging port
    - Check that any components have not come loose
- As per Australian Standards, RCDs in the distribution board must be checked once per year by a licensed electrician.

Councils may elect to enter a maintenance agreement with a charging provider or local electrician to perform regular maintenance of each charger. This is estimated to cost approximately $150-200 per charger per annum.

**Electrical cost**
The cost of electricity varies depending on hours of use, site electricity rates and the charging speed determined by the vehicle.

Typical costs to councils are:

- 7kW charger - $1.50 per hour
- 22kW charger - $1.50-$3 per hour (depending on the vehicle).

A 7kW charger that is used for an average of 4 hours a day will cost approximately $2,000 p.a. in electricity to operate.

This amount of electricity is approximately equivalent to over 6,000L of fuel (worth around $10,000) – which essentially reduces the cost per kilometre of travel by a factor of five when compared to equivalent internal combustion engine vehicles.

**Software**
Monitoring and billing software is required to facilitate billing to the customer as well as provide information about charger usage behaviour. This includes typical charging duration, total energy delivered, and state of charge of vehicles, as well as identification of any system faults.

Software is also useful for users to identify charging locations, whether they are occupied, and to provide status updates on charging.

Monitoring software subscriptions range from $150-$390 p.a. per charging port depending on the provider.

Additional 4G sim card fees may be applicable in some cases which range from $100-$200 p.a. per site.

**Other optional costs**

Councils have the option of several other services to enhance EV charging installations including:

- Bay painting and signage
- Bollards and wheel stops
- Extended warranty
- Maintenance agreements.

Some indicative prices for these services are provided in the table below:

| Optional extras | | | | | |
|---|---|---|---|---|---|
| Bay painting | Extended warranty (per year) | Bollards | Wheel stops | Signage | Maintenance agreement (per charger per year) |
| $1,250 | $800 | $200 | $200 | $55 | $180 |

## Billing and cost recovery


EV charging operators may choose to offer EV charging for free or implement a fee for service.

Where appropriate, billing of customers is typically performed through an EV charging mobile app linked to a customer's credit card. Fee structures may be easily modified through the integrated software to recover costs or even generate profit in high use areas.

In some cases, it may be beneficial to provide a free charging service as the indirect benefits generated from increased visitors outweigh the costs. Common examples of free charging include council carparks, shopping centres, wineries, hotels, and RSLs. By giving a few dollars-worth of electricity, these sites can attract more visitors for longer durations.

Depending on utilisation, a council may choose to implement billing to recover costs. A standard price for destination charging in metropolitan areas with high utilisation is 30c per kilowatt-hour.

This pricing structure equates to:

- 7kW charger - $2.10 per hour
- 22kW charger – up to $6.30 per hour (depending on the vehicle).

One option may be to offer free charging for 1 hour (or only during business hours) to ensure that drivers do not misuse the infrastructure. This can be easily configured by the software provider at council's direction.

Charging infrastructure has the potential to generate revenue as EV adoption increases, especially if energy tariffs and pricing are well managed.

# Warren Shire Council EV Charging

This section of the report provides recommendations for the suitability of Warren Shire Council sites for electric vehicle charging. It is intended to guide council on how they may best support EV tourism throughout the LGA and pursue grant funding opportunities.

The NSW Government is investing heavily in encouraging electric vehicle tourism throughout regional NSW. Installing charging infrastructure in Warren is an opportunity to attract new visitors, stimulate tourism as well as support the local community.

