

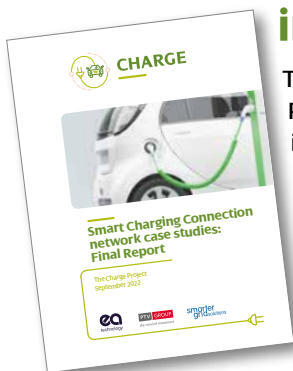
What is the Charge Project?

The Charge Project is an exciting initiative from SP Energy Networks, delivered in collaboration with EA Technology, PTV Group and Smarter Grid Solutions, that aims to accelerate the UK's transition towards electrified transport.

It's also a vital part of SP Energy Networks' commitment to help the UK achieve net zero by 2050.

Running for four years throughout Merseyside, Cheshire, North Shropshire, and North and Mid Wales, the Charge Project will – for the first time – merge transport and electricity network planning together. It will create a comprehensive map of the region that identifies where EV chargepoints are needed and can be best accommodated by the electricity network. It will also pioneer Smart Charging Connections to accelerate chargepoint installation.

Smart Charging Connections in the real world



The latest report from the Charge Project has just been launched and is available to [view online](#). Smart Charging Connection (SCC) network case studies looks at how SCCs work in the real world via a series of desktop assessments and virtual trials.

There are three key sections within the report:

- An analysis of historical datasets of chargepoint utilisation, sourced from chargepoint operators (CPOs) across a variety of sites in Southern Scotland and Northern England. This study looks at different types of chargepoint and how they have been used, including charging duration, energy consumption, and typical utilisation. Understanding this data is crucial to the subsequent evaluation of SCCs, and ultimately, the impact of charging constraint events on EV drivers.
- A series of desktop assessments of charging infrastructure based across a wide range of public, workplace and on-street residential destinations, plus en-route charging. These studies demonstrate delivery of distribution network operator (DNO) SCC solutions across a variety of use cases, both validating the DNO control technology and providing a practical illustration of chargepoint demand curtailment across different scenarios.
- Interim learning from a series of virtual trials, where the SCC control infrastructure has been configured in a laboratory simulation environment for emergence of network constraints to be modelled using representative SP Energy Networks network datasets. It also outlines the design and test cases demonstrated through the virtual trials.

Calum Watkins from Smarter Grid Solutions, which has produced this latest report, says,



“Using desktop studies and virtual trials enables us to investigate SCC benefits across a wide range of network cases and study scenarios.”



