

16 July 2025

Ms Lynda VOLTZ, MP

Chair

Legislative Assembly Committee on Transport & Infrastructure

By email: transportinfrastructure@parliament.nsw.gov.au

Re: Questions on Notice

Dear Ms Voltz.

On behalf of the Electric Vehicle Council, I would like to thank the Committee for the invitation to present at your hearing into infrastructure for electric and alternative energy source vehicles in NSW.

As the peak national body for the electric vehicle industry, the EV Council fully understands the role that convenient, reliable and affordable access to charging infrastructure plays in the broader adoption of EVs, in NSW and across Australia.

We congratulate the Committee for its interest and insightful questions on this matter and enclose our response to the two questions we took on notice. We would be happy to elaborate on any further details of interest to the Committee.

Thank you again for the opportunity to provide the EV Council's views on this important topic. We look forward to collaborating across the NSW Government to shape EV and charging policies that benefit the entire community.

Sincerely,



Julie Delvecchio Chief Executive Officer Electric Vehicle Council

LEGISLATIVE ASSEMBLY COMMITTEE ON TRANSPORT AND INFRASTRUCTURE

Infrastructure for Electric and Alternative Energy Source Vehicles in NSW

Monday 30 June 2025

Q: Should there be some kind of regulatory framework around freight and logistics companies to have that infrastructure as part of their destination, particularly when it comes to rural and regional New South Wales? Should there be some kind of planning controls or regulatory requirement so that there is adequate charging for heavy vehicles at the destination points?

A: At this stage in the EV transition, regulatory mandates for charging infrastructure could prove counterproductive to fleet electrification. Unlike passenger vehicles, EV deployments in freight are less a question of individual consumer choices and more the product of bespoke, multi-stakeholder commercial partnerships. This extends to the provision of the necessary charging infrastructure too.

Since the sticker price of an electric truck can still be double that of a diesel, most deployments to date have been collaborative partnerships across supply chains. For example, this could include:

- A retailer, who may have a target for zero emission deliveries
- A corporate transport company, with its own ESG targets
- An Original Equipment Manufacturer (OEM) of electric trucks
- A fleet management company that leases out electric trucks
- Several owner-operators, subcontractors or their drivers, who operate the electric trucks under long-term leases

Typically, such a commercial partnership would also include a supplier of EV charging equipment for the provision of truck charging infrastructure, be it at a depot, the retailer's premises or indeed the driver's own home.

The specification of the infrastructure required depends on the specific freight task (e.g. the truck's delivery schedule, the driving range and battery capacity, the charging speeds required, where the truck is parked overnight etc.). All of these variables change from operation to operation and EV deployments will continue to involve tailored charging solutions for individual freight operations into the foreseeable future. Since there is no one-size-fits-all for electric freight vehicles, specifying pre-defined charging requirements in regulations is unlikely to be fit for purpose.

A premature focus on mandating chargers on private premises could misdirect more immediate investment priorities. Recent <u>research commissioned by the Australian Renewable Energy Agency (ARENA)</u> suggests an efficient transition to freight electrification should focus on *public* charging hubs, concentrating on urban last mile deliveries in the first instance.

Notwithstanding the above, it will be increasingly important for *new* freight facilities to at least be ready for the power requirements of an electrifying fleet. To future-proof new builds (and avoid costly retrofits), development applications for <u>dedicated</u> freight and logistics facilities should ideally have regard to:

- Ensuring new sites are serviced with an adequate grid supply to power multiple heavy electric vehicles simultaneously
- On-site energy infrastructure (e.g. inverters, transformers, switch boxes and cabling) that can accommodate heavy vehicle charging equipment or are modular enough to be added in the future
- Provision for a second line of supply/alternative grid connection, particularly for large footprint sites
- Opportunities for on-site storage and load management, for chargers and broader on-site energy consumption
- The provisions of Part J9 of the National Construction Code, to the extent they apply to parking for freight vehicles (noting that specific requirements for depotbased charging should ideally be considered in the next review of the Code).

As electric trucks become more ubiquitous, there may come a time when a base level of charging infrastructure for heavy vehicles can be appropriately stipulated in government regulation. At this early stage of adoption, however, government incentivisation of electric trucks (and their charging needs) would be more beneficial than punitive regulations.

Q: Do we know the demographics of that outer suburban uptake? Is it young families or older people that are retired? Do you know the demographic breakdown on that increase in sales?

The Electric Vehicle Council has undertaken proprietary research into EV uptake, based on sales of Australia's leading EV models, by postcode. This analysis reveals that outer metropolitan suburbs account for around 43% of EV sales (in FY 2024), surpassing sales to inner city postcodes. 61% of EV sales were by residents in outer metropolitan, regional or rural locations. In NSW, some of the highest uptake is in outer metropolitan areas like Rouse Hill, Kellyville and Parramatta.

Demographics of EV buyers broadly mirror the demographics of the outer suburbs themselves; typically working families, multi-car, mortgagee households, often from

Response to Questions on Notice – Electric Vehicle Council

diverse backgrounds. In fact, there is some correlation between Indian- and Chinese-Australians and higher-than-average levels of EV ownership.

In addition, the Electric Vehicle Council runs one of Australia's largest surveys of EV owners on an annual basis, in collaboration with the University of Sydney's Institute for Transport and Logistics Studies. The 2024 edition included a sample size of over 1,500 EV drivers from across all states and territories, in both urban and regional areas.

The findings from that report reveal:

- Most EV owners rely on home charging some 90% of EV charging is done at residences
- 80% of those charging at home already have solar panels
- Savings of at least 60% were reported by three-quarters of respondents, compared to their previous petrol/diesel vehicles.

The results of the next EVC Ownership Survey will be published later in 2025.