

# Driving Change in Low Carbon Buses

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**PRIDE**  **F THE N**  **ORTH**



# PRIDE OF THE NORTH RTH

amazing bus companies  
across Lancashire  
& Yorkshire

by  transdev







Malton  
York  
Harrogate  
Keighley  
Burnley  
Leeds  
Bradford  
Preston  
Blackburn  
Manchester



# Harrogate Electrics









### **Overall Project Responsibility**

8 x Volvo 7900e Single Deck City Buses  
Warranty & Maintenance Support  
Telematics/Monitoring & Reporting (DfT Requirement)



1,250 kVA Incoming Supply & Transformer (312m)  
Planning Consent/CDM Regulations  
Installation & Construction Works

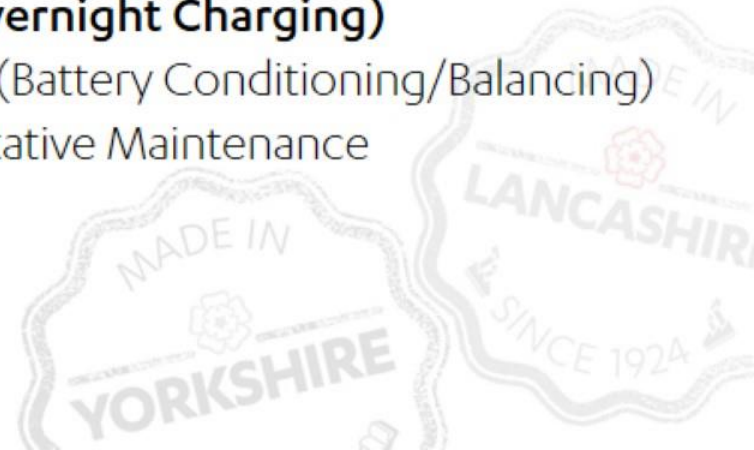


### **Bus Station (Opportunity Charging)**

3 x Inverted Pantograph Masts  
3 x 300 kW Chargers

### **Prospect Park (Overnight Charging)**

4 x 22kW Chargers (Battery Conditioning/Balancing)  
Warranty & Preventative Maintenance



## Timeline

Planning Consent/DNO Connection: Application April 2017

Installation: Summer 2017

Masts & Chargers: November/December 2017

Vehicles & Commissioning: January 2018 Onwards

## Cost

**DfT Grant £2.25m**

Buses

£1.44m

Infrastructure @ 75%

£816k

**Transdev Cost £1.7m**

Buses

£1.44m

Infrastructure Shortfall

£272k

**Total Project Costs £3.9m**

Buses

£2.88m

Infrastructure

£1.08m









# EV Conversions

## City Sightseeing York







## **Adopted a Low Emission Strategy in 2012**

Award of £75,433 from the DfT Clean Bus Technology Fund to convert bus 4009 (Prototype)  
World's first double deck 100% electric bus



**Sheffield based Magtec carried out the E/V conversion & part funded project shortfall**



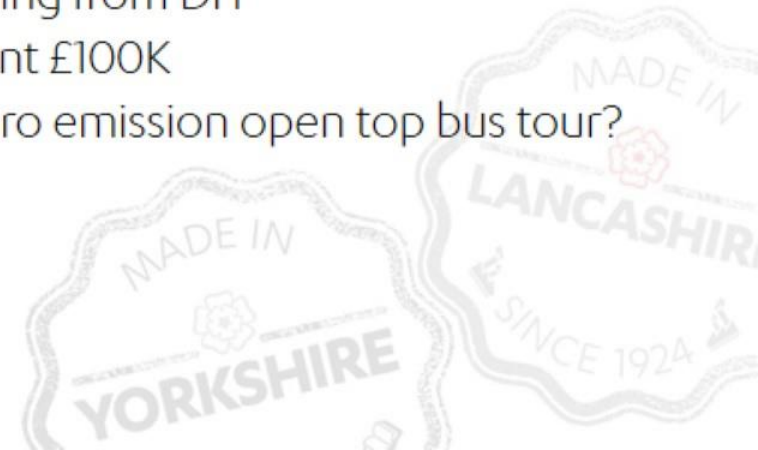
**60 miles a day for 45 miles a day operation**

In service since Sep 2014

## **A further five under conversion**

Further £475K funding from DfT  
Transdev investment £100K

The World's first zero emission open top bus tour?





# SCRT Conversions

## Keighley & Harrogate



## 19 MyBus SCRT conversion

Euro 3 buses

Clean Bus Tech Fund 2013

West Yorkshire Combined Authority



## 14 + 1 The Shuttle relaunch and SCRT conversion

Euro 3 buses

Clean Vehicle Tech Fund 2013

Bradford City Council



**THE Harrogate** BUS COMPANY

## 10 Harrogate 'The 1' SCRT conversion + E-fan

Euro 3 buses

Clean Bus Tech Fund 2015

Harrogate Borough Council



## 8 Harrogate '70/71' SCRT conversion + E-fan

Euro 4 buses

Clean Bus Tech Fund 2015

Leeds City Council

**96% less NOx achieved**

**Euro 6 standard**

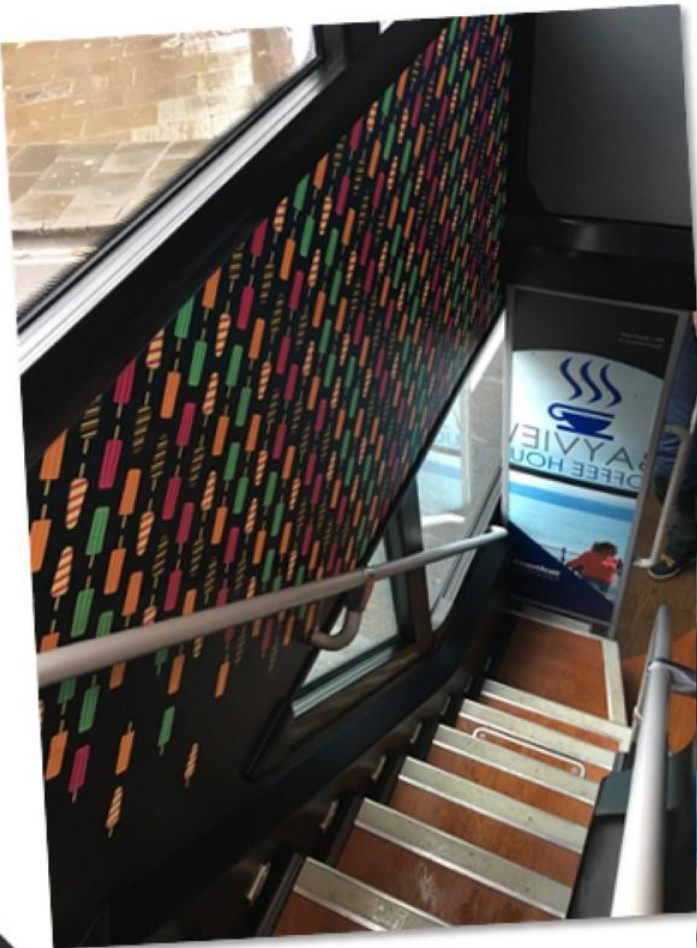
















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