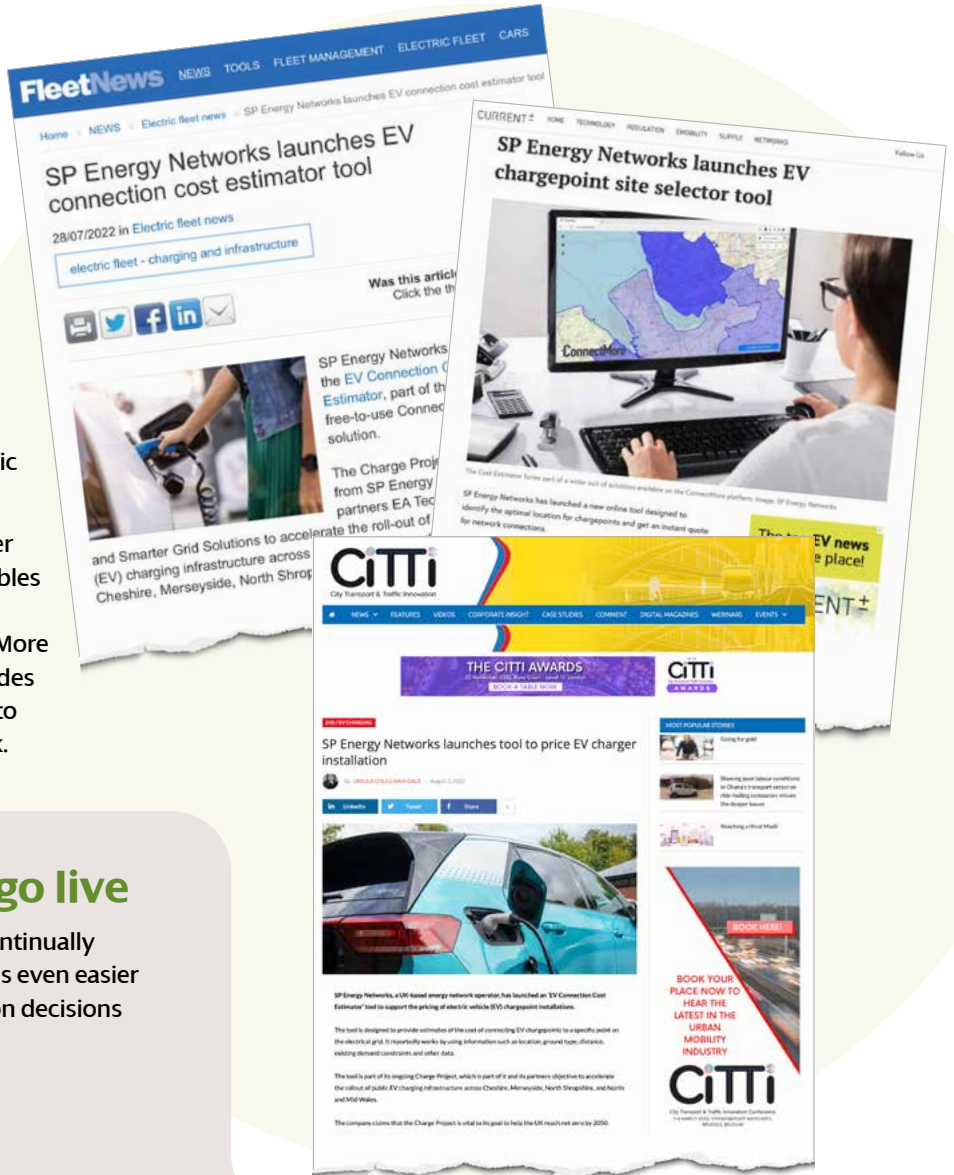


Cost Estimator hits the headlines

At the end of July, the Charge Project officially announced the latest element of its innovative online tool ConnectMore, the **ConnectMore EV Connection Cost Estimator**.

The story was picked up by a number of key media titles, including Fleet News, Current News, and City Transport & Traffic Innovation.

ConnectMore is a potential game changer for public charging infrastructure. It enables optimal locations for chargepoints to be quickly identified, and now the ConnectMore EV Connection Cost Estimator also provides immediate quotes for connecting them to specific points on the electricity network.



High-voltage data to go live

The Charge Project is working hard to continually develop and improve ConnectMore so it's even easier for users to make chargepoint installation decisions based on the information it provides.

The latest significant addition to the tool will be the inclusion of (HV) high-voltage as well as (LV) low-voltage electricity network data. Providing this extra layer of information within the ConnectMore Interactive Map and Cost Estimator will make a huge difference to the range of chargepoint schemes that can be quoted for, with the HV network able to support more higher-demand installations such as rapid chargers or en-route charging facilities for which bigger connections are necessary.





Charge Project events

The Charge Project and SP Energy Networks have been involved in a series of events this September, where the team has had the opportunity to talk in person

about the benefits of ConnectMore and Smart Charging Connections. It's also been a great opportunity to reach out to stakeholders and get their feedback.



On 8–9 September, the Charge Project exhibited at Cenex-LCV 2022, the UK's leading conference and networking event for low carbon vehicles.



SP Energy Networks was the headline sponsor at both EnergyX 2022 North (21 September) and the Energy Innovation Summit 2022 (28–29 September).



ENERGYX



Upcoming events

The Charge Project and UK Power Networks' Optimise Prime project will be holding two joint online events in November, where participants can hear more about both initiatives' innovative chargepoint connection solutions:

9 November 2022, 10:30–12:00
Getting connected: New EV charging infrastructure solutions. Register [here](#)

23 November 2022, 10:30-12:00
Enabling the EV revolution: Alternative connection and network capacity management solutions. Register [here](#)



Q&A

Meet the team



Adeel Javeed
Senior Consultant,
EA Technology

How did you become involved with the Charge Project?

After working for eight years in the automotive industry and seeing the internal push towards electric vehicles, I was excited to understand how the infrastructure would be developed to support this change. I quickly realised that as the number of electrical vehicles and chargers increased in the UK, the load on the energy network would increase. This is a major challenge that the energy sector is facing.

