

# 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.**