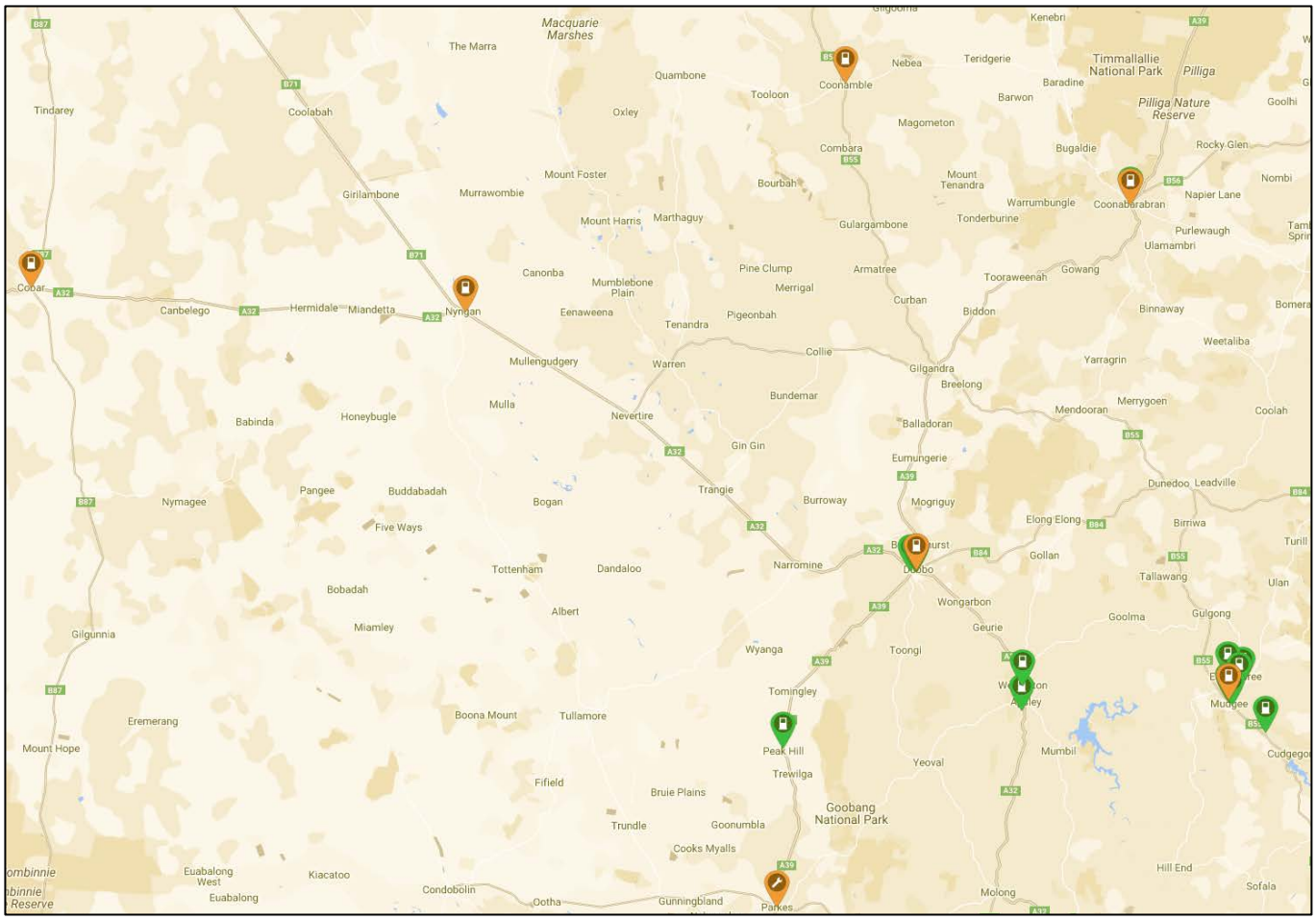
At each location ChargeWorks determined:

- Future use case for both local and visiting EV drivers including impact on councils and nearby residents and businesses
- Suitable equipment size to satisfy use case requirements
- Electrical considerations including required upgrades to service required capacity
- Considerations for future expansion
- Impact on existing carparking i.e., space availability
- Considerations for potential EV charging providers
- Indicative price for implementation.

## Gap in existing charging infrastructure

It was identified through the charger locator platform plugshare.com that, as of 2023, there is currently **no charging infrastructure** in Warren Shire.

The picture below showcases existing fast charging (orange) and destination charging (green) infrastructure surrounding Warren Shire.




*2023 Charging Infrastructure*

EVs travelling through Warren Shire currently rely on fast charging infrastructure in neighbouring towns or charge their vehicles form general power outlets in motels, caravan parks or showgrounds. This is inconvenient and discouraging for electric vehicle tourists wishing to visit Warren.

## Recommendations

ChargeWorks recommends that Council **invest in destination charging infrastructure** in up to **3 locations** so that tourists, and locals, may charge their electric vehicles whilst visiting a range of shops, restaurants and attractions.

Council should also **strongly encourage local accommodation providers** and businesses in Warren to consider applying for grant funding. Installing charging at a motel will be the most convenient charging solution for EV drivers staying in Warren. Council may also assist private businesses by engaging an electrician to provide quotations or providing additional grant funding.

Providing this infrastructure will enhance the visitor experience, encourage longer dwell times and support the NSW public charging network as EV adoption increases.

## Proposed sites

Council sites included in this feasibility assessment include:

| Site Description | Site Type | Priority |
|---|---|---|
| Windows on the Wetlands | Destination | High |
| Carter Oval | Destination | Medium |
| Dubbo St - Warren Shire Council | Destination | Medium |
| Victoria Park | Destination | Low |
| Warren Racecourse | Destination | Low |
| Oxley Park | Destination | Low |

## Windows on the Wetlands – Destination charging

**Recommendations**

Windows on the Wetlands is a candidate for **1 x 22kW dual-port destination charger** to service 2 parking spaces.

This site should be considered a **high priority** for a **round 2 destination charging grant application.**

**Use case**

The Windows on the Wetlands visitor centre is a popular attraction for visitors to Warren. The site features an art gallery and small café on site as well as a nature walk including bird watching. This site is a 10-minute walk from the town centre.

