Australian Electric Vehicle Association
www.aeva.asn.au

AEVA POLICY RECOMMENDATIONS: PUBLIC CHARGING INFRASTRUCTURE APPROVED BY THE BOARD: 7 JULY 2025

Policy statements

[1] AEVA recommends that, where governments provide financial assistance to install charging infrastructure, contractual agreements should mandate specific reliability guarantees.

[2] AEVA recommends that charging installations be accessible to users with a disability. In the absence of an Australian Standard for charger accessibility, the RAA *Design Guidelines for Accessible EV Charging Stations* should be used in the interim.

[3] AEVA recommends that governments specify standards for public charging concerning flexible payment mechanisms, open charging data and the visibility of fees.

[4] AEVA recommends that any charging infrastructure which is supported by state or federal funding should be subject to "idle fees" and that any rules on the misuse of EV charging bays are enforced.

[5] AEVA recommends that charge point operators install only CCS2 plugs for new installations. We strongly recommend that existing CHAdeMO plugs in service be maintained for the next few years at least, in support of owners of older vehicles.

[6] AEVA does not support 'free unlimited charging' business models, particularly for DC fast chargers, including inducements offered by car dealerships or automotive clubs. Free charging results in excessive occupation by thrifty EV drivers, and devalues the amenity of the infrastructure.

[7] AEVA believes that support for a competitive market for installation and management of kerbside or pole-mounted chargers is likely to result in the best options for efficiency, profitability, pricing and local amenities. The costs of installation and maintenance must be covered by income generated from charging (or grants) and should not be passed on to the general pool of electricity consumers.

[8] AEVA recommends that if regulations are changed to allow distribution network service providers (DNSPs) to own and operate pole-mounted EV charging points, the DNSPs (a) accept reliability standards similar to the electricity network itself; (b) take a community service obligation approach and invest in regional EV charging infrastructure where applicable; and (c) do not include these in the Regulated Asset Base.

Commentary

[1] - [5] The need for accessible, reliable and convenient EV fast charging infrastructure is substantial, but won't need to match the current ubiquity of petrol filling stations. This is because the bulk of EV charging will happen at home or at work on lower powered AC charging, and, with the exception of use cases for long-distance travel or those seeking a short-duration charge away from their regular charging location, only occasionally will the need for convenient DC charging arise.

Public charging should ideally comprise a mixture of 50 kW+ DC charging, and slower AC charging (typically 11kW or less). The slower 'destination charging' may be installed at a modest cost by motels, entertainment venues, businesses, retailers, pubs and shopping centres. Different charging speeds suit different destinations and expected 'dwell times'.

It is essential that governments that are planning on installing charging infrastructure select the most appropriate charger types, and determine the necessary redundancy for different locations. In some locations, the installation of several DC fast chargers with redundancy is most appropriate, such as in small towns between major centres.

Where power supplies are constrained in small centres it is preferable to install lower power (20kW) DC chargers on existing or new 32A three-phase supply rather than 11 or 22kW AC chargers. This allows a reasonable charging speed as all EVs can charge at 20kW DC, but most are limited to 6-11 kW AC. Other locations, with longer dwell times, may benefit from a larger number of relatively slow AC charging points, such as in recreational centres, libraries, civic centres and parks, workplace parking, 'Park and Ride' and other long-stay car parks. Local governments or retailers may also plan to develop car parks with solar roofs to supplement their EV charging facilities.

For long distance travel, EV drivers must have confidence that reliable charging will be available at regular intervals along major intercity routes and country towns. Since EV uptake is now growing rapidly through the mid-2020s, there is a clear need for substantial banks of EV chargers at regular intervals on Australia's highways and secondary roads. Suppliers of fast chargers on these busy routes should be able to make these investments and receive an economic return through charging fees.

Where governments provide financial assistance to install charging infrastructure, such agreements should require on-going reliability guarantees. Chargers left out-of-order for extended times are a cause of considerable frustration among EV drivers and could erode public confidence in EVs.

AEVA welcomes moves by Tesla to open up its 'Supercharger' network to non-Tesla vehicles. Tesla has an excellent reputation for the reliability of their chargers and the addition of Tesla as a further supplier of reliable charging would be a valuable broadening of competition. AEVA accepts that non-Tesla EV owners are charged a higher rate per kWh for electricity than Tesla owners. In the future, AEVA would like to see all existing Tesla charging stations opened to non-Tesla vehicles.

