

**Submission  
No 43**

**INFRASTRUCTURE FOR ELECTRIC AND ALTERNATIVE ENERGY SOURCE  
VEHICLES IN NSW**

**Organisation:** ChargePost

**Date Received:** 2 May 2025

**Ms Lynda Voltz, MP**  
**Committee Chair**  
**Inquiry into infrastructure for electric and alternative energy source vehicles in NSW**

2 May 2025

Dear Ms Voltz, MP and Committee Members,

**Re: Terms of Reference**

- a) funding and location of electric vehicle chargers or infrastructure for other potential energy fuel sources***
- c) use of existing infrastructure and measures to ensure a competitive market, including 'ring fencing' policies***

**ChargePost**

ChargePost are an Australian company which supplies and operates high-quality UK manufactured AC kerbside EVSE. We provide solutions for DNSP, LGA and other entities including government and private enterprise. ChargePost works under guidance from CityEV which is a major supplier of EVSE primarily in Europe and expanding into other markets including India, USA and Australia.

**World-leading Kerbside EVSE**

Many of the functions and features on CityEV EVSE have evolved over 10 years in the highly contested UK kerbside market. The EVSE was specifically designed to be deployed on existing electrified infrastructure adjacent parking spaces. In the UK this was primarily on lamp columns but also includes commuter car parks, hospitals and workplaces. This equipment had to be safe, accessible, reliable, easy to use and, most importantly, have a form factor which would not impede on the streetscape.

**The AC Advantage**

AC EVSE supplies controlled energy to on-board chargers within EV. These OBC convert the energy to DC which is then sent for storage in the battery pack. Although AC EVSE are frequently referred to as chargers the term controllers more accurately describes their function. Not having to house a charger enables the form factor, and cost, of the EVSE to be significantly less than DC alternatives. Socketed solutions (which require a BYO connector cable) in contrast to tethered solutions (cable already connected) reduce the cost even more and reduce unnecessary intrusion into the streetscape, ensure the responsibility of the cable is on the road user and are less likely to suffer vandalism.

Cost efficiencies and increased reliability are big advantages AC has over DC EVSE. Instead of one rapid charge point there can be as many as 20 AC charge points. A disadvantage is the rate of charge, but a parked car is often stationary for lengthy periods. At an average of 11kW a typical EV adds approximately 60km an hour. Even vehicles with completely depleted large batteries can be fully recharged in 10 hours.

Matching the charging opportunity to the dwell time of the vehicle is a crucial to solving the infrastructure problem. Authorities ought to carefully consider the needs of the parking space users. Charging while parking is an efficient use of time and energy and enables many more charge points to be deployed forming the backbone of the infrastructure. AC EVSE has been shown to perform this function in many overseas markets.

## **The UK Proliferation of AC EVSE**

As at the end of February 2025 there were approximately 75,000 publicly accessible charge points in the UK. 70% of these were AC charging between 3.6kW to 22kW. Kerbside charging is a crucial and well-utilised part of the charging infrastructure as up to 30% of residents don't have access to off-street parking.

Mandated ZEV targets have moved in correlation with the rise and fall of conservative and progressive governments. 2030 targets were pushed out to 2035 and beyond. Nevertheless, the impetus to attain these moving targets has required constant proliferation of publicly accessible charging infrastructure. There are currently tenders and project pipeline for 30,000 more charge points. The UK will likely surpass 100,000 charge points by mid-2026, possibly even sooner. Even with this planned increase the public are still calling for more - especially in outer regions.

## **LGA-led Rollout in the UK**

In the UK the distributors permit CPO to deploy EVCI in partnership with LGA. This enables a highly contestable market for EVSE suppliers and CPOs. LGA receive significant national funding such as LEVI grants and are comparatively advanced in terms of planning for CPO deployment. It is worth noting that the UK began this process at least 10 years ago. As some LGA achieve almost complete market saturation we see examples of public AC EVSE functional ubiquity occurring in zones around London.

## **What is Public AC Functional Ubiquity?**

Public AC functional ubiquity occurs when an area achieves maximum charge point deployment opportunities based on existing electrified infrastructure capability and parking availability. Public AC functional ubiquity ought to be a priority in urbanised areas as it provides confidence in the charging infrastructure and should therefore increase EV uptake.