EV charging should be offered for free at this location to encourage visitation and tourism. Council may implement a fee for service as EV adoption increases.

**Physical and electrical considerations**

The visitor centre has insufficient electrical capacity to service EV charging and requires a long cable run and some civil works.

As an alternative, Council may supply EV charging from the nearby sewage pump MSB located in the carpark. A short trench in grass will be required to facilitate the cable run from the pump to the proposed charging location.

Council may determine their preferred parking location within proximity to the pump.

**Estimated cost of implementation**

The table below shows the estimated cost for 1 x dual port 22kW charger (2 ports).

| | Cost (ex GST) | Grant Funding Contribution | Cost to Council with Round 2 funding |
|---|---|---|---|
| EV Charger | $7,600 | $5,700 | $1,900 |
| Installation (Materials and labour) | $10,915 | $6,000 | $4,915 |
| Software (1 year) | $300 | $225 | $75 |
| **TOTAL** | **$18,815** | **$11,925** | **$6,890** |

*Cost estimates do not include any extended warranty and/or service level maintenance agreements.*

## Carter Oval – Destination charging

**Recommendations**

Carter Oval is a candidate for **1 x 22kW dual port destination charger** to service 2 parking spaces.

This site should be considered **medium priority** for a **round 2 destination charging** grant application.


**Use case**

This site is currently under construction. Council has made electrical provision for EV charging in the carpark by installing a conduit underground. This will significantly reduce the cost of installing EV charging at this location.

This location is nearby to Carter Oval and the swimming pool and is within walking distance of the town centre.

EV charging may be offered for free at this location to encourage visitation and tourism. Council may implement a fee for service as EV adoption increases.

This infrastructure will benefit locals as well as tourists.

**Physical and electrical considerations**

The charger may be supplied by the MSB located adjacent to the carpark. There is sufficient electrical capacity for EV charging and a conduit ready at the proposed charging location ready for install of cabling.

**Estimated cost of implementation**

The table below shows the estimated cost for 1 x dual port 22kW charger (2 ports).

| | Cost (ex GST) | Grant Funding Contribution | Cost to Council with Round 2 funding |
|---|---|---|---|
| EV Charger | $7,600 | $5,700 | $1,900 |
| Installation (Materials and labour) | $7,061 | $5,296 | $1,765 |
| Software (1 year) | $300 | $225 | $75 |
| **TOTAL** | **$14,961** | **$11,221** | **$3,740** |

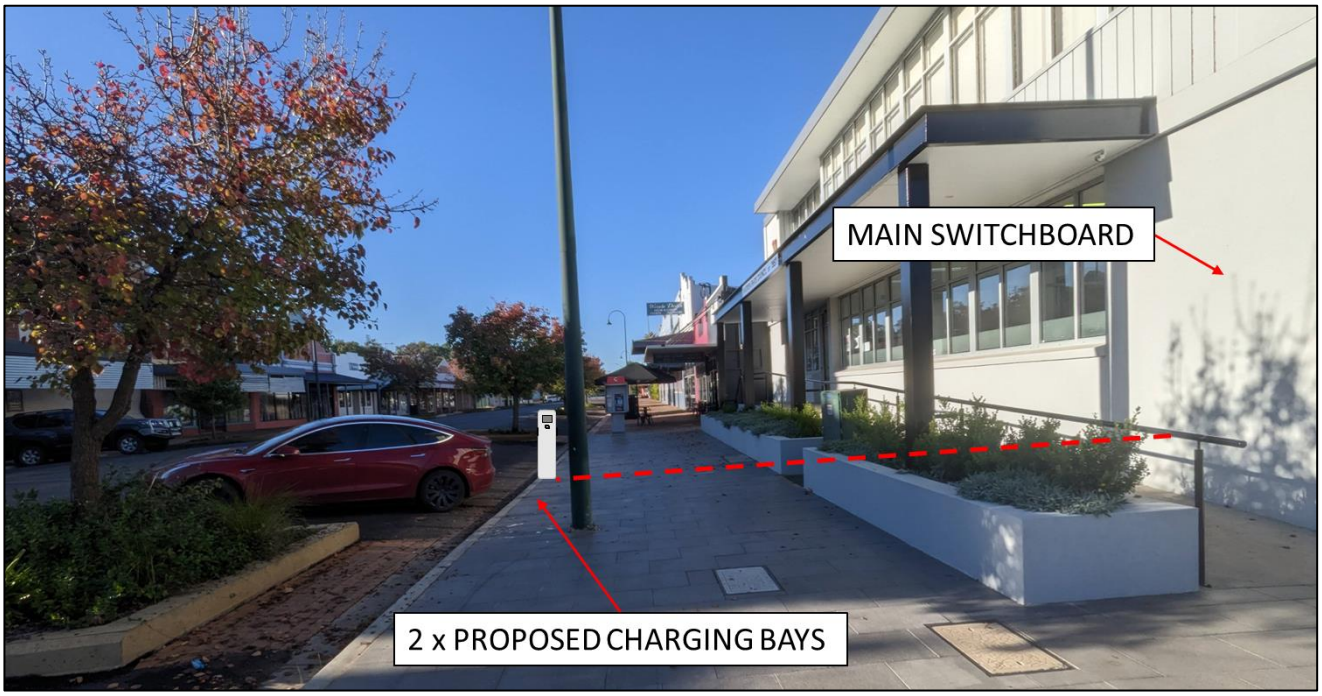
*Cost estimates do not include any extended warranty and/or service level maintenance agreements.*