As a Senior Consultant at EA Technology, I got the opportunity to work on the ConnectMore project. Both the Heatmaps tool, to scope out areas of future high demand, and the Cost Estimator, to get a quote for a specific connection point, are hugely innovative.

What does your day-to-day work life involve?

A typical day at EA technology starts off with the daily stand-up, where the consultants and developers provide an update on their progress and what they've got planned for the day.

As a Senior Consultant, I'm responsible for the delivery of the project and, to achieve this, we have to work in collaboration internally and with our partners across the project. I bring all the stakeholders together and ensure their skills and input are taken into consideration, and then feed this back to the team.

What's the best thing about your job?

I'm very fortunate to work with a fantastic group of people inside EA Technology and the partner organisers. What I love about my job is the work we're doing to fight climate change. I believe the tools we're creating can really help to plan energy usage around the country as EVs become ever more popular.

What do you do outside of work?

Outside of work, I spend a lot of my time with my family – I have a 9-year-old who is always coming up with ideas about how we can be more energy efficient! I also love



playing and watching a lot of sports. I play football once a week locally with friends, and try and get to the gym a couple of times a week as well.

What's the biggest challenge that the UK faces in its drive to reach net zero by 2050?

I think the biggest challenges the UK faces is, firstly, to replace all fossil fuels with clean energy, and secondly, to ensure there is enough power to meet demand. As more electric vehicles are introduced to the UK market, the demand on the electricity network will increase – tools like ConnectMore can help facilitate this change.

High-quality metrics will be key to achieving our net zero goals and help us understand the energy network as we make the EV transition. At the moment, a lot of the green technologies available favour people who have money to spend on EVs and heat pumps, etc. It's also easier for homeowners who have private driveways to spend, for example, on EVs and heat pumps. The Charge Project's goal is to support public infrastructure roll-out and provide more equal opportunities for EV adoption.



What was your first car and what do you drive now?

The first car I owned was a Vauxhall Corsa. It was a perfect first car, small and excellent for a new driver to learn and improve his driving skills. My current car is an Audi A3, which is big enough for a small family and also a diesel, so doesn't cost an arm and a leg to run. I think my next car will probably be an EV, considering how the relevant technologies have really improved their efficiency.





EV charging in the news

CITY A.M.

1,000 new public EV chargers get £20m boost for UK-wide for roll-out

24 August 2022

The UK government and industry have pledged over £20m for the roll-out of 1,000 new public electric vehicle (EV) chargers across England.

The local EV Infrastructure pilot scheme has received £10m as part of the government's £450m EV charging strategy for local authorities, which aims to increase the number of public EV infrastructure by a 10-fold to 300,000 by 2030. The additional £10.9m were raised from private investment and public funding across the local authorities.

The chargepoints will be built across 9 local authorities – including Durham, Kent and Dorset – to help the levelling up of electric cars' infrastructure.



theguardian

Housebuilders 'lobbied against plan for electric car chargers in new homes in England'

12 September 2022

Britain's biggest housebuilders privately lobbied for the government to ditch rules requiring electric car chargers to be installed in every new home in England, documents have revealed.

The FTSE 100 construction firms Barratt Developments, Berkeley Group and Taylor Wimpey were among the companies who argued against the policy in response to an official consultation seen by the Guardian. The "blatant lobbying efforts" were criticised by Transport & Environment, a campaign group.

fleetworld

Marked shift to public EV charging among EV drivers

13 September 2022

Electric vehicle drivers are markedly moving to using out-of-home chargepoints in response to fast-improving public and destination charging facilities.

A YouGov survey has revealed that only 56% of EV owners now charge at home (down from 78% in 2021), with 20% charging at shopping centres, 20% at work, 11% at hotels and 8% at restaurants.

And a total of 17% charge at petrol stations, but only 7% give this as their preferred place to charge, while 12% actually say that not having to visit petrol stations is their favourite thing about EV ownership!

QUIZ TIME

According to Zap-Map:

What is the percentage increase in public chargepoints in the UK since last August?

a) 19%

b) 27%

c) 34%

How many free public chargepoints are there in the UK?

a) 2,970

b) 4,105

c) 5,430

Answers: 34% and 5,430