



# EV STREET SIDE CHARGING PROJECT

## ELECTRIC VEHICLES AND EV CHARGING NETWORKS

### EVs in Australia

- According to the Australian Government, carbon emissions from the transport sector make up about 19% of Australia's total emissions.
- The latest figures from the Electric Vehicle Council show that around 9% of all new car sales in NSW in the first half of 2023 were EVs.
- It found there were more than 130,00 EVs on Australian roads in July 2023.
- Other experts predict that by 2030 there will be more than one million EVs on Australian roads.
- The estimated value of the EV public charging market in Australia is about \$902 million.
- Eight out of ten existing EV owners charge at home, according to the NRMA, with the remaining relying on their workplace, shopping centres and highway fast chargers.

### Australia's Challenge

- About one in four Australian households – or 1.9 million homes – do not have access to off street parking and can't charge an EV from home.

### *The Solution*

- There is potential for 190,000 EV chargers that could be connected to street side power poles across Australia.
- It's estimated that one on-street charger could service 10 households which don't have access to off-street parking.
- This represents about 1,400 megawatts of controllable load for retailers and electricity networks to support the sustainability of the grid.



## HOW THE TRIAL WORKS

### The Trial

- Fifty 22 kilowatt chargers are being installed on streetside power poles that allow EV owners to book, connect and charge 24/7.

### Where

- 50 sites across eight local government areas in Sydney and the Hunter region of NSW.

### EV Chargers

- Schneider Electric 22kW EV chargers allowing for convenient top ups and overnight charging.

### GreenPower

- Origin Energy will supply 100 percent GreenPower, meaning all of the energy required to charge the vehicles will be matched with the equivalent amount of certified renewable energy added to the grid.

### Customer Experience

- The charging service will be managed via Exploren, an EVSE customer experience app which outlines billing, time limits, and availability.

### Objective

- To demonstrate that there are no regulatory barriers to using existing street furniture that already has power running to it.
- Test how many people will use the chargers. If a commercial success is achieved, then a wider rollout of chargers will be possible on a commercial basis.



## INTERNATIONAL EXPERIENCE

Tens of thousands of power pole or streetlight EV chargers have been deployed across London, Los Angeles, New York, Hamburg; and Toronto.

Other cities such as Seattle, Lancaster, Philadelphia, Miami, Chicago, Berlin are exploring similar alternatives to increase Electric Vehicle adoption and reduce greenhouse gas emissions from private transport.

## CONSORTIUM MEMBERS

The project is being supported by the Australian Renewable Energy Agency and led by smart metering and data intelligence provider Intellihub.

### *Project partners:*

- Schneider Electric
- EVSE
- Origin Energy

### *Local Government Partners:*

- Lane Cove Council
- Bayside Council
- Lake Macquarie Council
- Randwick Council
- Singleton Council
- Northern Beaches Council
- Woollahra Council
- Waverley Council