



### **Crawley Sustainable Transport Event**

# A zero emission fleet by 2030

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#### Who are we?

With our local bus operating brands, we are the main provider of local bus and interurban services across the Coast 2 Capital region with 430 buses.

#### Go-Ahead

But also part of the Go Ahead Group, largest operator of red buses in London for TfL, eight regional urban bus operators around UK, largest operator of trains for DfT and an emerging global operator with buses in Dublin & Singapore and trains in Germany and Nordic Region.







## A zero emission fleet by 2030









A hugely ambitious aim but one we believe will become increasingly necessary to help tackle climate change, improve air quality in the communities we serve and ensure that our fleet is fit to meet the future needs of mobility across the region.

It follows a campaign of heavy investment in low emission Euro 6 technology with 82 Microhybrid Wrightbus Streetdecks in Brighton since 2015, the retrofit upgrade of SCRT equipment to a further 1/3 of the Brighton fleet, 27 Microhybrid Wrightbus Streetlites & 4 Wrightbus Volvo Eclipse Single Deckers since 2015 for Metrobus.

From August this year our first new generation hybrids arrive in Brighton with 30 ADL Enviro 400 double deckers that will operate in geo-fenced electric only mode throughout the City Centre LEZ.





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## But the future starts on Metrobus Fastway



- High frequency 24 hour service
- First BRT guideways in the UK
- Doubled passenger growth in the last decade
- Connections from Rail Stations and residential areas to Gatwick Airport and Manor Royal Business District
- New buses every 5 years since introduction in early 2000's
- USB charging at every seat and Free onboard Wifi
- Audio/Visual Next Stop announcements
- Real Time Rail Info on approach to railway stations with platform numbers





#### **Our Zero Emission Vision is Fuel Cell Electric**

- 20 Fuel Cell Electric 12 metre long Single Deckers
- First commercial application of this technology anywhere in the world
- Delivered in partnership with funding from EU FCHJU Jive Project and the UK Government's Ultra Low Emission Bus Scheme
- Green generation of Hydrogen included
- Due in service second half of 2020







## Why Fuel Cell Electric?



- The only zero emission bus that we can currently use as flexibly and efficiently as the diesel buses we are buying today
- Refuels within the same time as it takes to refill a tank of diesel and then goes back out and does the same range again
- Requires less batteries onboard because the fuel cell maintains them at full charge
- Multi-million pound investment in increasing local grid capacity without any control over future availability not required
- 80% of the buses we are likely to buy are the same as the diesel buses in our fleet so most maintenance procedures will be very common with the same parts
- Hydrogen fuel can also be generated using renewable energy





# Zero emission buses alone, are not the answer







## **Thank You**

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**Questions**