

Climate Change Office



Electric vehicles - on the road

Public charging stations

Public charging stations are located throughout Tasmania, and more are being added constantly to the network. The most up to date source of information about charging stations and their operational status is the Plugshare app, a free, largely crowdsourced, international resource (www.plugshare.com).

Plugshare is updated with charger location, charger type, user reviews, and offline or maintenance status.

Fast (DC) chargers are shown in orange on the map, and AC or slow/destination public chargers are shown in green. The grey icon shows a charger in use.

Most public chargers in Tasmania are on the Chargefox network. Government fleet users can use their RFID card to activate these chargers.

There is a Tesla Supercharger at Devonport, available to Tesla drivers only.

Chargers using the Evie network are located at Campbell Town, Westbury, Brighton and Kingston. These chargers require an Evie RFID or the Evie app.

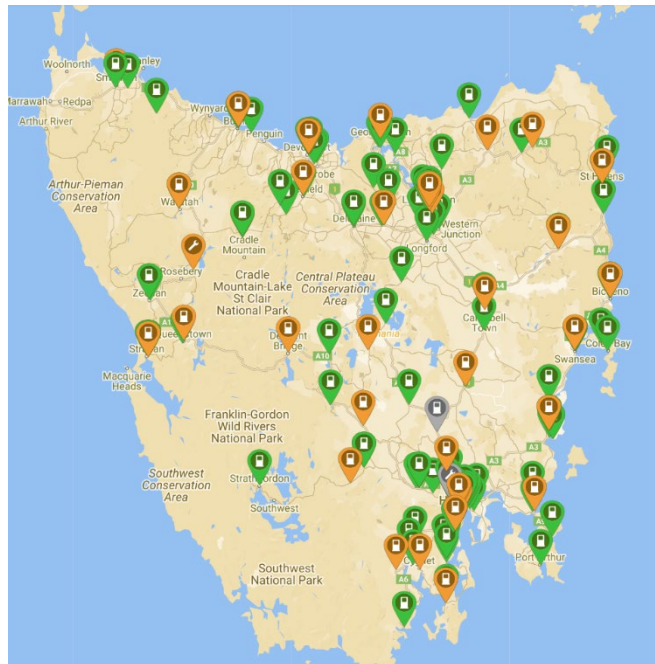


Image: Plugshare (Check website for most up-to-date information)

Public charging etiquette

As electric vehicle (EV) adoption and public charging increase, these etiquette tips can help everyone.

- **Only park in charge bays while charging.** These bays are not for priority parking. Some locations are introducing 'idle fees' for cars that have finished charging staying in parking bays.
- **Report any issues.** Each station has a phone number for users to report any issues, and you can also leave notes on Plugshare if there are issues with a station.
- **Check in.** Use Plugshare to let other drivers know the station is in use.
- **Charge to 80 per cent,** particularly if others are waiting to charge. Vehicles slow down their charge rate over 80 per cent, and you'll be paying more for the extra time on some stations.
- **Don't outstay your charge session.** Blocking the charger will annoy other drivers, and is becoming illegal in most states.
- **Replace all cables neatly.** A cable left on the ground may be easily run over, and then could be out of action for weeks.

Factors affecting charge times

- **Battery heat management:** a vehicle travelling fast or for extended periods will slow down charging to protect the battery from overheating.
- **Cold weather:** cold weather may affect charge times. This is determined by the internal battery management system.
- **Charger capacity:** the charging station's power output may be affected by other vehicles charging, or the volume of vehicles charging that day.

- **Nearing capacity:** at over 60 per cent charged, the battery management system may slow down charging to protect the battery. This charging speed decreases again at over 80 per cent. This is more pronounced on some vehicles than others.

Factors affecting range

- **Driving conditions:** extreme weather conditions, such as very cold or hot temperatures, can lower range, as will driving into a headwind.
- **Driving style:** aggressive acceleration, high speeds, and frequent stops can reduce range.
- **Driving mode:** different vehicles have features such as sports mode, regular mode, e-mode or one pedal driving. Using these modes will increase or decrease vehicle speed and efficiency.
- **Weight:** transporting heavy items or several people will lower the range of the vehicle.
- **Terrain:** hilly or mountainous terrain will affect range compared to flat surfaces. Travelling uphill will use more battery, and when coasting downhill or braking, an EV will consume minimal battery or will gain range through regenerative braking. (Regenerative braking uses kinetic energy to add charge to a battery while braking.)
- **Climate control:** extensive use of air conditioning (heating or cooling) can reduce range.



What to do if you're concerned about range

If you are uncertain about reaching your destination with the range left in your vehicle, here are some tips to help you arrive safely:

- **Check Plugshare** to determine where fast charging stations are on your route, and modify your plans accordingly.
- **Smooth acceleration and deceleration:** avoid sudden and aggressive acceleration or braking, as these actions consume more energy.
- **Maintain a steady speed:** driving at a consistent speed helps maximise efficiency. Use cruise control whenever appropriate, especially on highways or open roads.
- **Manage speed:** higher speeds generally require more energy. Driving at or below the speed limit can help conserve battery power and extend your range. Use eco-mode settings in your vehicle.
- **Minimise use of air conditioning** (heating or cooling), which can significantly impact your vehicle's range.
- **Monitor energy consumption:** pay attention to your vehicle's energy use through the onboard display or monitoring systems. This helps you understand how your driving habits affect energy consumption and allows you to adjust accordingly.
- **Use regenerative braking:** Take advantage of regenerative braking to recover energy while decelerating or braking. Lift off the accelerator pedal earlier and allow the regenerative braking system to slow down the vehicle, reducing reliance on the traditional brake pedal.

- In an emergency, any power point can provide you with a slow charge. Your car should be equipped with a 10amp portable charger, or chargers can be purchased separately. A car will function for up to 10kms past the point where the battery is showing empty. But once the car slows down, often called 'turtle mode', it is best to pull over and call for assistance.
- Roadside assistance providers may not support on-road charging, so a car with a flat battery will need to be towed. Do not drive the car to a complete standstill, as it will be difficult to restart.

Tyre repair kit

Most EVs are typically equipped with a tyre repair kit, including a tyre sealant and an air compressor, instead of a full spare tyre. This kit allows for temporary repairs to minor punctures until you can reach a service centre. If you do not feel comfortable attempting this yourself, please call for roadside assistance.