## Dubbo St – Warren Shire Council – Destination charging

**Recommendations**

Dubbo St is a candidate for **1 x 22kW dual port destination charger** to service 2 parking spaces.

This site should be considered **medium priority** for a **round 2 destination charging** grant application.




**Use case**

This site is an ideal location for visitors to park whilst visiting central Warren. This location is nearby to several shops, businesses and restaurants as well as the council administration building. Visitors can reasonably be expected to park in this location for 30minutes up to a few hours.

EV charging may be offered for free at this location to encourage visitation and tourism. Council may implement a fee for service as EV adoption increases. Council-owned electric vehicles may also be charged at this location.

**Physical and electrical considerations**

The charger may be supplied by the MSB located inside the council building. Facilitating the cable run from the MSB to the kerb will be challenging. Significant civil works will be required underneath the footpath pavers. As part of this work council should make provision for expansion of charging to multiple parking spaces.

**Estimated cost of implementation**

The table below shows the estimated cost for 1 x dual port 22kW charger (2 ports).

| | Cost (ex GST) | Grant Funding Contribution | Cost to Council with Round 2 funding |
|---|---|---|---|
| EV Charger | $7,600 | $5,700 | $1,900 |
| Installation (Materials and labour) | $25,173 | $6,000 | $19,173 |
| Software (1 year) | $300 | $225 | $75 |
| **TOTAL** | **$33,073** | **$11,925** | **$21,148** |

*Formal quotation from an electrician is recommended for accurate costings of civil works. *Cost estimates do not include any extended warranty and/or service level maintenance agreements.*

## Low priority sites

Three other sites were assessed, however, are not suitable for EV charging and are **not recommended** for grant applications.

**Victoria Park**

Victoria Park has sufficient electrical capacity for EV charging. There is already a 3-phase power outlet on the exterior of the building that ChargeWorks was able to use to charge our electric vehicle during our visit to Warren using a special adaptor. The physical parking layout however is not suitable and civil works are required. The tourist use case is also poor at this location.

**Warren Racecourse**

Warren Racecourse already has general power outlets that may be used to charge electric vehicles. Dedicated chargers are not required at this location. Given the infrequent use of the facility ChargeWorks recommends Council invest in other locations presented in this report.

**Oxley Park**

Oxley Park is not an attractive tourist location for EV charging. This site has a caravan dump point and public toilet. This site has insufficient electrical capacity for EV charging.

# Summary of recommendations

## Destination charging

ChargeWorks recommends that **Council submit a grant funding application** for up to **3 destination charging** sites in Warren.

Council should also **strongly encourage local accommodation providers and clubs** (i.e. motel, Warren Services Club, Warren Golf Club) to consider applying for grant funding. Installing charging at a motel will be the most convenient charging solution for EV drivers visiting Warren.

Council may also assist private businesses by engaging an electrician to provide quotations or providing additional grant funding.

| Description of Car Park | Priority | Number of Suitable Charging Ports | Nearby Destinations | Estimated Cost to Council with round 2 grant funding (ex GST) |
|---|---|---|---|---|
| Windows on the Wetlands | High | 2 | Visitor Centre, Motel | **$6,890** |
| Carter Oval | Medium | 2 | Carter Oval, Pool, Town Centre | **$3,740** |
| Dubbo St – Warren Shire Council | Medium | 2 | Town Centre, Council | **$21,148** |

ChargeWorks is engaged to assist Council throughout the grant application process and can provide ongoing recommendations around types of chargers, software etc. to ensure successful implementation of charging infrastructure.

ChargeWorks, at Council's direction, can request formal quotes on behalf of Council which may be submitted with grant applications.

## Fast charging

Where suitable, council should support development proposals from fast charging providers to help facilitate additional chargers.

ChargeWorks does not recommend council submit an EOI to be a site host, however, may consider becoming a site host if approached by fast-charging providers.

Useful links to the fast charging and destination charging grant funding portals may be found in appendix 1 below.

