

Committee	COUNCIL MEETING
Date	19 July 2021
Agenda Item	14

Update on Electric Vehicle chargepoints

The installation of Electric vehicle chargepoints in Chapel Street car park was held up for a year by the fact that, although HTC has owned the carpark for 40 years, it never held the title deeds. The pandemic delayed the work of Land Registry, and the title deeds were eventually received in December 2020. When the company Instavolt, who had promised to carry out the installation, were then contacted, they stated that they were no longer interested.

More research was done, and HTC made contact with the officers at BDC working on the Horizon platform. They recommended BP pulse with whom they are working. HTC has made contact, and initial studies are now being carried out by BP pulse. The results of these should be available in August, and it is hoped that the project can then move forward.

Recommendation; that HTC notes this report and awaits further developments.



Sarah Greatorex Town Clerk

BP Pulse/BP Chargemaster - business model for Residential charging infrastructure

Background & experience

As one of the first OLEV (now OZEV) funded deployments of 7 kW residential charge points under the On-Street Residential ChargePoint s scheme (ORCS), working with Nottingham City Council, the bp Pulse team project managed the delivery of 60 Fast charging sockets across 4 residential car parks for residents without access to on-street parking and home chargers in 2018-2019.

Following this pilot project, we worked with Derbyshire County Council as sponsor for 2 Derbyshire Local Authorities, High Peaks and Derbyshire Dales, for 80 Fast charging sockets across 5 car park locations in 2019-2020.

In 2020 we began site selection, legal and procurement due diligence for 15 Local Authorities, with 414 charging sockets planned for installation by mid-2021 in car parks and on-street locations:

Our 2021 installations include the following partners and charging numbers:

- South Derbyshire – 16 charging sockets
- Warwickshire County Council - 78 charging sockets
- Lincoln City Council – 8 charging sockets
- Rushcliffe Borough Council – 16 charging sockets
- Bolsover – 8 charging sockets
- Citi of London Corporation – 32 charging sockets
- West Suffolk – 16 charging sockets
- South Northamptonshire – 16 charging sockets
- Chesterfield – 56 charging sockets
- Gedling – 32 charging sockets
- Uttlesford – 24 charging sockets
- Braintree – 32 charging sockets
- Newark & Sherwood – 16 charging sockets
- Buckinghamshire – 32 charging sockets
- West Lancashire – 32 charging sockets
- Amber Valley District Council – 16 charging sockets

CAPEX and funding

In all cases, the capital costs of charge point supply and installation has been fully funded 75% by OZEV and 25% match funding by bp pulse. In addition, bp pulse has undertaken site feasibility and costings to assist the Local Authority bid to OZEV for funding, with site proposals meeting ORCS requirements.

Operational costs and liabilities

Following installation, as Charge Point Operator (CPO), bp Pulse will take on the subsequent operational risk and costs for charging infrastructure, saving each Local Authority, responsibility for operational liabilities and ongoing cost. This includes electricity, insurance, repair and maintenance costs. This is essential during the early market development for electric vehicles and charging infrastructure, when operational costs will exceed revenue.

Policy and market observation

The business model enables the public sector to reduce risks and still pursue policy to encourage take up of low emission vehicles through the provision of charging infrastructure and at the same time observe the electric vehicle charging market as it develops and moves towards being commercially viable. Each Local Authority has access to the back-office charging data for each charge point operated on Local Authority premises.

Profit Share

We also want to ensure that as the market develops and utilization rates increase there is revenue generation potential for our Local Authority partners, acting as Charge Point Hosts.

With this in mind, hosts will receive a 25% profit share on all Tariff charging income over 17.5pence per kWh per charging session, calculated annually.

Contract Term

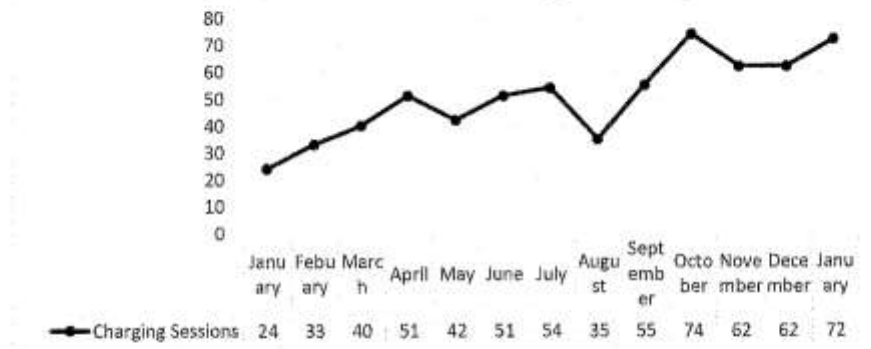
OZEV require a minimum operational contract period of 3 years and bp Pulse request an additional 4 years option to extend the term to 7 years.

Cost to drivers

In line with EU, UK Government and OZEV requirements, bp Pulse will offer electric vehicle drivers two access methods for charging, pay as you go and subscription, with current per kWh tariffs of 12 pence and 18 pence

respectively. The Electricity is 100% green. The Tariffs are designed to encourage the transition to Electric Vehicles.

Evidence from ORCS 2018 installations shows usage increasing over time



Profit & Loss (P&L)

With a low tariff to encourage electric vehicle take up, the ORCS charging infrastructure is not a guarantee to produce early stage profit for the CPO or Charge Point Hosts, but this programme and deployment is part of the solution to encourage the transition to electric transportation, particularly for those without access to off-street parking and home chargers.

The following P&L is taken from our best performing ORCS installation of three charge points and charging data for 2 years between 2019 – 2020:

685 charging sessions

9,197 kWh consumed – average of 13 kWh per charging session

36 individual electric drivers using the one car park over the 2 year period

Tariff income £1,941

Maintenance Costs

3 x annual maintenance costs @ £249 per year per charger = £1,494

Electricity Costs: 9,197 kWh x 15 pence cost of green energy = £1,380

Gross Loss of £933 without adding cost of warranties and insurance.

With our Profit Share proposition, 25% over 17.5 pence per kWh per charging session, we offer a simple calculation process and all charging and income data will be shared as an Open Book process via the charge point back-office.