## **The Politics of Parking**

Parking is and will always be a contentious issue for LGA. In most cases the public accepts a first-in best-dressed approach in addition to requirements for preferential parking where necessary. Solutions such as preferential and non-preferential spaces for EV drivers are being trialled in NSW during this early phase of transition but either approach creates viability issues for the CPO.

An additional benefit of AC functional ubiquity is that parking spaces can still be shared between EV and ICE without the need for divisive and politically sensitive preferential parking. If a car park is not available adjacent to a charge point the driver can, ideally, find one nearby. While a small percentage of the population drives EV functional ubiquity is a solution to facilitate the political transition of parking.

## **Equity and Access**

This infrastructure is also crucial to ensure equity of opportunity for drivers to benefit from the cost savings of EV compared to ICE. It provides up to 30% more of the population in urbanised areas the confidence to drive EV. Even homes with off-street parking and charging opportunities at home will need this infrastructure. Achieving functional ubiquity by zone equalises access and ensures no-one misses out on the EV opportunity due to lack of public charging infrastructure.

## **LGA-led AC kerbside rollout in NSW**

There are transformative examples of LGA in Australia leading the rollout of AC EVCI and many of these are in NSW. Motivated LGA, some of which collaborate with neighbouring LGA, are prepared and proactive in the deployment of EVCI. Typically, these LGA have an EV charging strategy, identified sites and solutions, procurement processes and policies to engage with private suppliers and/or CPO. These LGA have benefitted from the well-designed NSW kerbside charging grants and are concluding or have completed round one installation and are now planning for round two expansion.

It is possible that these well-organised and resourced LGA will ultimately achieve public AC functional ubiquity if provided with further funding and planning support. It is also likely this will occur in correlation with the uptake of EV ownership but will not significantly accelerate the transition. Unfortunately, these LGA are in the minority and other NSW LGA will take significantly longer.

## **The Necessity for Expediency**

There are many reasons for the transport sector to transition rapidly to zero emissions. Climate change, public health outcomes, reducing the national dependency on oil are some of the major ones. None of these are issues which we can kick further down the road without abdicating our responsibility to a better future. Australia is already behind many nations in the effort to decarbonise and we risk becoming a laggard state with further delay. For a country that has an abundance of potential renewable energy we ought to be a world leader in utilising it.

## **The Chicken and the Egg paradox**

Publicly accessible and highly visible EVCI serves an important function of reassuring existing and future EV drivers that charging opportunities are available. To this end the EVCI should be built before demand can commercially sustain it. This presents as a barrier to uptake provided how expensive EVCI can be but can be partially solved by AC EVSE if deployed with subsidy. If a target of 100% of new vehicles are EV by 2035 is going to be achieved this infrastructure must be built sooner rather than later.

## **Kerbside Charging Requirements**

Kerbside charging can only occur when there is sufficient energy availability in the local grid and parking spaces for vehicles to charge safely. To avoid expensive and disruptive civil works it is preferable to deploy EVSE on existing electrified assets. These are owned almost exclusively by the distributors. Assets adjacent to current or potential parking spaces mostly consist of power poles and lamp columns. Many of these energised assets have the additional benefit of providing lighting at night.

## **The Role of the Distributors**

DNSP are crucial to the provision of kerbside charging opportunities as in addition to owning most of the energised assets they can also determine if a site is suitable and evaluate the availability of energy. Ausgrid, Endeavour Energy and Essential Energy all provide support and guidance for CPO and LGA nominated sites. This was evident during the Round 2 Kerbside grants with Ausgrid clearly outlining a process flow to obtain letters of support. Ausgrid were able to quickly respond to council supported sites and confirm or advise of suitability.

## **Facilities Access Fees**

It is fair that the distributors charge access fees for the use of these assets. They are already providing a service evaluating the sites and the asset itself carries additional costs. Facilities access fees must be fair and proportionate to the cost of enabling the equipment. These are clearly outlined in facilities access agreements and CPO must budget for these fees when determining site viability. Unfortunately, a consequence of these fees is the commercial necessity for dedicated EV parking spaces. Ideally DNSP would offer FAA by zone and CPO could deploy multiple EVSE without preferential parking spaces to assist the transition.

## **Government Leadership and Funding**

State and Federal Governments ought to take a wholistic view to supporting the infrastructure solutions required to incentivise and expedite the transition to EV. If the AC kerbside rollout is accepted as the foundation for the infrastructure, then the next problems are who should pay for it and how can this be achieved most efficiently.