# Appendix 1 - Useful links

More information on the NSW EV strategy and available grants can be found here:

- NSW EV strategy and grants overview
- Electric vehicle destination charging grants - Overview
- Electric vehicle grants guide booklet
- Electric vehicle fast charging grants - Overview
- NSW fast charging masterplan
- Electric vehicle kerbside charging grants

# Appendix 2 – Site electrical capacity

The electrical capacity of each of the feasible destination charging sites is as follows:

| Site Description | Electrical Capacity | Max Charging Load |
|---|---|---|
| Windows on the Wetlands | 80A - 3Ø (Pump MSB) | 32A - 3Ø |
| Carter Oval | >100A - 3Ø | 32A - 3Ø |
| Dubbo St – Warren Shire Council | ~400A - 3Ø | 32A - 3Ø |

# Appendix 3 – EVSE plugs and cables

**Plugs: Type 2 and CHAdeMO**

Most EVs in Australia use a Type 2 plug. Type-2 plugs have 7 pins and provide the ability to charge with either three-phase or single-phase. This covers all types of vehicles and all charging speeds.

CCS Type 2 plugs are used exclusively for DC fast charging. They are the same form-factor as regular type-2 plugs with the addition of two dedicated DC pins below.

Nissan and Mitsubishi brand cars use type-2 plugs for level 2 AC charging but use a CHAdeMO plug for DC fast charging.

A comparison of each can be seen below.


Most DC fast-charging systems in Australia simultaneously offer both CCS 2 and CHAdeMO.

For all AC charging, Type-2 has become all but ubiquitous (all new vehicles now use this standard plug). Council, in considering EVSEs, should similarly choose AC EVSEs with type-2 plugs and DC chargers with both CCS 2 and CHAdeMO plugs.

**Cables**

EVSEs feature either a **tethered plug-and-lead** or **socket**.

A tethered plug-and-lead is designed to plug directly into the charging port of a vehicle.

- The advantage of tethered plugs is the user experience - it is easy for drivers to simply park and plug-in.
- The disadvantage is that these cords get damaged over time, particularly in high use public carparks. If the cord of a tethered EVSE is destroyed, then the whole device must be replaced at high cost.
- Tethered plug-and-lead is the norm for fast charging. Larger fast charging units have built-in cable management systems.

A socketed (also known as 'universal') EVSE requires drivers to Bring Your Own Cable (BYOC).

- The advantage of BYOC is that between charging sessions there are no cables lying around, mitigating the risk of tripping, cable wear and tear and reducing the risk of vandalism or theft.
- The disadvantage of BYOC is the user experience of needing to retrieve a stored, furled cable from the vehicle and then plugging it into both the EVSE and the vehicle.

Tethered leads are better suited to fast charging and home charging, whilst more exposed locations such as public carparks and workplaces are often better suited to a socketed EVSE.

ChargeWorks recommends that Councils applying for grant funding focus on socketed EVSEs to limit risk and reduce maintenance issues.

Tethered plug and lead EVSE

Socketed EVSE

## Appendix F - Other supporting considerations

**To supplement – EV Charging Station Project**

1. **Background**

   Reference to previous Council resolution requesting "*A further report be provided to the April 2025 Council meeting on the proposed EV Station including the location, power availability, and the estimation of costs.*"

2. Discussion and use of the information contained within the WSC EV Charging Feasibility Assessment Report undertaken by ChargeWorks Pty Ltd.

   In April 2023, ChargeWorks Pty Ltd was engaged under the NSW Sustainable Councils Program to assess the viability of electric vehicle (EV) charging infrastructure across Warren. The resulting report, delivered in November 2023 (refer Appendix E), identified a significant gap in regional EV infrastructure and referenced the NSW Government's Electric Vehicle Strategy, which forecasts that more than 50% of new vehicle sales will be electric by 2031.

   While the report provides valuable insights, it contains a minor factual inaccuracy: it identifies the electrical capacity of the Council Administration Building on Dubbo Street as approximately 400A (three-phase), whereas the actual capacity is 200A (three-phase). Additionally, the report presents its findings in brief form and does not include detailed cost estimates for the three priority sites identified.

   The recommendations outlined in the report may support council applications to the NSW Destination Charging Grant Program for eligible sites. Furthermore, the report may assist council in engaging with fast-charging providers to explore future funding opportunities under relevant grant schemes.

   ChargeWorks recommended the installation of Level 2 chargers (ranging from 7kW to 22kW) at three priority sites, based on criteria including existing power infrastructure, proximity to local businesses and tourist attractions, council land ownership, and eligibility for grant funding. The report also encouraged council to consider partnerships with the private sector and to remain open to the future installation of higher-capacity chargers (e.g. 50kW or greater), subject to the availability of upgraded power supply.

3. **Summary of Current Funding and Grant Issues;**
   *Any concern about LRCI grant funding being lost if there is a deadline and whether the LRCT Grant deadline can be extended if needed. ?*
   *The actual LRCI Grant Program Budget, is it $75,000 or $38,000?*

   Warren Shire Council received a total allocation of $1,033,225 under Phase 4 of the Australian Government's *Local Roads and Community Infrastructure (LRCI)* Program, comprising:

   - Part A – $655,258 for use on local roads and community infrastructure projects; and
   - Part B – $377,967 for exclusive use on roads projects in rural, regional, or outer-urban areas.

