

State of the Art Bus Rapid Transit (BRT) Electrification

Kent County Council carries 2.75 million passengers every year on its Fastrack Thameside BRT - a high-frequency Bus Rapid Transit network running on dedicated BRT lanes since 2006.

Now with £9.5m ZEBRA 1 funding, Fastrack BRT is going electric. KCC appointed VEV to build, manage & maintain specialist Opportunity Charging infrastructure at 2 locations for 28 Go Ahead electric BRT buses in Gravesend & Dartford. A new Opportunity Charging Fastrack Dover network will be introduced in 2024.

KCC is using 6 powerful pantograph chargers at Fastrack BRT Thameside & Dover networks to provide opportunity charging at 3 locations. At 450kW, it takes less than 6 minutes to top-up charge at each end of the route while passengers board.



“We were confident VEV understood our innovative requirements and had the skills and knowledge to build, manage & maintain our bus charging infrastructure for Fastrack Electric BRT. We also felt VEV were aligned with our ambitious environmental goals and Fastrack Electric programme to achieve net zero by 2030.”

Jacqui Elliott,
Public Transport Project Manager

About KCC

- Kent County Council is the country's largest Council and serves 1.7m people.
- The Kent County Council Area is covered by 12 local authority districts, from Ashford to Tunbridge Wells.
- KCC declared a climate emergency in May 2019, and pledged to be net zero from their own estate and activities by 2030.
- KCC invests in projects which address the national climate emergency by reducing emissions and supporting green economic recovery.



15-year bus operator contract underpins the EV business case



Innovative pantographs: **lighter battery, more passengers, top-up charging** while passengers board



Charging infrastructure for **x6 450kW pantographs providing continuous power** for long bus operations



Predicted **carbon emissions savings of 1,100 tonnes/year.**