Grants such as NSW Kerbside are well considered in their design and delivery and result in public/private partnerships which are providing valuable charging opportunities in well organised LGA. A dependency exists on the preparedness of the LGA, and an outcome of these grants is that some LGA are missing out altogether on AC Kerbside infrastructure because the LGA is simply not resourced.

## **LGA Funding**

LGA require funding to plan and facilitate the parking spaces required for EVSE deployment. If they are also expected to run procurement processes, then additional funding is also required. Without this support the LGA are forced to impose licence fees and/or revenue share on these spaces to recover costs. AC Kerbside infrastructure cannot sustain commercial viability paying for site licence fees on top of facilities access fees. This would require punitive prices for the consumer and undermine the purpose of the public charging infrastructure.

## **DNSP-led AC Kerbside Rollout**

Distributors are well positioned to lead the roll-out of AC kerbside EVSE because not only do they own most of the existing infrastructure they also have access to ongoing funding to maintain it through the Regulated Asset Base. The expansion of the RAB will mean that every energy account holder in the distribution area will bear the cost, but this increase is likely to be small. Public EV charging that is managed by the DNSP should also perform a service to the grid and benefit all users. Incentivising daytime charging either near home or work, balancing local phases and modulating loads are all achievable.

## **Demands of the Grid**

DNSP are understandably cautious and concerned about EVCI. One vehicle charging for two or three hours could consume more energy than a household might in a whole day. Several vehicles in the same day could become a significant problem. Isolated sites by themselves may make sense to CPO but might also present as a challenge to DNSP to maintain grid stability.

Smart EVSE such as publicly accessible charge points can modulate to best use the available energy in a local grid. While energy is abundant during a sunny day this can be absorbed by vehicles charging. When it becomes scarce such as in the evening peak it can be reduced.

This modulation could potentially interfere with the commercial viability of the charge point. Tarriff reform and incentivised or dynamic pricing can alleviate the demand but ultimately the EVSE ought to be acting in harmony with the demands on the grid. Consumers may be best served by a model which facilitates their desired length of stay and modulates their energy requirements using predictive algorithms and contract pricing.

## **Contestable Services and Consumer Outcomes**

Australians have learnt to be suspicious of monopoly manoeuvres surrounding regulatory reform and caution is required when considering requests to alter rules such as ring fencing. Contestability has long been supported to ensure better consumer outcomes and shifting away from it is cause for legitimate concern. Proponents in an emerging market are vulnerable to alterations and any decision to enable a monopoly to provide a solution could result in business disruption and possibly destruction.

Prioritising consumer outcomes is the best place to start the potential solution to the problem of providing the AC kerbside EVSE. Contestability will enable choice but may also hinder access for regional and remote consumers for whom EVSE commercial viability may be unachievable. Likewise, inner-city consumers may be left with inadequate provision of equipment and subsequently charged premiums to pay for preferential parking spaces thereby slowing the transition.

## **Potential Solutions and Recommendations**

Large infrastructure projects require Government leadership and collaboration with private partners to deliver solutions. Building the EVCI required for Australia to decarbonise the transport sector is no exception. Fundamental foundation building such as the publicly accessible AC kerbside solution should be a priority for governments as the problem of adequate provision of infrastructure will continue to exist until it is achieved.

Working backwards from AC kerbside functional ubiquity can illuminate potential solutions. Working from the outside in similarly shines a light on pathways to achieve them. Acting responsibly and ensuring a timely transition is essential.

To this end ChargePost recommends the following potential solutions:

- Enable and fund the DNSP-led roll-out of AC kerbside EVSE for regional and remote areas of NSW.
- Prioritise the AC kerbside functional ubiquitous solution for urban areas.
- Support LGA to prepare potential parking spaces suitable for kerbside charging.
- Support existing and future proponents to participate in the provision of EVSE.
- Encourage DNSP to consider facilities access fees by zone.
- Strongly consider enabling the DNSP-led roll-out of AC kerbside EVSE for urban and suburban areas.

We welcome the opportunity to discuss our submission with the Parliamentary Committee further. Please contact Blaise Northey, Managing Director at [REDACTED] for further information.

Kind regards,

ChargePost