Types of electric vehicle

Electric vehicles are charged from an external electricity source. They can be powered in two ways:

1. Solely by electric batteries. Known as pure electric vehicles or battery electric vehicles (BEV) - the Nissan Leaf and Renault Zoe are examples of common BEVs in New Zealand.

2. A combination of electric batteries and a petrol or diesel engine. These are commonly known as plug-in hybrid electric vehicles (PHEV) - The Mitsubishi Outlander PHEV and BMWi3 are examples of PHEVs in New Zealand.

Why are electric vehicles good for New Zealand?

New Zealand is particularly well suited for electric vehicles:

- Just over 80 percent of the country’s electricity is generated from local renewable sources. Greater use of electric vehicles will lessen our reliance on imported oil.
- New Zealand has more than enough supply of consented renewable electricity to support the widespread adoption of electric vehicles.
- High renewable energy levels mean that the emission reduction benefits of electric vehicles in New Zealand are greater than in most other countries, producing 80 per cent fewer greenhouse gas emissions.
- New Zealand motorists drive on average 29 kilometres per day. Average commutes in urban centres are even shorter, at about 22 kilometres a day—a distance electric vehicles can handle easily without recharging.
- 85 percent of New Zealand homes have off-street parking, meaning electric vehicles can be easily charged overnight at home.
- Electric vehicles are cheaper to run than petrol or diesel vehicles. On average, charging an electric vehicle at home is equivalent to buying petrol at 30 cents a litre, compared to petrol which is around $2 a litre.
- With only around 20 moving parts in a battery electric vehicle, compared to around 2,000 for a petrol or diesel powered car, maintenance costs are less.
- There’s an increasing number of charging stations around the country and apps available to help locate them.

www.electricvehicles.govt.nz