



Low Carbon Fuel Cell Bus Public Transit

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ISE has pioneered in electric drive transit vehicle development



MAYOR OF LONDON Transport for London

London leading the way in hydrogen

hydrogen bus powered by hydrogen fuel cell - zero emission bus

First ISE

01/07/2008



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20 Fuel Cell Buses in Production for Canada

- New Flyer Chassis, Seats 37
- Range in Excess of 300 mi
- Climb of 20% grade from stop fully loaded
- 5 yr, 12,000 hour fuel cell warranty
- High Energy Lithium Ion Battery



Showing the fuel cell end of the BCT Bus:

- Range in Excess of 500km on 46 kg of H₂
- Certified to Canadian Road and Safety Standards
- This bus carried up to 70 passengers
- Speed is 105 km/hr



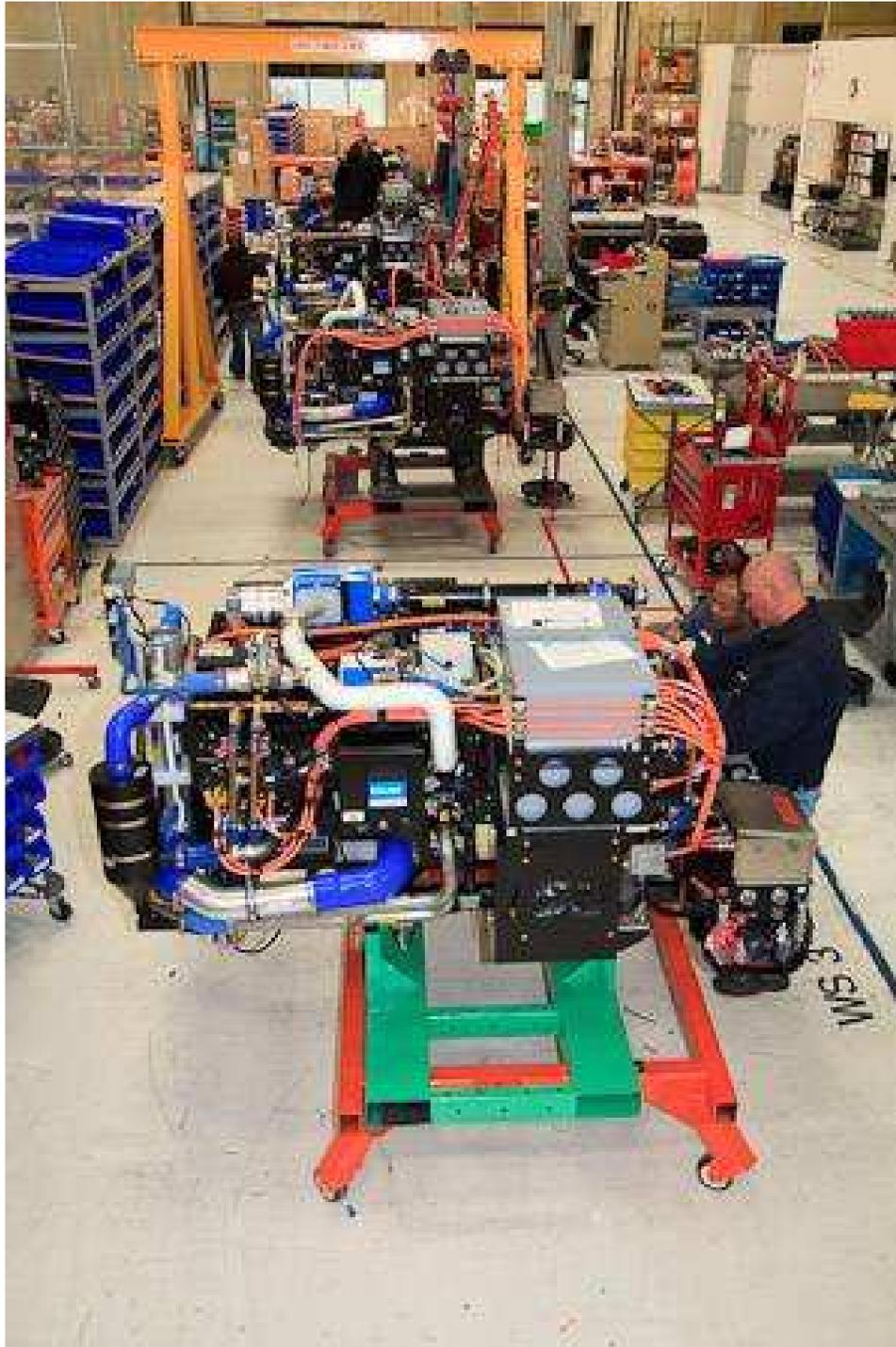
London Bus Design:

- Range in Excess of 500km on 46 kg of H₂
- 75 kW Ballard Fuel Cell
- ISE Ultracapacitor Energy Storage
- Lightweight Drive System



London Bus in Development:





Fuel Cell Bus Production:

- Serial production of the fuel cell bus cradles, the drive train system started at ISE in March 2009
- Orders in place for 20 buses for BC, 8 buses for London
- Possibilities of additional buses for USA, Canadian Customers?
- London facility can fuel 50 h₂ buses
- Emissions reductions in excess of 100 tons CO₂/year/bus
- Technology exists today, buses commercially available

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 Thank you

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