



CHARGE

Refuelling Tomorrow's Electrified Transport



WHO ARE WE?

We are SP Energy Networks, part of the Iberdrola Group, leaders in sustainable innovation. As a Distribution and Transmission Network Operator we keep electricity flowing to homes and businesses throughout Central and Southern Scotland, North Wales, Merseyside, Cheshire and North Shropshire.

We do this through the network of overhead lines and underground cables which we own and maintain.

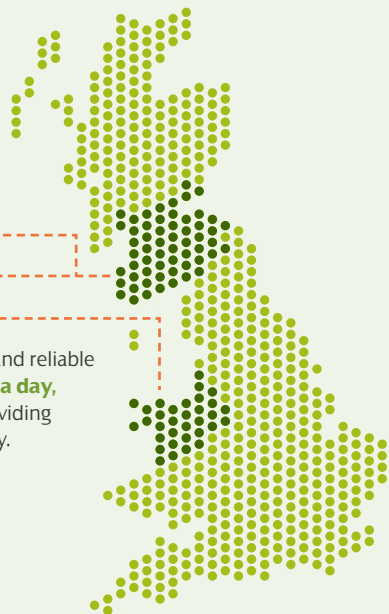
Our three regulated electricity licences are:

SP Transmission (SPT)

SP Distribution (SPD)

SP Manweb (SPM)

Our aim is to deliver a safe and reliable electricity supply **24 hours a day, 365 days a year** whilst providing exceptional value for money.



CHARGE

Charge will accelerate the deployment of public charging infrastructure by bringing together expertise from transport planning, the electricity network and charging solutions. The project will provide insight into where electric vehicle charge points may be needed, and how their use will impact the electricity network.

Whilst it is expected that the majority of EV charging will take place at home and in the work place, there will still be a need for on-street and public charge points. These charge points may be required by those who do not have a driveway – e.g. those who live in flats, apartments or terraced houses. Charging facilities are likely to also be required at public destinations such as leisure and shopping centres, tourist attractions, or filling station forecourts. The project will allow a better understanding of the network impact of different types of charge point, taking into account location, the hardware installed, use patterns and whether flexible connection arrangements can be used.

Charge also aims to reduce the length of time that it takes to bring new large-scale charge point schemes to fruition.

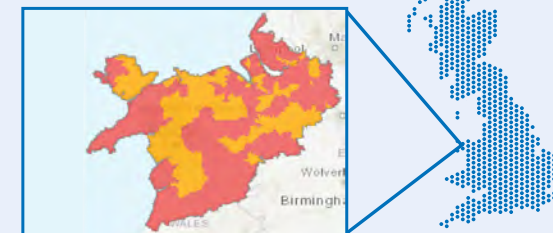


PROJECT PARTNERS

 the mind of movement	Strategic transport and scenario planning
	Solutions for public EV charging
	"ConnectMore" online connection tool

WHERE

A subsidiary of SP Energy Networks, SP Manweb operates the electricity distribution network in the former Merseyside and North Wales Electricity Board area where the project will take place. The SP Manweb license area covers Merseyside, North Wales and parts of Cheshire and Shropshire. Whilst the initial project work will be focused in our Manweb area, the future aim will be to roll the learnings out across our SP Distribution network and across the rest of the UK.



CUSTOMER BENEFITS

Project Charge will:

- Help to develop a new ground-breaking solution for connecting EV charge points to the electricity network in a way that balances network capacity and the needs of the motorist
- Identify prime locations charge points are likely to be needed
- Develop an online connection tool that will allow users to assess and select the most appropriate locations for charge points – reducing the administration necessary to connect new charge points and making the roll-out of charging infrastructure more efficient for all concerned
- Will allow expansion of the charging infrastructure network at the most sensible locations for the needs of the EV motorist

TIMESCALE

September 2019

Identify suitable EV connection solutions for different locations

Delivered by Smarter Grid Solutions (Method 2 – Tactical Solutions for Public Chargepoints):

- Identify areas of high EV growth requiring on-street, destination and en-route charging; and analyse the impact this will have on the electricity network.
- Consider a range of conventional and smart charging solutions, with the aim of determining the lowest lifecycle cost options for different locations.

June 2022

Broader trial completion

Also delivered by Smarter Grid Solutions:

- Working with a large volume of stakeholders, a range of smart charging solutions will be trialled (over a period of 12-18 months). The key learnings of the trial are aimed to benefit a range of stakeholders including other DNOs, Chargepoint manufacturers and EV customers.

SEPTEMBER
2019

December 2020 EV demand scenarios

Delivered by PTV Group (Method 1 – Strategic Transport and Scenario Planning):

- PTV's state of the art transport planning software, Visum, will be used to map out the future electric transportation needs in the SPM License area to 2050.
- Working closely with key stakeholders, the model will provide an evolving picture of EV usage considering a range of uncertain futures, helping SP Energy Networks future proof their network.
- This work will feed into the selection of trial sites for Method 2 and delivery of 'ConnectMore' tool (Method 3)

June 2021

Limited trial completion

Delivered by Smarter Grid Solutions:

- Working with a focused group of stakeholders, selected smart charging solutions will be trialled (over a period of 12 months) with key learnings of the trial feeding in to the development and design of the broader trial to follow.

December 2022

ConnectMore Online Tool Public Availability

Delivered by EA Technology (Method 3 – The 'ConnectMore' Online Connections Tool):

- The 'ConnectMore' Tool will enable a range of non-engineering stakeholders to assess optimum locations for the connection of EV chargepoints, by considering user needs and the capacity of the electricity network.

CONTACT US



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