

We
Develop
Quality

Urban liveability

NOTABLE PROJECTS IN 2018

Handelsbeurs

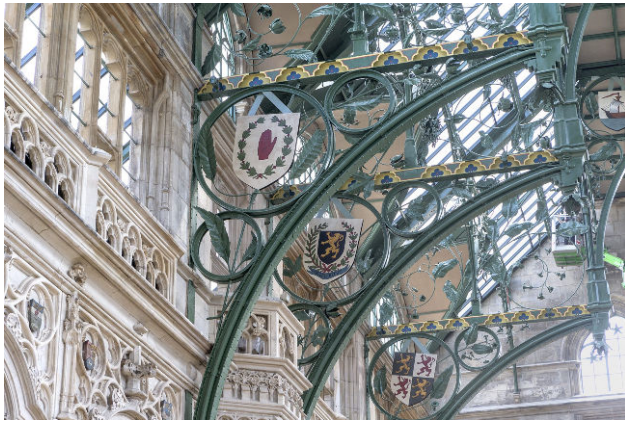


Photo courtesy Denys website

Q-Park excels in collaboration projects and the restored Handelsbeurs in Antwerp is an excellent example. In conjunction with architect eld, restoration specialists Origin and contractor Denys, in September 2019 Q-Park opened a modern 300-space car park in the centre of Antwerp.

The parking facility includes many of Q-Park's signature features on which the company has built its reputation for quality and convenience.

Pre-booking & Event management

This parking facility is equipped with Q-Park PlatePay, our proprietary solution which allows customers to access and exit parking facilities with their number plate. Customers can pre-book a parking space online and choose from a variety of parking propositions: for meetings, leisure or events.

Event organisers, offices and leisure providers please note: **Q-Park PlatePay** enables you to create bespoke solutions tailored to specific target audiences, needs and requirements.

 [More about the Handelsbeurs.](#)

Veerkaden – 100% energy neutral

The upgrade and transformation of the Veerkaden parking facility was completed in Q4 2019.



The transformation into an energy-neutral parking facility will help Q-Park reduce its overall CO₂ per parking space and contributes to meeting the Paris 2016 UN climate change commitments, the Energy Efficiency Directive (EED) from which the ISO 50001 energy management standard is derived. Q-Park Netherlands and Q-Park Germany both have multisite ISO 50001 certificates.

Veerkaden required substantial renovation to bring it in line with Q-Park's updated functional quality standards and to meet changing requirements regarding energy consumption, e-charging and CO₂ footprint.

Q-Park took this opportunity to not only refurbish the visible and aesthetic aspects of the car park, but to go much further and equip the parking facility with the means to be self-sufficient for energy. Government subsidy was available for this extensive project, meaning the investment is expected to pay for itself within 7 years, about half the usual return on investment period.

To achieve energy self-sufficiency, the renovation included:

- I PV panels
- I Nilar EC Batteries
- I DC LED lighting
- I Smart energy hub

PV panels

The top deck of the parking facility now houses 1,042 solar PV panels, installed in east-west orientation for maximum efficiency. The installation includes four inverters and has a maximum capacity of 339 kWp. The annual estimated electricity production is 392,000 kWh.

Nilar EC Batteries

The installation is as large as possible to maximise the electricity generating capacity. In the Netherlands there is a cap on the amount of power an installation may give back to the national grid, so facilities to store the power generated were made. The batteries selected are environmentally friendly nickel metal hydride (NiMH) Nilar batteries. These store the power generated by the PV panels for use at a later point in time.

The installation is calculated to provide enough electricity to power the parking facility, including the e-charging stations. Electric cars can be fast charged (DC charging) and charging at night means using the solar power generated during the day.

DC LED lighting

Low-energy high-performance LED lighting became the standard in most of Q-Park's owned or long-leased parking facilities during 2019, Veerkaden is no exception.

However, the difference here is that the LEDs are DC powered directly from the Nilar battery packs. This is an enormous saving as the DC power generated by the PV panels does not have to be first inverted to AC power and then transformed back to DC in the LED lighting circuit.

We expect to realise an additional annual saving of approximately EUR 10,000 with this DC LED lighting solution.

Smart energy hub

The Veerkaden parking facility is equipped with a bi-directional smart energy hub designed to manage the power generated by the PV panels on the roof and to direct it to the battery pack, DC LED lighting, and e-charging stations. It also provides AC power for the rest of the car park equipment, such as the lifts and barriers.

If the battery packs are fully charged, the hub converts the power generated by the PV panels to AC and channels it to the public grid.

Furthermore, if the battery pack cannot meet electricity demand in the parking facility at any point, the smart energy hub draws power from the grid. As such, it optimises energy flow and, using patented power equalisation technology, balances the parking facility's power consumption, also minimising the parking facility's dependence on the grid.

The entire installation, in combination with the Nilar battery pack also provides a reliable peak shaving and time shifting power solution. In the event of a public grid power failure, the smart energy hub will continue to power the parking facility.

 [More about this 100% energy-neutral car park.](#)

Parking company P1 acquired

In September 2019 Q-Park acquired 100% of the shares of P1, a family-owned parking company operating and managing parking facilities in the Netherlands.

This acquisition has added volume to the Q-Park portfolio and has strengthened our position in major cities in the Netherlands including Eindhoven, Utrecht, The Hague and Amsterdam.

At the time of the acquisition, Vladan Jankovic, Managing Director of P1 said he was pleased to have found a parking operator with a quality profile and similar vision.

Figure 3: P1 acquisition in the Netherlands



Onderdeel van **Q-PARK**

Q-Park sees this as an opportunity to optimise service in the Dutch market and to engage with public and private stakeholders to build smart mobility solutions which will help keep Dutch cities accessible, liveable and economically viable.

Philharmonie, Paris



The Philharmonie concert hall is a modern structure ideally located to enjoy the Parc de la Villette with its many attractions including the Zenith. Its highly original architecture – which conceals all its corners both above and below ground – presented new challenges for Q-Park when designing the parking spaces, entrances and exits.

The result reaffirms Q-Park's track record in the design and management of car parks around the most iconic cultural sites, and our desire to participate in projects of high technical and architectural significance.

Q-Park signature features were incorporated and adapted to meet the requirements of the building, with special attention being paid to routing, signposting and house style colours. Motorists now benefit from:

- | One-way traffic
- | Effective illuminated signage
- | Optimised guidance system to spaces
- | Multiple barriers (2 for entry and 3 for exit)
- | Smooth traffic flow in the car park and on the streets
- | Two pedestrian entrances at street level

The facility has space for 564 cars (including 16 places for PRMs) and 90 motorcycles, spread over two underground floors. It offers direct access to the concert halls and is close to public transport connections (metro, bus and tram).

 [More about Philharmonie in Paris.](#)