

UNDER EMBARGO UNTIL 12:00PM (MIDDAY) ON WEDNESDAY 18TH APRIL

VCharge | Platform Information

An intelligent platform for the future electric grid

One of the first systems of its kind, VCharge is a highly scalable, intelligent technology platform that captures the value of flexibility present in all energy resources.

VCharge remotely connects distributed flexible electrical devices (electric vehicles, home batteries, storage heaters) enabling the UK grid to symbiotically react to changes in demand and supply.

For the electric grid, VCharge recognises system stress from national to micro-regional levels and responds to changing conditions within seconds. From managing demand at peak times to providing highly responsive grid balancing services for multiple devices and appliances, VCharge automatically adjusts electricity flow to provide greater flexibility so that everyone gets the power they need, when they need it, for the lowest possible price.

It can also be used to intelligently manage both generation and demand by facilitating more renewable energy generation and supply without the need for costly infrastructure investment.

<u>FAQ</u>

How does OVO use VCharge?

VCharge enables OVO's smart charging and vehicle-to-grid (V2G) technology, allowing electric vehicle chargers to operate in reaction to the grid, ensuring cars can be charged when they need to be for the lowest possible cost (or at times of lowest carbon intensity on the grid) and pause any unnecessary charging when electricity demand is high. VCharge will also control the OVO Heat Dynamo and Home Energy Storage product to optimise management of customer energy usage while helping the National Grid function more effectively.

Where has VCharge been rolled out?

VCharge is operational in a number of high profile pilot projects; for example, in the Scottish islands of Mull and Orkney. It is also being used by Newcastle city council and Glasgow housing association.

How will OVO ensure the safety and security of VCharge?

OVO follows best practice at all times and tight access control lists are executed operationally. Security will be ensured by implementation of a mix of hardware, transport and encryption level security.

How will VCharge work with regards to charge points and electric vehicles?

Installing VCharge inside smart charge points will enable electric vehicles (EVs) to charge flexibly, meaning they are charged in a way which is flexible with how and when that charge is built up. For instance, if EVs are connected to smart charge points, they can export energy back to the grid at certain times or pause charging momentarily to help balance demand on the grid.