

15th February 2022

MEMO

Project: 21-41 Canberra Ave and 18-32 Holdsworth Ave, St Leonards South

This memo has been prepared as a response to the below Draft DA Condition:

C.8.T (8)

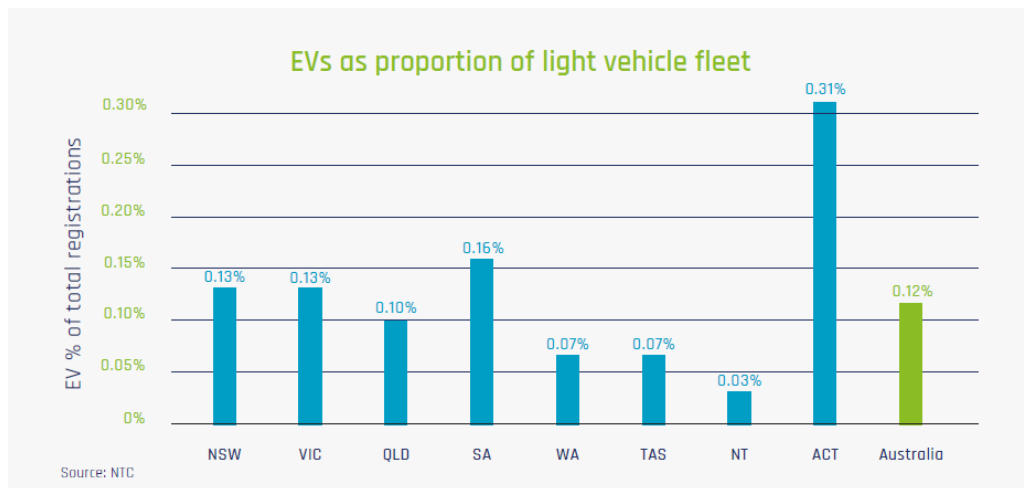
All residential dwellings spaces are to be provisioned with cabling (and adequate electricity capacity provided) for electrical vehicle charging. That is, all dwellings allocated 1 or more car parking spaces are to have private cabling provision for a minimum of 1 car parking space. Certification is to be provided to the certifier prior to the issue of a Construction Certificate in relation to this requirement from a suitably qualified person. The cabling infrastructure is to be located in such a way that the installation of a car charger would not impact parking space dimensions (e.g. infrastructure raised on tracks or similar).

IGS are of the opinion that private cabling/power provision for every dwelling is considered excessive for this project. The ESD report dated 7th June 2021 submitted with the development application DA99/2021 details the requirements proposed for electric vehicle charging on this project being 5 electric vehicle chargers per building or a total of 25 for the development.

Our recommendation is based on the following considerations, with particular reference to the Electric Vehicle Council – State of Electric Vehicles report dated August 2021.

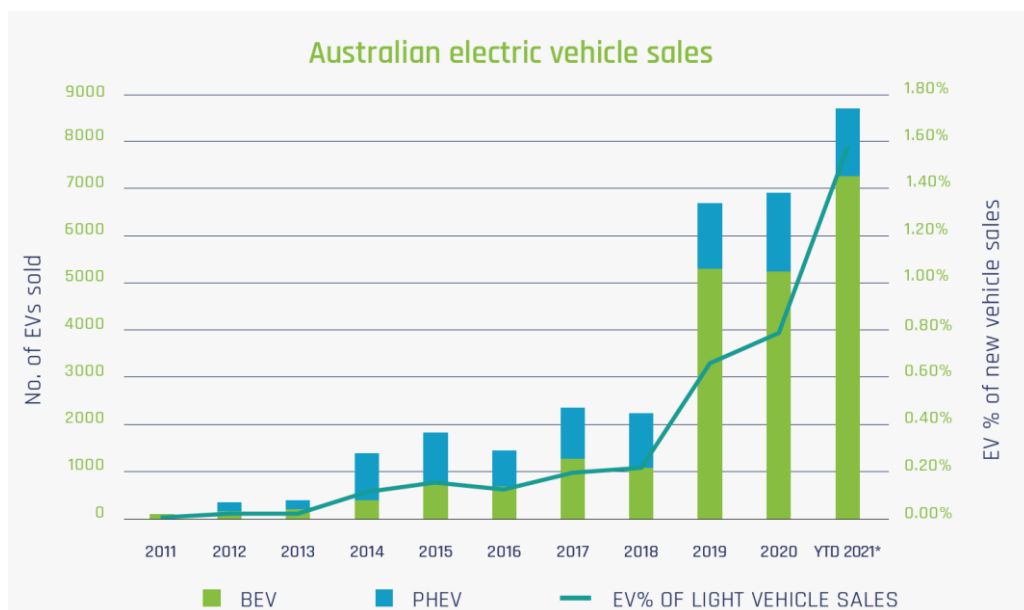
The report concludes the following key findings:

- As it relates to car ownership, only 0.12% of all light vehicles in Australia are electric vehicles. 99.88% of light vehicles are still fuel or gas powered.
- In 2021 – electric vehicles represented only 1.57% of car sales in Australia
- NSW has a target of 52% electric new car sales by 2030. This does not directly translate to car ownership, only sales.
- Electric vehicle sales are expected to grow, however there are no current findings that provide a forecast when 100% electric car ownership will occur, it is reasonable to deduce this could be in 20-30 years or possibly even longer.



With additional models – some at lower price points – expected in the coming years, electric vehicle sales and market share will continue to increase.

Source: Electric Vehicle Council – State of Electric Vehicles report dated August 2021.



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A consent condition requiring provisioning for every single apartment is considered an unnecessary commercial constraint given the ownership and sales projects available. Additionally it is expected that technology will dramatically change during the next decade as electric car sales increase. This will potentially change the method and type of reticulation for electric vehicle chargers.

Finally, if such a consent condition is imposed it is likely an additional substation will be required to be incorporated into the development which will be dedicated to electric vehicle charging and not utilised effectively given the long term projection of electric car ownership.

Conclusion & Recommendation

Top Spring are proposing the below:

- The installation of 5 electric vehicle chargers per building or a total of 25 for the development.
- The proposed basement provides for 306 residential apartment parking spaces (372 less 66 visitors)
- The provision of 25 chargers equates to 8% of residential parking spaces (as compared to only 0.12% electric vehicle ownership in 2021). This allows for short term growth in electric vehicle take up.
- The future owners corporation can install additional EV chargers, as and when the demand arises
- IGS are of the opinion that sufficient electric vehicle chargers have been allowed for as indicated in the ESD report dated 7th June 2021.

Should you require any further information or clarification, please do not hesitate to contact me.

Oudai Awad – MIEAust CPEng NER RPEQ BDC



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