



Plugging into the future – a guide to electric vehicle chargers

You've already purchased an electric vehicle (EV) to help remove your carbon emissions from transport and shift towards net zero emissions – now how do you charge it? This guide provides information on types of charging infrastructure available for your EV.

Charging your EV at home

The biggest difference between owning an internal combustion engine (ICE) vehicle and an EV is that they can be charged at home or at public chargers. This can provide greater flexibility in 'refuelling' and avoids the need to visit service stations. Home charging speed and cost is dependent on the charging infrastructure you use.

The average Canberra driver travels about 38 kilometres each day. For everyday driving it would not be necessary to recharge every day. A standard 10amp garage wall socket would be sufficient to recharge an EV from empty to full within 15-30 hours, depending on the battery size. With sufficient time to recharge, a standard wall socket could easily ensure you have a full battery for longer trips on a weekend. If you require a higher charge rate a 15amp socket upgrade outputs 3.6kW, enough for adding over 220km from an overnight charge. Either of these two options would be adequate for most EV drivers. You may find yourself charging your EV only once or twice a week. Not all vehicle manufacturers provide dedicated 10 or 15 amp home charger lead as a standard inclusion with an EV.

For faster charging a dedicated EV charger can provide 7kW, enough to fully charge a standard EV in about 6–9 hours and allow for up to 500km of travel per day from an overnight charge. These chargers cost around \$2,000 - \$3,000 installed and could be included in your Scheme loan. While a standard 10amp or 15amp socket is adequate for most daily driving needs, a 7kW dedicated EV charger upgrade is beneficial if you regularly drive long distances or have an EV with a large battery capacity. Apartment dwellers would need to seek permission from your body corporate to install your own charger.

Bi-directional chargers allow an EV to become a battery on wheels, supplying excess power back into the home or into the electricity grid. This could provide EV owners with additional financial benefits or improved energy resilience in the event of a power outage. Bi-directional, or vehicle-to-grid (V2G) chargers are very new in the Australian market and are more expensive than standard chargers. It should be noted that not all EVs are capable of bi-directional charging.

Away from home charging

Home charging may not be possible for carparks or on-street parking, as there may not be access to a power point or it would be impractical/illegal to run an extension cord with a charger to your EV. There are public charging stations across the ACT, with more popping up all the time. Locations for publicly available chargers across the ACT and Australia can be found at www.plugshare.com. Public chargers do charge a fee for usage. Public charging is an option if home charging is not available.

How to apply for a loan under the Sustainable Household Scheme

Firstly, check you are eligible to participate in the Scheme by reviewing the [Scheme Guidelines](#). It's also a good idea to review the Scheme [terms and conditions](#). If you've decided an electric vehicle charger is right for you, just follow these easy to steps to apply for your zero-interest loan:

- Get your quotes from suppliers accredited with our loans provider, Brighte. Information about accredited suppliers can be found on Brighte's [website](#). We suggest seeking more than one quote.
- Select your preferred quote and your chosen supplier will initiate the loan process with Brighte.

Some important things to note

- You can bundle products from the list of eligible products available under the Scheme, with a maximum of \$15,000 loan available to each household.
- Installation of an EV charger requires an ACT licenced electrician.
- If there is a requirement to upgrade to 3-phase power this can be included as part of your loan.

Need some free advice?

Contact the Actsmart team for general and free energy advice on 1300 141 777 or email actsmartadvice@act.gov.au.



Small Steps. Smart Choices.
[For more information click here.](#)