Among the projects funded under Part A is the "Windows on the Wetlands Centre Precinct – Net Zero" initiative, which aims to support the region's net zero emissions goals through the installation of up to three electric vehicle (EV) charging stations.

The total estimated cost for this project is $75,000, funded as follows:

- $37,996 from LRCI Phase 4 – Part A
- $37,004 from Council internal reserves

The project is fully funded, including a 10% contingency allowance to cover ancillary items such as signage, bay painting, and software licensing.

## LRCI Grant Conditions and Deadlines

The LRCI Phase 4 program is subject to strict delivery timeframes and funding conditions:

- Agreement Start Date: 1 July 2023
- Grant Executed: 3 July 2023
- Work Program Approved: 10 April 2024
- Construction Completion Deadline: 30 June 2025
- Final Cost Reconciliation Deadline: 31 December 2025
- Agreement End Date: 30 June 2026

Under Clause 5.1 of the LRCI Grant Agreement, *"Construction activity on Eligible Projects must be undertaken between 1 July 2023 and 30 June 2025. Other eligible costs may continue until 31 December 2025."*

Clause 5.4 of the LRCI Round 4 Program Guidelines further clarifies that *"It is not expected that requests to extend the Eligible Construction Time Period (ECTP) beyond 30 June 2025 would be needed or granted. Planning issues and general delays associated with construction will not be considered exceptional circumstances."*

Recent liaison with LRCI Grant officials confirms that extensions to the construction deadline **will not be granted**, reinforcing the need for timely project delivery in accordance with approved milestones.

**4.** The reasons why Council was unsuccessful with a further EV Station Grant to be added to the LRCI Grant;

Previous Electric Vehicle Charging Grant Rounds – Council Participation Overview

Warren Shire Council has previously explored opportunities under the NSW Government's Electric Vehicle Destination Charging Grant Program and related funding initiatives. However, eligibility constraints have limited participation in several rounds to date.

Rounds 1 & 2 (May 2022 – December 2023): These rounds required councils to co-fund 25% of the purchase and installation costs for EV chargers, with grants covering up to 75% of costs. Due to the co-funding requirement, Council did not pursue these rounds.

Expression of Interest – Fast Charging Site Host (May 2024): Council submitted an EOI to host a fast charging site and awaits further developments.

EV Electric Fleet Incentive (July 2024): This initiative was not applicable to Council's operations and therefore not pursued.

Round 3 (March 2025): This round was open exclusively to private EV charge point operators (CPOs) installing public low-powered DC chargers (24kW to 100kW) in designated regional zones (GREEN and BLUE Zones). As Warren LGA was not included in either eligible zone, Council was not eligible to participate.

Round 5 (Open 22 April 2025; Closing 11 June 2025): Council is not eligible for this round, which targets organisations operating a fleet of at least three vehicles (including internal combustion engine, hybrid, plug-in hybrid, or battery electric vehicles) or those owning a licensed taxi in NSW.

**5. The charging abilities difference between a 60kW charging station and a 240kW charging station and what have other Councils in the area installed;**

*What are the practical considerations, how many cars can be charged at once, how are we going to charge for the electricity;*

**Charger Capacity Considerations and Regional Context**

Fast chargers offer significantly reduced charging times compared to standard Level 2 chargers. For example:

- A **60kW DC fast charger** can fully charge most electric vehicles within approximately **one hour**.
- A **240kW ultra-fast charger**, operating at maximum capacity, can deliver a full charge in as little as **15 minutes**.
- These chargers typically feature **two charging ports**, enabling simultaneous use by multiple vehicles.

To provide context for regional deployment trends, the following is a summary of EV charging infrastructure installed by neighbouring councils and key locations:

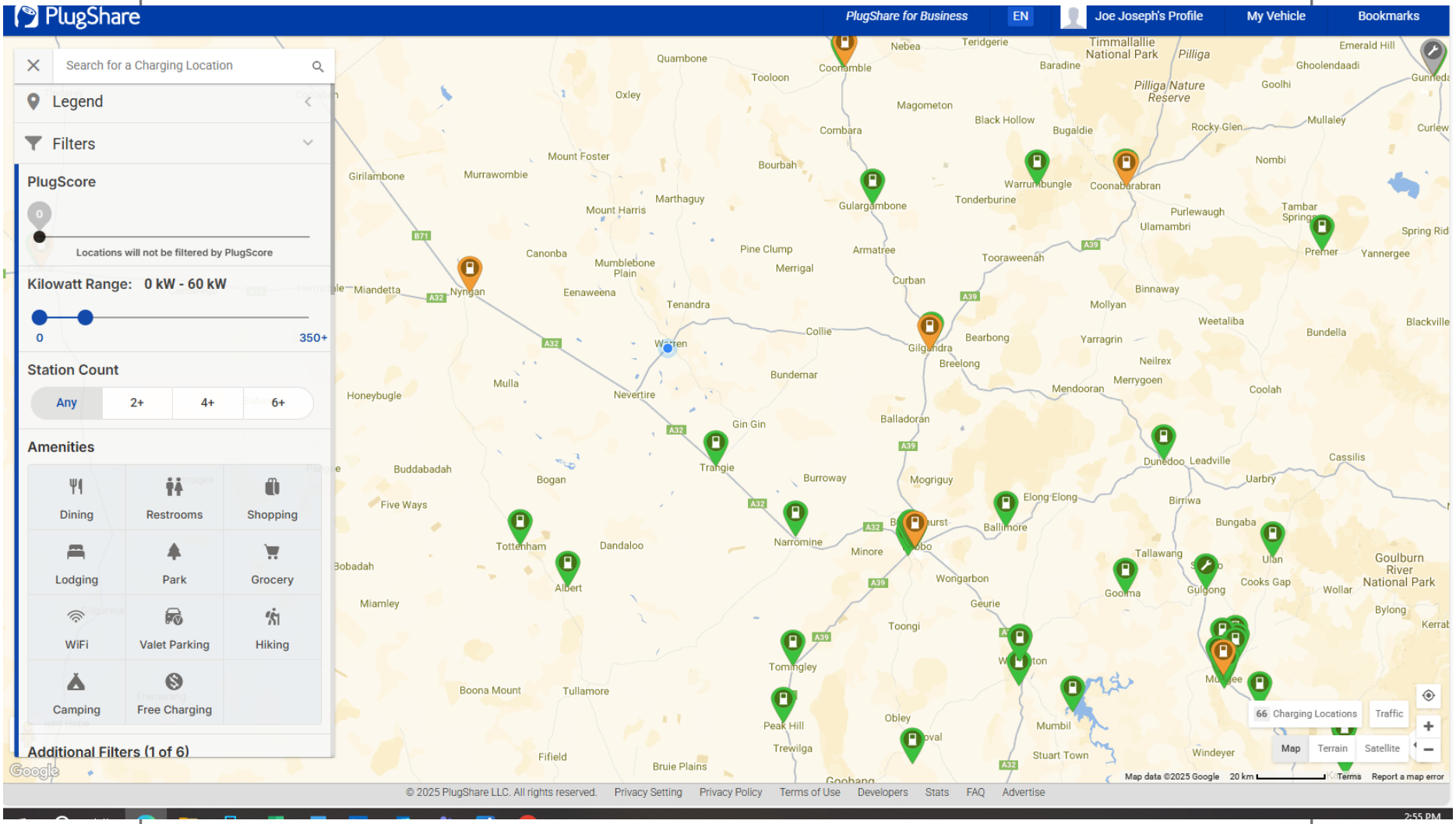
| Location | Charger Type(s) |
|---|---|
| **Lachlan Shire Council** | 2 × 22kW (3-phase), 1 × 7kW (single-phase) |
| **Weddin Shire Council** | 1 × 22kW (3-phase) |
| **Bathurst Regional Council** | 1 × 7kW (single-phase) |
| **Orange – Waratah Sports Club** | 1 × 22kW (3-phase) |
| **Shearing Shed Motor Inn, Dubbo** | 1 × 22kW (3-phase) |

| Location | Charger Type(s) |
|---|---|
| **Forbes Shire Council** | 1 × 60kW DC fast charger |
| **Nyngan** | 1 × 50kW DC fast charger |
| **Trangie Caravan Park** | EV chargers installed (specific capacity not detailed) |
| **Narromine Tourist Park** | 20 EV chargers (likely a mix of Level 2 and/or DC) |
| **Dubbo** | Range of chargers from 22kW to 50kW |

These examples illustrate a varied approach across the region, with many councils installing **22kW three-phase chargers** to support local and visitor demand, while some, such as Forbes and Nyngan, have opted for **faster DC options (50–60kW)** to enhance convenience for through-travellers.

This regional snapshot can inform Warren Shire Council's planning by identifying trends, assessing community expectations, and guiding investment in charging infrastructure that meets both local needs and regional tourism objectives.

An interactive online map showing the locations of EV chargers is included below. This map is regularly updated by users and service providers and provides real-time visibility of available charging infrastructure across the region.




PlugShare - EV Charging tion Map - Find a place to charge your car!

**6.** What is wrong and right with the VIC location;

Although the Visitor Information Centre (VIC) is not located on Dubbo Street and is approximately a 10-minute walk from the town centre, its high visibility and proximity to key tourist attractions make it a strategic site for promoting electric vehicle (EV) tourism in Warren. Also known as the Windows on the Wetlands Centre, the VIC is a well-recognised destination featuring birdwatching areas, walking trails, an art gallery, and a café. Situated on the main approach road into Warren via Coonamble Road, it is regularly frequented by travellers seeking tourism information or rest stops.

