STANDING COMMITTEE ON PLANNING, TRANSPORT, AND CITY SERVICES Ms Jo Clay MLA (Chair), Ms Suzanne Orr MLA (Deputy Chair), Mr Mark Parton MLA

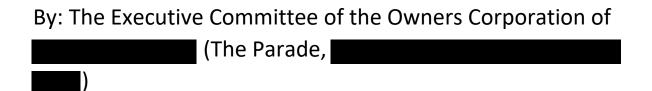
Submission Cover Sheet

Inquiry into electric vehicle (EV) Adoption in the ACT

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Submission on Inquiry into Electric Vehicle Adoption in the ACT 26 August 2022



The Parade is the final building in the Campbell5 development undertaken by JWLand. The building has been ready for occupation since July 2021. There are 242 units, being a mix of 1,2, 3 and 4 bed apartments and a rooms-only hotel of 60 rooms leased to the Sebel Group and ready for occupation before year end (2022).

Like other buildings in the Campbell C5 precinct The Parade has NOT been constructed as electric vehicle (EV) ready. A study carried out for the ACT Government by Urbis "Is your building EV Ready?" undertaken in June 2022 and released on 20 July 2022 states "the provision of EV Ready development standards for new developments will be key to the successful rollout of EVs in the Territory". The ACT Government plans to change the planning legislation with effect from 2023 to ensure that new developments are constructed as EV ready.

This change in planning legislation will not help The Parade and all other multi-dwelling buildings in ACT approved before 2023 (when new planning legislation is due to come into effect). All these buildings face a complex and expensive retrofit to enable residents to charge their EV in place. By 2030 the number of EVs in ACT is expected to be at least 25,000 and take-up if it is evenly spread between different resident types ¬8,333 (33% of total) are likely to be in multi-dwelling or semi-detached dwellings.

Another barrier to making multi-dwelling buildings such as The Parade EV ready is the capacity of Evoenergy's distribution network and its ability to support a wide-scale increase in average demand due to EV charging and the broader electrification of energy demand (including hot water and heating). The capacity constraints of the network are unknown and merit immediate investigation.

The lack of "in place" charging in The Parade has been identified by 70% of The Parade's EV survey as a significant barrier to EV ownership. Key issues relating to the required infrastructure retrofit include:

- Building has not been constructed to be EV Ready
 - "EVs use a more decentralised vehicle charging network involving charging from home, the shops or work rather than needing to make designated stops at a petrol station¹". "In place" charging (i.e. a power point in each resident's car space) is expected to account for 70% of all EV charging²
- All car parking spaces have been allocated as part of the Unit Titles
 - The option of installing chargers in common car parking spaces could only be taken up if owners agreed to rent excess car parking spaces to the Owners Corporation. This would would result in increased costs for the EV charging infrastructure and add a measure of long-term uncertainty on account of the availability of leased car spaces.

¹ Is your building EV ready? June 2022, Page 6

² EV Charging Outlook for the ACT 2021, Urbis June 2021

Complexity

- The capacity of the power supply to The Parade is likely to require an upgrade to cater for the additional load from "in place" charging.
- The space available in the building risers is insufficient to support a large number of connections between parking spaces (distributed throughout the three parking levels) and the associated owner's meter (located on the same floor as their apartment.) A practical solution is likely to be staged, ultimately involving the deployment of an electrical spine for distributing communal power throughout the parking levels, with sub-metering of spurs that are installed to individual parking spaces as the fleet of EV's grows.

Cost

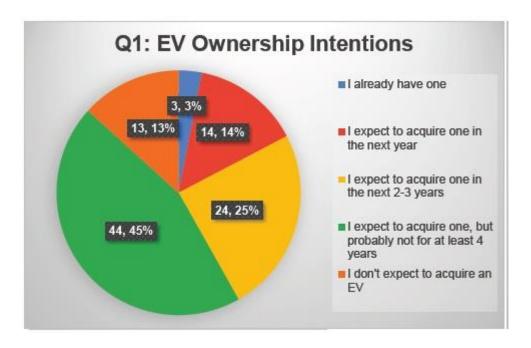
- O If the technical problems can be solved, ie capacity and wiring, the cost is likely to be very substantial. There is a significant upfront fixed cost associated with establishing enabling infrastructure for EV charging. Given changing technological developments and a desire by owners for a full user pays system (refer The Parade) we believe that it will be very difficult to get owners' agreement to establish this infrastructure until a substantial portion are actively considering purchasing an EV.
- Urbis estimates the cost of retrofits (excluding upfront infrastructure costs) in multi-dwelling buildings as between \$2,500 and \$8,000 per carspace³. We expect, given the inherent constraints in The Parade, that the per carspace retrofit cost is likely to be at the top end of the range, say \$5,000 to \$8000.
- The total cost would ultimately need to be borne by residents under appropriate "user pays" principles. To the extent that EV charging available to any parking space increases the value of units, a portion may be recoverable through body corporate levies, irrespective of whether the unit owner has or intends to purchase an EV. The balance of the capital costs (along with operating costs) would need to be recovered more directly from the individual EV owners deriving the benefit of "in place" charging.
- Access to sources of interest free funding would facilitate the early provisioning of the base infrastructure needed to provide the framework for growing EV uptake.