The CHAdeMO DC charging standard used by Japanese manufacturers such as Mitsubishi is becoming much less prevalent over time. New models from other Japanese brands such as Nissan, Toyota, Lexus and Subaru have been introduced into Australia with CCS2 charging ports. AEVA accepts that providing a small number of CHAdeMO plugs (e.g. one plug per station) reduces overall station utilisation, and that CHAdeMO's demise is inevitable. Therefore, AEVA would like to see all existing CHAdeMO plugs retained at existing stations for the next few years at least. A significant number of affordable, used EVs will continue to be imported from Japan under the parallel importation scheme.

The needs of EV drivers with respect to public charging infrastructure are summarised as follows:

- Chargers should be accessible 24 hours a day, be well signposted, with fees clearly visible
- Faults, damage and interruptions must be easy to report, 24 hours a day
- Maintenance and technical support must be prompt, reliable, and effective. Charging station hosts should expect contractual requirements for service up-time of at least 98%.
- EV drivers with disabilities should have no difficulty accessing and using chargers. In the absence of an Australian standard for charger accessibility, the RAA guidelines should be used instead
- Chargers should be well signposted, particularly on highway routes
- Chargers should be located near accessible amenities, such as toilets and food outlets
- Chargers should be able to cater for a wide range of EVs, including cars, vehicles towing trailers, motorbikes and e-bikes, whether personally-owned or hired
- Payment should be available using a credit or debit card as a priority, with company-specific apps or RFID cards a reliable alternative
- Charging for longer than 30 minutes at the fastest DC chargers (150 kW+) should be discouraged through fee structures such as idle fees
- Access to charger information in real time allows users to better plan their trips using tools like A Better Route Planner.

[6] Some charging networks have partnered with luxury car brands to offer car buyers several years (in some cases up to six years) of free, unlimited charging. These free charging plans have the potential to create unnecessary congestion at busy charging sites by local drivers preferentially charging there instead of at home (where possible). These plans should be discontinued for new customers. AEVA considers credits such as a limited number of kilowatt hours or a limited dollar value acceptable as recipients of these deals should create an incentive to conserve their free credit. It is the view of AEVA that idle fees should never be included within these free charging plans.

[7] Kerbside charging can be a valuable part of the charging infrastructure and AEVA is supportive of this type of installation. How it is owned and operated matters. Where there is no off-street parking available for each residence, kerb-style charging (e.g. lamp posts or pedestals with a charge socket) could be introduced, as proposed by ConnectedKerb[1]. Similarly, lamp posts around shopping centres, cafés and other commercial precincts which offer street parking could be similarly retro-fitted.

[8] Since late 2024 some distribution network service providers (DNSPs) have been piloting and promoting the installation of additional kerbside charging on existing power poles that are managed within their regulated asset base, but often in partnership with charge point operators (CPOs).

For example:

- Ausgrid is proposing to enter into charging partnerships[1] with commercial CPOs to establish such charging infrastructure. Their 2023-24 pilot[2] found that "*pole mounted chargers are faster and cheaper to deploy than other kerb side charging units, while reducing urban clutter and causing less disruption to the surrounding communities".*

[1] https://www.ausgrid.com.au/About-Us/Future-Grid/Electric-Vehicles/EV-Charging-Partnerships

[2] Energy Networks Australia report: The Time is Now: Getting Smarter with the grid, 6 August 2024 p32.

- AGL has partnered with PLUS ES to expand the NSW charging network by installing 149 public chargers – Kerbside Charger - Pole Charging in Australia.

However, Energy Networks Australia notes[3] that EV charging infrastructure is not considered a distribution service under the current regulatory framework for DNSPs, and sees this as a restriction to DNSPs in playing a role in deploying and maintaining public chargers as part of their regulated asset base.

AEVA does not support inclusion of EV charging infrastructure in the regulated asset base of DNSP's as this unfairly distributes the cost across all consumers. AEVA is also concerned that over-focusing on DNSP-led EV charging infrastructure could have detrimental effects on the ability and incentive for competitive providers to deploy these assets, and consequently risks inefficient and higher cost deployment of such assets by regulated monopoly businesses. A competitive market for installation and management of kerbside chargers is likely to result in the best options for efficiency, profitability, pricing and local amenities.

[3] Energy Networks Australia report: The Time is Now: Getting Smarter with the grid, 6 August 2024 p31.