

## **OVO launches the world's first widely available domestic vehicle-to-grid charger**

- OVO unveiled its breakthrough into energy technology with the launch of a range of revolutionary products that will make up the distributed, domestic energy system of the future.
- Founder and CEO Stephen Fitzpatrick outlined how OVO is solving future energy challenges using artificial intelligence, technology and years of working with customers to redesign the entire energy system.
- He introduced OVO's proprietary platform **VCharge**, the intelligence behind the new energy system, that remotely connects and coordinates an unlimited number of small-scale household storage devices in real time, with split-second latency and no effort from consumers.
- He revealed the technology that could solve one of the biggest challenges of integrating electric vehicles onto the grid, with the world's first widely available domestic bi-directional 6kW **OVO Vehicle-to-Grid Charger**, and the 7kW **OVO Smart Charger**.
- Also unveiled at the event was OVO's **Home Energy Storage** solution – a powerful battery that could reduce household electricity bills and help balance the grid.

**London, 18 April 2018** - Today at its first ever Energy Technology Product Showcase, OVO unveiled a range of products that together with its intelligent platform **VCharge** will form the components of a distributed, domestic energy system for the future.

The range includes the world's first widely available, domestic electric vehicle-to-grid charger, designed and manufactured in the UK. The charger will accelerate the global transition to electric vehicles and will enable drivers to sell surplus energy from their electric vehicle batteries back to the electricity grid – meaning they may never have to pay to be on the road again.

### **Building an intelligent distributed energy system for the future**

OVO CEO and Founder Stephen Fitzpatrick said: *"Renewable energy and electric vehicles are perfect partners for the 21st Century. Today we're launching the world's first widely available vehicle-to-grid charger, helping to solve one of the biggest challenges facing the energy sector. We're enabling thousands of EV batteries to help balance the grid in times of peak demand, more renewable energy to come onto the system, and households to reduce their electricity bills.*

*"This is the first step in building the distributed energy system of the future. One that is truly customer centric and built around households and their connected energy storage devices.*

*“Our completely new approach to energy has been made possible by the convergence of emerging technologies, applying intelligence, and years of working with customers to redesign the entire energy system.”*

### **The world’s first widely available domestic Vehicle-to-Grid Charger**

The **OVO Vehicle-to-Grid Charger** is the world’s first widely available domestic bi-directional charger. Using VCharge, this charger will give drivers the option to discharge and sell surplus electricity from their electric vehicle batteries back to the electricity grid, helping to supply energy at times of peak demand. VCharge will also optimise vehicle charging to take advantage of cheaper electricity when it’s available and when there are more renewables in the system. Through their partnership, Nissan and OVO are leading the way with this technology.

In addition, OVO is launching a **Smart Charger** which, like the vehicle-to-grid charger, will enable electric vehicles to be charged during off-peak hours, thereby easing pressure on the electricity grid as well as allowing drivers to take advantage of cheaper off-peak electricity.

### **One of the first intelligent systems of its kind**

An intelligent platform for the future electric grid, **VCharge** is a highly scalable system that captures the value of flexibility present in all energy resources. It remotely connects distributed flexible electrical devices and aggregates them into a virtual power plant. This connected system reacts as a whole to changes in demand and supply, recognising strain and reacting within a second. By intelligently managing both generation and demand in this way, using VCharge could facilitate more renewable energy generation and supply without the need for costly infrastructure investment.

### **UK’s first home energy storage product for the mass market**

OVO is also announcing its debut in the home battery market with a **Home Energy Storage** solution. This powerful battery with a custom built control and communications unit will dynamically and proactively manage energy and power use. It will enable everyone to store, use and sell back electricity, whether or not they produce it themselves.

### **UK’s first smart-enabled electric heaters**

The smart electrification of heating is an essential component of decarbonising our energy system. Showcased at the event was the **OVO Heat Dynamo**, an internet connected smart switch that can be retrofitted to electric storage heaters. It allows users to control the level of heat they want, when they want it via OVO’s Smart Heat Customer App, while reducing their electricity bills by as much as 30% and providing balancing services to the electricity grid.

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## **Notes to Editors**

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For more information about OVO Group: [www.ovogroup.co.uk/](http://www.ovogroup.co.uk/)

### **About the OVO Vehicle-to-Grid Charger**

The 6kW OVO Vehicle-to-Grid (V2G) Charger is the world's first domestic bi-directional charger. It offers drivers of certain electric vehicles the opportunity to discharge excess electricity from their cars back to the electric grid to help supply energy at times of peak demand. It is the first such product to be produced and made commercially available at volume in the world. The OVO Vehicle-to-Grid Charger will be rolled out from summer 2018 for up to 1,000 Nissan electric vehicle owners as part of a two-year trial, and with support from Innovate UK's funding scheme, it will be free for OVO Energy customers on the trial. Fully designed and made in the UK, we're also helping to develop the UK's high-tech manufacturing sector.

Available to Nissan LEAF and e-NV200 drivers, the OVO Vehicle-to-Grid Charger could enable Nissan drivers to have free power for their electric vehicles by selling energy back to the grid. This is an important step for both companies to deliver their mission to offer customers free power for their electric vehicles.

### **About VCharge**

One of the first systems of its kind in the world to utilise renewable energy that would otherwise be wasted, VCharge is the intelligent solution for the environment enabling us to solve the problems caused by growing pressure on the UK's electricity grid. 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. VCharge recognises system stress in the electricity grid 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 devices, providing greater flexibility so that everyone gets the power they need, when they need it, for the lowest possible price. By intelligently managing both generation and demand in this way, using VCharge could facilitate more renewable energy generation and supply without the need for costly infrastructure investment.

### **About the OVO Smart Charger**

OVO's first 7kW Smart Charger is compatible with all electric vehicles. Using VCharge, it responds to signals on pricing and demand from the grid. It can automatically charge cars during off-peak periods when demand for electricity is lower and energy is cheaper and possibly greener. It can also pause charging during peak periods to manage strain on the grid.

### **About the Home Energy Storage solution**

The Home Energy Storage product consists of a state of the art rechargeable battery, with ultra fast control and local frequency sensing, and a high power bidirectional inverter. Using the real time intelligent VCharge platform, the product has been designed to dynamically and proactively manage energy and power use. It buys energy cheaply when demand is low, stores it, then discharges it to the house when consumers need it, as well as back into the grid at times of peak demand.

### **About the OVO Heat Dynamo**

The OVO Heat Dynamo is an ultra-low latency, IoT-connected, multi-purpose load switch that can be retrofitted to an electric storage heater to give it smart controls.

Using high speed frequency sensing and power metering, this wi-fi connected device allows users to control the level of heat they want, when they want it, via OVO's Smart Heat Customer App.

The device is part of OVO's strategy to make heating greener through electrification while providing more value for customers. OVO is also working with manufacturers to launch the first electric storage heaters with built-in VCharge integration later in 2018. These will be the world's first smart-grid enabled electric storage heaters, which will support balancing of the electricity grid by providing extra capacity for flexible energy distribution.

### **About OVO**

OVO is the UK's largest independent energy technology company and supplier. Across the group, OVO serves nearly one million customers with intelligent energy services and other home services. Founded in 2009 by Stephen Fitzpatrick, OVO redesigned the energy experience to be fairer, greener and simpler for all. Today OVO is no longer simply an energy retail business: it is group of innovative, dynamic companies, all striving to harness technological advances with great consumer propositions to deliver affordable, clean energy to everyone.