

Published: 10 September 2012

Electric vehicle fast-recharge network opens in Perth

Perth now has Australia's first electric car fast-recharge network, with 23 new fast-charge stations installed across the metro area.



Credit: University of Western Australia

The new electric vehicle (EV) recharge network has been installed between Midland and Fremantle, and includes a recharge outlet at East Perth Railway Station and one at Osborne Park. Most are dual outlets that can charge two vehicles at the same time.

Project leader Professor Thomas Bräunl, of the University of Western Australia (UWA) says about 50-100 EVs – including about 30 owned privately – are thought to be currently operating in Perth.

The federal government-funded network uses stations that reduce the average time to fully recharge a medium-sized electric passenger car from about 10 hours to 3.

According to Professor Bräunl, UWA road tests have shown that a single recharge will enable a converted Ford Focus EV to travel about 130 km and a Mitsubishi Leaf about 110 km.

A typical recharge uses about \$2 worth of electricity but is currently available free with an electronic card reader issued by UWA. Parking at recharge stations is also free.

All outlets are connected to Western Power's electricity grid. One outlet – at Energy Made Clean, in Colin Street, West Perth – also draws renewable energy from a solar photovoltaic (PV) system. A further six outlets are planned.

'All EV charging stations are networked and transmit their data to a server at UWA, where user data and load profiles are being analysed,' says Professor Bräunl.

'This gives us a valuable insight into the requirements of EV charging infrastructure for the next two decades, when we expect millions of electric cars to have a significant impact on the electricity grid.'

The recharge stations were built in the UK to comply with two competing world standards and can charge any new electric vehicle.

The network is funded by an Australian Research Council linkage grant.

Source: University of Western Australia

From **ECOS** online <http://www.ecosmagazine.com/?paper=EC12415>