The site has access to a redundant power source from the adjacent sewage pump main switchboard, providing an estimated 80A three-phase capacity—sufficient for Level 2 EV charging infrastructure and supporting its designation as a high-priority location. Additionally, staff at the VIC are well-positioned to engage with EV users, further promoting tourism opportunities across the Warren Local Government Area.

**7.** The setup underground and electricity supply ability at Carter Oval Youth Sports Complex carpark;

Council has proactively made electrical provisions for EV charging infrastructure at the Carter Oval site by installing underground conduits within the car park. The main switchboard at Carter Oval is currently supplied with a 200A three-phase feed, which services the flood lighting, amenities, and the nearby sewage pumping station. As the site's primary electrical load is attributed to oval flood lighting, the installation of a 22kW charger with a load limit switch is considered the most appropriate solution to ensure safe and efficient energy management.

The proposed charging location is situated within a dedicated parking area at the Carter Oval Youth Sports Precinct, adjacent to the swimming pool and other sporting and recreational facilities. This site experiences high levels of foot and vehicle traffic during the sporting season, contributing to consistent visibility and usage of the charging infrastructure. Located approximately 720 metres from the town centre, an 8-minute walk, the site is well-positioned to serve both local residents and visitors.

**8.** The setup and electricity supply ability (7kW, 22kW, 60Kw, 240Kw) at the proposed Dubbo Street location in front of the Council Administration Centre;

Traffic Committee and parking area considerations for any on-street locations;

The Dubbo Street location is well-suited to serve both local residents and visitors, given its proximity to shops, cafés, essential services, and Council's Administration Building. As a high-traffic area in the heart of Warren, the site offers strong potential for consistent visibility and utilisation of EV charging infrastructure.

The site is powered by a 200A three-phase feed to the Council Administration Building, a capacity verified by Essential Energy staff in Warren. Preliminary assessments suggest that

this supply is adequate to support the installation of a 22kW Level 2 charger on the street. However, implementation at this location would involve more intrusive civil works, including trenching beneath existing footpath pavers. Despite these additional requirements, the site remains technically viable and strategically significant due to its central location.

This site is most appropriate for a 22kW charger; the installation of a higher-capacity fast charger would require substantial system upgrades to the existing electrical infrastructure.

**9. Site Assessments** Include a comparative analysis of potential sites:

Should we prioritise to say 3 locations, perhaps VIC at 2 Coonamble Road, Dubbo Street location in front of the Council Administration Centre and the Carter Oval Youth Sports Complex carpark;

| Location | Advantages | Disadvantages | Power Availability | Estimated Cost |
|---|---|---|---|---|
| VIC (2 Coonamble Road) | Existing visibility, tourist link | Power capacity Parking layout | 80A – Suitable for 38kW maximum, Best suited for 22kW without major upgrade | $18,006.77 |
| Carter Oval Youth Sports Complex | Space availability | Distance from main thoroughfare? | Underground setup ready<br>200A Load capacity during off peak | $14,961.00 |
| Dubbo Street (Council Admin Centre) | Central location, visibility | Traffic committee input needed | What level of charging is feasible? (7kW/22kW/60kW/240kW?) | $33,073.00 |

**10. Traffic Committee and parking area considerations for any on-street locations;**

Input from the Warren Traffic Committee is required to assess the suitability of on-street parking for the proposed EV charging installation on Dubbo Street. Key considerations include maintaining safe pedestrian access, ensuring adequate vehicle turning paths, and accommodating existing 45-degree angle parking arrangements. Due to the angled configuration, the EV charger will need to be positioned slightly away from the kerb, which may affect the reach and usability of charging leads. These design implications should be carefully reviewed during the detailed planning phase to ensure compliance with safety standards and accessibility requirements.

**11. Budget & Funding Strategy;**

Where Council will obtain the extra funds if needed over and above the LRCI Grant Funds allocated to the proposed project;

The project remains fully funded under LRCI Phase 4 and Council Reserves, with sufficient contingency (10%) for signage, bay painting, and software. Works must be completed by 30 June 2025, with associated project costs finalised by 31 December 2025, in line with LRCI conditions.

**Identify funding shortfall (based on preliminary costings) - Nil**

**Suggest possible funding sources** for the gap: internal reallocation, further grants, partnerships with private providers (e.g., Chargefox, NRMA, Tesla destination chargers).

**12. Proposed Prioritised Options:**

Recommend narrowing the scope to **three locations** for detailed feasibility:

- VIC – 2 Coonamble Road
- Dubbo Street – in front of Council Admin Centre
- Carter Oval Youth Sports Complex carpark