

Shaun Westcott – The Advertiser 19 March 2024

CHARGED -UP STATE IN THE DRIVER'S SEAT FOR CHANGE

Mitsubishi Motors Australia sees existing Plug-in Hybrid Electric Vehicle (PHEV) technology as the way to create a leapfrog effect that would enable more Australian households to shift to renewables.

The PHEV is a transitional technology that Mitsubishi Motors has been selling in Australia since 2013.

You could say it's the best of both worlds, because PHEVs are EVs with a usable EV range backed by a hybrid petrol engine that seamlessly switches between the two.

A PHEV system is both open and closed loop, so you can charge externally, in other words has regenerative capability and allows the battery to recharge as you drive.

It doesn't come with the high price tag of most electric vehicles either. With a hybrid petrol engine to address range anxiety, PHEVs open up EV ownership to all Australians, regardless of whether they live in the city or in country towns.

This accessible technology also allows us to fast-track the uptake of renewable, sustainable vehicles as we overcome challenges with Australia's EV charging network.

Whilst PHEV technology is not new, what is less known is that PHEVs and EVs with a CHadeMO charge port can also support bi-directional charging.

The Mitsubishi Eclipse Cross PHEVs and Mitsubishi Outlander PHEVs have this capability, meaning our PHEVs are V2G (vehicle-to-grid) and V2X (vehicle-to-building, vehicle-to-vehicle, vehicle-to-home) capable.

Bi-directional charging or vehicle-to-grid (V2G) is untapped technology awaiting approval in South Australia. Once V2G comes on stream, it will transform how we view and use our V2G-capable vehicles.

We will not only use them for transport but also as personal mobile power plants.

Bi-directional charging capability is the key to unlocking this power-generation capability for individuals, communities and society.

We've been piloting this technology, in Adelaide, at our Head Office since February 2023, the first trial of its kind for an automotive brand in Australia.

V2G puts consumers in the driving seat on energy management. Bi-directional charging can help consumers make and save money, by selling the energy stored in their vehicle's battery to the grid, or alternatively using their vehicle's battery power to power a home or business at peak-rate times and during blackouts. PHEV batteries, like their EV counterparts, have far greater storage capacity than home batteries.

Starting with a full charge and a full tank of petrol, when used with the unique on-board 'Charge Mode', and the 20kWh Outlander PHEV can power a typical Australian home for up to seven days.

V2G technology enables consumers without a home battery to access the benefits of renewable energy generation, especially those households fitted with solar. Consumers can factor their potential home energy savings and electricity sales to the grid into any V2G-enabled PHEV or EV purchase they're considering.

Mitsubishi Motors thinks keeping V2G technology in a holding pattern rather than greenlighting its rollout is a missed opportunity.

As discussed with Nick Reade from RAA at the Future SA forum last week, if the Australian Standards are updated to recognise V2G chargers, this technology will become more readily available so that consumers, businesses as well as government can benefit, with cascading benefits to all grid users including increased renewable energy utilisation and potential energy cost reduction.

As the first state permitting the trial installation and use of V2G chargers in the country, South Australia is leading the way in how we use and generate electricity. PHEV and EV uptake is growing, and once V2G is

approved, it will unlock significant benefits for consumers and businesses, and pave the way for other vehicle manufacturers to adopt bi-directional charging.

When it arrives, South Australians can expect to see greater grid stability, lower energy costs and a pathway to accelerate South Australia towards net zero.

So let's embrace the existing technology that can help us leapfrog costly infrastructure that takes years to build.

If we do, we could experience the kind of transformative change to energy in South Australia that mobile phones and Starlink have brought to communications across the developing world.

Shaun Westcott is CEO of Mitsubishi Motors Australia



Shaun Westcott with an Eclipse Cross PHEV and a bi-directional charger. Picture: Keryn Stevens