

Case Study

Skanska

Highlights

- Skanska UK, one of the country's leading development and construction groups, has had 67 electric vehicle chargepoints installed at its Hertfordshire office.
- The installation was project managed by Skanska's facilities team, with Pod Point the supplier and installer.
- A substation was updated to give the potential for all 243 bays in the multi-storey car park to offer electric vehicle charging in future.
- The car park had to remain open during the installation process.
- Skanska also wanted to restrict usage of the chargepoints to employees and visitors, and have the option to set a tariff to cover its electricity costs.
- Pod Point's Array charging load-balancing solution helped overcome the car park's limited power enabling up to three times more chargepoints to be installed without costly power supply upgrades.
- Skanska is using Pod Point's back office MIS to control access to EV charging centrally, monitor usage and have the option to set custom electricity tariffs.
- Pod Point's network assurance team is able to monitor the Wi-Fi connected chargepoints and remotely perform simple fixes and issue over the air updates. This reduces the need for on-site maintenance and further minimises inconvenience.



Skanska's Senior Project Manager Paul Jarvis said:

“The installation of the EV charge points was a credit to all concerned. All site work was done efficiently, on time and to budget with minimal impact on a busy, occupied site.”

The whole story

Project overview

Skanska UK, one of the country's leading development and construction groups, wanted to install 67 electric vehicle chargepoints, at its Hertfordshire office in Maple Cross. The company has long been recognised in the construction industry as a leader in sustainability. As part of its low carbon approach, it uses electric and low emissions vehicles both operationally and as company cars.

As part of the work, the substation on the site was upgraded. This means it now has the capacity to supply energy to all 243 spaces in the multi-storey car park, should Skanska decide to install more chargepoints. Doing this work now, minimises any future disruption.

Finally, Skanska wanted to be able to restrict usage of the chargepoints to employees and visitors only. It also wanted the flexibility to be able to set a tariff for usage, either via an RFID card or an app.

Challenges

The biggest challenge was the limited existing electricity supply to the car park. This did not have the capacity to power 67, let alone 243, chargepoints simultaneously without a major upgrade. The second hurdle was the car park was extremely busy and could not be taken out of use for any length of time.

The Solution

Pod Point, which offers a fully managed service from initial consultation through to surveying, installation and maintenance, was able to overcome the challenge of limited power supply with the help of its Array Load Balancing system.

The system distributes available power across each chargepoint, ensuring that the electricity capacity is never exceeded. In this way, it enables up to three times more chargepoints to be installed using the same power availability, avoiding the need for costly infrastructure upgrades.

Using the Array system, Pod Point was able to install the 67 chargepoints required and put the infrastructure in place for the remaining 176 bays. This cuts future costs by removing the need for further site surveys. An additional benefit of Array is that it reduces the complexity of electric vehicle chargepoint installations and cuts down the amount of cabling required.

The Result

Pod Point was able to complete the Skanska installation in just two weeks, during which the car park remained open. Using Pod Point's back office MIS, Skanska can control access to the EV chargepoints centrally, monitor usage and set custom electricity tariffs. Monitoring utilisation levels is an excellent indicator of when more chargepoints are required, and Pod Point typically recommends that additional chargepoints are added once utilisation levels reach 70 per cent.

Pod Point's chargepoints are internet enabled, either via WiFi or 3G, which means its in-house network assurance team is able to troubleshoot any problems remotely, often before clients are aware of the issue. This means that problems tend to be resolved more efficiently, reducing the need for on-site maintenance and thereby further minimising disruption and inconvenience.

Skanska was able to part-fund the cost of the install using the Office for Low Emission Vehicles (OLEV) Workplace Charging Scheme. Under the Workplace Charging Scheme, the cost and installation of a single chargepoint can be reduced by up to 75 per cent, up to a maximum of £500. Currently, companies can claim for a maximum of 20 chargepoints under the scheme.