

4 SEPTEMBER 2020

Australia's largest virtual power plant ramps up in South Australia

More than 3000 social housing tenants in South Australia will soon join in Australia's largest virtual power plant (VPP), helping to deliver lower energy bills and a more resilient electricity grid.

On behalf of the Australian Government, the Australian Renewable Energy Agency (ARENA) has today announced \$8.2 million in funding to Tesla Motors Australia (Tesla) to deploy residential battery and rooftop solar systems at 3000 properties owned by Housing SA across Adelaide.

As part of the South Australia's Virtual Power Plant (SA VPP), Tesla will install 5 kW of rooftop solar and a 13.5 kWh Powerwall battery system at each property, at no cost to the tenant. The system will provide approximately 80 per cent of average household energy use.

Together with 1100 systems already installed in a previous phase, the combined 20 MW / 54 MWh of residential energy storage will be used by Tesla in a centrally controlled VPP trial.

Housing SA tenants involved in the trial, like other renters, are usually locked out of being able to benefit from renewable energy. The tenants will benefit from cheaper household electricity bills, with the project offering electricity rates 22 per cent lower than the default market offer.

A VPP is a centrally-managed network of battery systems installed behind-the-meter that can be collectively controlled to deliver benefits to households, energy retailers and the local network.

The \$60.6 million SA VPP is also supported by \$10 million from the South Australian Government's Grid Scale Storage Fund in ongoing payments, \$30 million debt finance from the Clean Energy Finance Corporation and an \$18 million equity contribution from Tesla.

With the support of the SA Government, Tesla has previously installed 1100 solar and battery systems. This next phase of deployment supports Tesla's ambition to create the world's largest VPP comprising 50,000 solar and storage systems across both social housing and private dwellings.

The 3000 additional systems will also participate in AEMO's VPP trial to provide a range of grid stability services by exporting excess energy to the National Electricity Market.

Previously, ARENA has supported VPP projects in South Australia led by AGL and Simply Energy.

ARENA CEO Darren Miller said this was the next step towards the commercialisation of VPPs.

"This project represents a significant step towards a technology and commercial model for battery and solar that requires no upfront cost or risk to the customer. Another benefit of this approach is that it is open to households that otherwise wouldn't have access to renewable energy options," he said.

With more than 2.5 million households already owning rooftop solar and more than 60,000 home battery storage systems already installed in Australia, Mr Miller said VPPs would be important to Australia's future energy security and reliability.

"As rooftop solar and home battery storage increases in Australia in the coming decades, virtual power plants potentially have an important role to play in harnessing distributed energy in a way that maximises the benefit to the customer as well as the electricity system as a whole.

"By supporting this pioneering project, ARENA is excited to help support the evolution of virtual power plants that can provide dispatchable power and essential grid stability powered by clean energy technology, at scale," Mr Miller said.