CONTENTS

E-charging

Electric vehicles (EVs) have become part of the cityscape – they are here to stay for the foreseeable future. EVs need to park just as petrol and diesel fuelled cars do. The difference is that motorists want to recharge their car's batteries while parking.

The EV not only occupies a parking space, but it may hog an e-charging point even when it's fully charged. And this poses societal dilemmas.

Societal debate on e-charging behaviour

The charging behaviour of electric vehicle motorists continues to be a topic of societal debate. One major source of irritation is charge-point 'hogging': when cars that are fully charged block charging stations for hours. The Dutch Association for Electrical Vehicle Drivers (VER) and some major energy companies think the problem can be solved by imposing an extra charge for people who 'hog' charging stations.

A survey by PitPoint Clean Fuels and two Dutch academic institutions indicated that people would move their cars if they had to pay more once the battery was fully charged. The counter-argument is that when customers park and charge their e-car to visit a theatre or a restaurant they are unlikely to interrupt the evening to move their car when it's fully charged and would accept the 'fine' as part of the costs of their evening.

The number and complexity of contracts between charging point suppliers, energy companies and e-charge providers in Europe also impede transparency, which is a precondition for introducing any extra costs for customers.

Q-Park e-charging service dilemmas

We also have paying guests who park their petrol or diesel car on a charge-point parking space – we are experimenting with measures, social or otherwise, to nudge our customers to park their car in the right type of space.

Our service is all about 'no worries' after parking your car. We don't want our paying guests to return to the parking facility just to re-park their fully charged EV car.

The service offered by EV-charge providers conflicts with ours. We are talking with all parties concerned to devise a holistic solution.

Smart charging outside peak times

The timing of e-charging is another issue on the minds of local authorities. A survey into the charging habits of e-motorists indicated that the numbers of people charging their e-vehicles at the same time (usually between 18:00 and 22:00) could overload the power grid and reduce the beneficial environmental impact of electric vehicles.

Since the potential growth of EV cars will only intensify this problem, two Dutch provinces want to install 4,500 smart charging stations in 44 municipalities to make it more attractive and convenient for motorists to charge their cars outside peak times.

Exponential growth

In the last decade, e-mobility had the chicken and egg problem, not enough customers buying electric vehicles for the lack of ubiquitous public charging infrastructure, and not enough EV charging infrastructure in place because of too few electric vehicles on the road. However, thanks to favourable policies and advances in technology driving down the price and driving up the speed and performance of electric vehicles and

EV charging stations, the picture of electromobility in Europe has changed drastically.

Add to that increased collaboration among energy companies, automobile companies, and EV charging equipment manufacturers, the number of EV charging points in Europe stands at 170,149 in 2019 from just 3,201 in 2010; the biggest growth being registered from 69,094 in 2015 to 132,114 in 2016.

The countries in which Q-Park operates now have substantial numbers of charging points and additional charging facilities are still being added.

Europe is already ahead of the goal of one charging station per 10 electric vehicles. However, the infrastructure must continue expanding to cater to the growing number of electric vehicles that hit the road each year. It is estimated that by 2025, 14% of all light vehicles sold in Europe would be electric.

In Europe, 79% of the public charging infrastructure is operated by utilities and oil companies.

Source; https://www.prosperoevents.com/our-services/item/398-electric-vehicle-charging-infrastructure-in-europe

There's more to EV charging than meets the eye

We continue to monitor market developments regarding EV charging and to conduct our own research. Governments throughout Europe are introducing regulations regarding the availability of e-car charging points in purpose-built car parks and on-street.

We want to be prepared so we meet the requirements. This means that when we conduct major refurbishments to any of our parking facilities, we include e-charging stations were relevant.

Targets & Actions

We have defined the following ambitions regarding e-charging. We will continue to increase the numbers of:

- parking facilities with e-charging stations by at least 10% per year till 2025;
- e-charging stations by at least 10% per year till 2025;
- e-charging stations based on an international e-charging policy, to be created by the expert team 'Energy Management'.

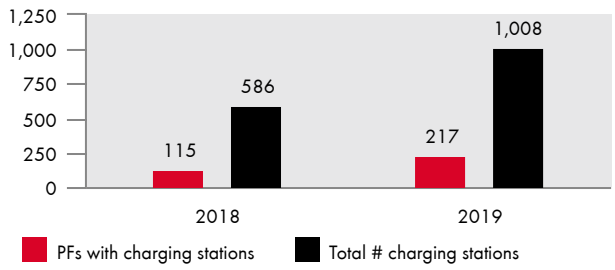
In addition, we have plans to:

- improve definitions and reporting as there are various interpretations of e-charging stations.
- embrace new technology to face e-charging challenges related to grid capacity and human behaviour aspects.

Results

In 2019, Q-Park had 1,008 (2018: 586) e-charging stations in more than 217 (2018: 115) parking facilities, an increase of 72.0% and 88.7% respectively.

Chart 21: E-charging stations



More about our thoughts on EV dilemmas.

Digital services

PaSS PlatePay

In 2019 we implemented our innovation PaSS PlatePay in most of our parking facilities in Belgium and in a few parking facilities in the Netherlands, enabling pre-booking propositions for Park+Fly as well as Event Parking.