

Cheshire and Warrington Sustainable and Inclusive **Growth Commission**







Case Study



Sustainable Transport

Charge Project -Refuelling tomorrow's electrified transport

This case study demonstrates how funding has allowed the development of better accessibility to EV charging ports in the Warrington Borough. This aligns with aspirations in Cheshire and Warrington to become a sustainable and inclusive economy.



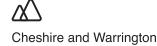
SP Energy Networks' Charge Project explores innovative ways to accelerate the UK's transition to electrified transport and help meet 2050 Net Zero targets

Funding of £6.85m was awarded by OFGEM via the 2018 Networks Innovation Competition and implemented over four years in partnership with the PTV Group, Smarter Grid Solutions and EA Technology. With the ban on sale of new petrol and diesel vehicles from 2035, and the rapid growth of EV use, the Charge Project focused on increasing the availability of public chargepoints, making EV ownership a more viable option for drivers.

Objectives:

A fundamental objective of the Charge Project was to help chargepoint operators and other customers make more informed decisions on the location of public chargepoints. It was therefore important to build a transport model with specified requirements to assess EV infrastructure needs.

The model needed to have a coverage of travel including the network licence area, sufficient coverage to capture most travel into and out of the network licence area with specific zoning and population segmentation applied. It was also calibrated to realistically route journeys in reasonable time and distance with reference to particular day type, time of day, road condition, weather condition etc.



Sustainable and Inclusive Growth Commission

WARRINGTON Borough Council





Sustainable Transport

Location:



Warrington

Challenges addressed:



Carbon emissions



Air pollution



Tech & Innovation



Outcomes

Through the Charge Project, it has been realised that DNOs and customers, including chargepoint operators, local authorities site owners and property developers, would require a methodology for better understanding the public EV charging infrastructure roll-out.

To this end, ConnectMore, a unique, free-to-use, self-service online planning tool was developed in the Charge Project that identifies the EV charging demand and the electricity network accommodability based on the Transport Model and up-to-date LV and HV network data.

It is also equipped with the EV Connection Cost Estimator that provides instant quote to connect chargepoints to a specific location on the electricity network. These features guide and inform EV charging infrastructure decision making in a quicker, more accurate and cost-effective manner.

Find out more about our Sustainability projects around the region at:

cheshireandwarrington.com/what-we-do/sustainability-inclusion/



Cheshire and Warrington
Sustainable and Inclusive
Growth Commission

Find out more here:

ConnectMore Interactive map

Scenario Forecasts for EV Uptake in Manweb

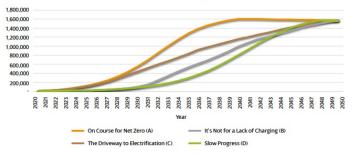


Fig. 1. Scenario-based EV uptake forecast in Manweb area.

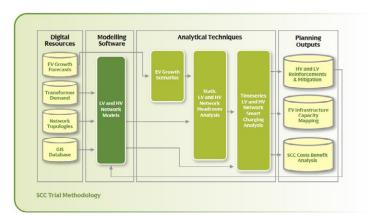


Fig. 2. Smart Charging Connection analytical process flow.



 $Fig.\ 3.\ Connect More\ interface\ showing\ the\ electricity\ network\ capacity.$





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