Kent hosted the OppCharge Electric Bus Trial between 21st March and 9th May 2018. We are extremely grateful to Volvo Bus and ABB for bringing the vehicle and charging infrastructure to Kent and are proud to be only the second Local Authority in the country to host this trial following an initial demonstration in Manchester in September 2017.

The trial presented a fantastic opportunity over a 7 week period for the county and its residents to see this ground-breaking technology in action. The bus provided great benefits for improving air quality and reducing CO2 emissions and allowed us to obtain vital information on the environmental benefits the technology brings. During the trial, we held stakeholder events and obtained public feedback on the technology as well as an understanding of whether the technology could work in Kent on a permanent basis, both locally in the North Kent area and countywide.
How does the technology work and what are its main features?
During the trial, the electric bus recharged outside Greenhithe train station in under six minutes using innovative OppCharge pantograph high-power charging technology. The OppCharge makes the range of the bus limitless by allowing the bus to charge at convenient locations along the line of route - in fact, a bus can charge within 30 seconds. The vehicle uses an electric driveline featuring an energy storage system used to power an electric motor drive system. Attached is technical information on the OppCharge equipment and the bus itself.

How did Kent residents see the bus in action?
The bus operated on the Fastrack A route between Bluewater, Greenhithe, Dartford and The Bridge. The electric bus had its own timetable in operation which will provided an hourly service on Mondays – Sundays from 21st March – 9th May 2018. A full normal Fastrack A service operated as per its regular timetable alongside the electric bus.

Why is the trial important to Kent?
The environment and air quality is important to us all. KCC sees this trial as a fantastic opportunity to gather information on how electric buses may be able to operate in Kent in the longer term. The trial will enable us to establish whether OppCharge technology could work for Kent, and whether it could be rolled out to other locations around the county.

Why was Fastrack selected as the route to trial the vehicle?
Fastrack is Kent’s award-winning Bus Rapid Transit system. Ongoing and fast-moving development in the Kent Thameside area is anticipated to see the growth of Fastrack which is a key part of the Transport Strategy for the area. It is felt that in the longer term, Fastrack could provide an ideal location for electric buses to be introduced on a permanent basis.

Where else is the trial taking place?
Kent was only the second Local Authority to host the trial. Volvo and ABB are conducting a year long tour which began in Manchester in September 2017 and has / will take in locations such as Heathrow Airport, Cardiff and Liverpool in the coming months.

Other than environmental benefits, does the vehicle provide any other advantages?
Yes. As well as the clear environmental benefits which result from the use of a zero emissions vehicle, the bus is capable of operating zone management areas. This involves the establishment of speed and other restrictions which ensure the vehicle is running within prescribed limits. This technology was used during the trial to manage speeds at Bluewater and The Bridge development.

Why is the opportunity charger powered by a generator?
For a 7 week trial, it would not have been feasible to install permanent charging technology linked in to the National Grid. The portable generator powering the opportunity charger is moving around the country during the year long trial along with the bus itself. If the technology is introduced in Kent on a permanent basis in the longer term, charging points will link into the National Grid and not involve the use of a generator.

Who has been involved in bringing the trial to Kent?
Key stakeholders have included Kent County Council, Volvo Bus, ABB, Arriva and Prologis. Other stakeholders have included Dartford Borough Council, Southeastern, Ebbsfleet Development Corporation and Bluewater. We are grateful to all partners for bringing the trial to Kent and for working collaboratively to ensure that it runs successfully.

PLEASE LET US KNOW YOUR THOUGHTS AND FOLLOW US ON TWITTER

@KENTELECTRICBUS