

Fast charging stations electrify south-west commute

August 12 2015, by Aaron Fernandes



RAC Electric Highway Launch in Margaret River. Credit: RAC

Australia's first electric vehicle highway will open in WA later this month, with the final charging stations currently being installed in the south-west.

Motoring body RAC, which funded the project, has fitted 11 fast charging power stations between Perth and Augusta which will enable

drivers of [electric vehicles](#) (EVs) to explore the southern part of the state without fear of running out of power.

RAC spokesperson Liz Carey says the fast [charging stations](#) will be able to do an 80-100 per cent charge in about half an hour, substantially quicker than the 6-8 hrs ordinarily needed to charge a standard EV battery.

"Most EVs currently on the market have about a 100-130km range, which meant that travelling down south was previously impossible," she says.

"What this network has been able to do is let people travel down south, enjoy the south-west and recharge very quickly."

Fast charging stations are currently operational at Perth, Mandurah, Bunbury, Busselton and Margaret River, with additional stations coming on line in Augusta, Bridgetown, Nannup, Harvey and Dunsborough by the end of August.

A final station will be installed in Fremantle at the end of the year and the stations will be free to use until the end of 2015.

The chargers deliver a high current charge directly to the electric car's battery, via thick cables and power electronics.



RAC Electric Highway launch in Margaret River. Credit: RAC

Ordinary chargers use a single two to seven-kilowatt on-board charger—fine for over-night charging, but impractical for road trips.

An on-board charger of this power (50kW) would be far too big and bulky to fit within the vehicle.

Whilst the RAC has labelled the infrastructure an Electric Highway, it operates more like a network of stations that allows drivers to decide their own route without experiencing 'range anxiety'.

"We wanted to provide a viable network that would make the whole experience worthwhile," Ms Carey says.

"These stations have been strategically placed in areas that will be of interest to visitors from the metropolitan area, and will help to boost local tourism."

The idea for an electric highway was first proposed by a committee of WA electric car owners.

The RAC then paid for and installed the stations, with local governments now responsible for their operation and maintenance.

"We hope that this will be a strong catalyst for more people to consider making the switch to EV, and given the feedback so far we think it will be," Ms Carey says.

Provided by Science Network WA

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