Preliminary enquiries undertaken by The Parade's Executive Committee and a working group established to look at long term energy sustainability suggest that the retrofit required will be both complex and costly.

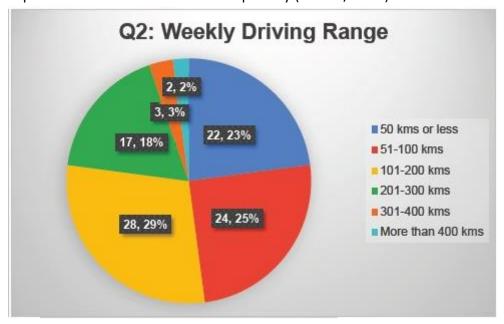
³ Is your building EV ready? June 2022, P9

A recently conducted resident's survey with 98 responses (40.5% response rate) revealed the following:

• 41 respondents expect to purchase an EV by 2025, a take up rate of 16.9% compared with the expectations of ACT Government central case of 1.8%⁴

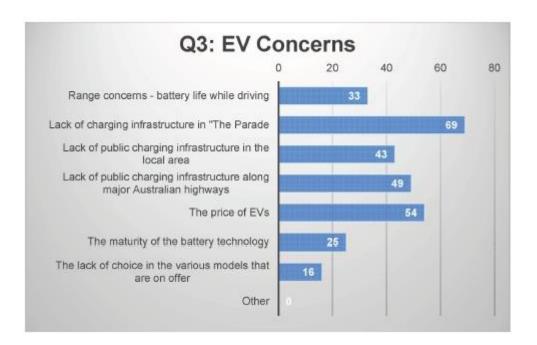


• 95% of respondents expect to use their EV for local commuting with only 5% expected to travel more than 57km per day (400km/week)

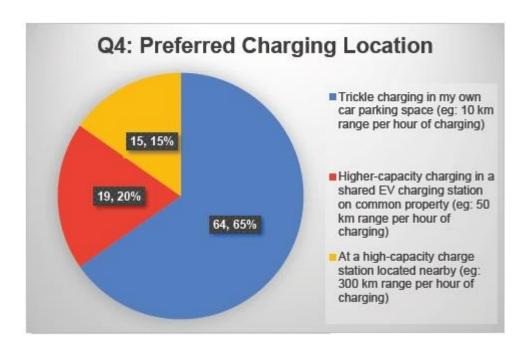


⁴ EV charging outlook for the ACT. Guidance for Industry, December 2021 Appendix B (EV uptake rates lower case 3.8%, central case 7.8% and higher case 13.8%)

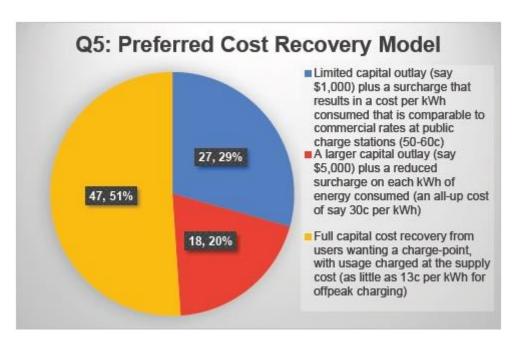
• The three main concerns for residents were the lack of charging infrastructure in "The Parade" (69 respondents), the price of electric vehicles (54 respondents) and the lack of public charging infrastructure along major Australian highways (45 respondents).



 Respondents charging preferences are 65% trickle charging "in place", 20% higher capacity chargers located in common property area (50km/hour) and 15% higher capacity public chargers located nearby (300km/hr)



• Full cost recovery from users for EV chargers and associated infrastructure with no cost to unit owners who do not own an EV was the favoured model for 51% of respondents with the balance preferring an upfront cost from EV owners of between \$1,000 and \$5,000 plus a consumption charge of up to 30c/kw



The Parade's Owners Corporation is committed to assisting the ACT Government in achieving net zero emissions by 2045 and welcomes the incentive packages announced to date. The announcement on 20 July 2022 of \$2,000 to subsidise the cost of making multidwelling buildings EV ready should, in our view, be allocated per unit and should be more closely related to the expected cost of \$5,000 to \$8,000 per unit.

Assistance from the ACT Government is sought for the following:

- Locating (as soon as possible) one or more high-capacity public charge stations in the Campbell C5 precinct to demonstrate the government's support for the transition to EVs, and to offset the delays that are likely to be faced in establishing longer term infrastructure to support overnight charging in parking locations.
- Funding a feasibility study to determine options for a retrofit of The Parade's infrastructure having regard to likely technology changes.
- Subsidies and/or favourable funding arrangements for retrofitting buildings such as The Parade.