In Australia, there are currently two types of Electric Vehicles:

- **Battery Electric Vehicle (BEV)** - a vehicle that contains a built-in battery pack, draws electricity from the grid to charge and has no other engine or fuel tank.

- **Plug-in Hybrid Electric Vehicle (PHEV)** - a vehicle that is driven by an electric drive train and fitted with an internal combustion engine, allowing the battery to be charged via either the grid or the engine.

**Battery Electric Vehicles (BEV)**

- **Nissan Leaf**
  - Fuel Consumption: Zero litres per 100km
  - Charging Time: 240 volt / 15 amp = 6 hours; fast charge = 80% in 35 minutes
  - Range: 35km
  - Power and Torque: 80kW and 280Nm of torque

- **Tesla Model S**
  - Fuel Consumption: Zero litres per 100km
  - Charging Time: Tesla charger = 3.5 hours
  - Range: 343km
  - Power and Torque: 280kW and 440Nm of torque

- **Mitsubishi i-MIEV**
  - Fuel Consumption: Zero litres per 100km
  - Charging Time: 240 volt / 15 amp = 7 hours; fast charge = 80% in 10 minutes
  - Range: 104km
  - Power and Torque: 41kW and 160Nm of torque

- **BMW i3 101**
  - Fuel Consumption: Zero litres per 100km
  - Charging Time: 240 volt / 15 amp = 6-10 hours; 4 hours with Wallbox Pure charger
  - Range: 190km
  - Power and Torque: 125kW/170hp and 250Nm of torque

**Plug-in Hybrid Electric Vehicles (PHEV)**

- **BMW i8**
  - Power and Torque: Up to 320Nm of torque
  - Engine/Motor Size: 1.5L petrol engine, 3 cylinder petrol engine with 136kW (184hp)
  - Range: 50km (electric)
  - Power and Torque: 87kW and 186Nm of torque

- **Honda Outlander**
  - Power and Torque: 87kW and 186Nm of torque
  - Engine/Motor Size: 2.0L petrol engine with 60kW twin motors
  - Range: 50km (electric)
  - Power and Torque: 87kW and 186Nm of torque

- **Holden Volt**
  - Power and Torque: 170kW and 370Nm of torque
  - Engine/Motor Size: 1.4L petrol engine with 63kW electric motor
  - Range: 87km (electric) to over 600km (petrol)
  - Power and Torque: 280kW and 440Nm of torque

- **Mitsubishi i-MIEV**
  - Fuel Consumption: Zero litres per 100km
  - Charging Time: 240 volt / 15 amp = 7 hours; fast charge = 80% in 30 minutes
  - Range: 150km
  - Power and Torque: 41kW and 160Nm of torque

**Electric Vehicles and our Network**

Electric Vehicles (EVs) can provide a significant benefit to consumers and utilities. Charged in a grid-friendly manner, they have the potential to reduce peak demand, reduce the need to increase infrastructure and put increased pressure on electricity prices.

EVs can be purchased and connected to the network for charging purposes in a manner that provides not only consumer choice and benefit, but also has limited impacts on electrical infrastructure. Ergon wants to provide an EV-friendly network and encourage EV uptake in a manner that does not increase peak demand, using time of use tariffs and controlled load tariffs like T33.

EVs present an opportunity for low cost, low carbon transport; and also provide the opportunity for energy diversity and security in transportation. By September 2014 there were over 600,000 EVs worldwide, with at least 22 models available.

In Australia, a recent CSIRO study forecast approximately 6,000 BEVs and PHEVs on Townsville roads by 2020. EVs present opportunities and challenges for our network. If managed well they could improve network utilisation, help stabilise network voltages, provide greater flexibility in demand management, provide customers with another choice and more control – ultimately putting downward pressure on electricity prices.

Information correct as at November 2014. Source greenvehicleguide.gov.au. While every effort has been made to present all models of BEV and PHEV currently available in Australia, some makes or models may have been inadvertently left off this poster. For information on availability and price, please contact your local dealership.