TFL TO TEST IPT WIRELESS CHARGING TECHNOLOGY
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ALTERNATIVES  PUBLIC TRANSPORT

TFL (Transport for London) will trial inductive charging systems provided by IPT Technology on up to four extended range diesel electric hybrid buses in east London from next year. The specially built hybrid double deck buses will operate on route 69 between Canning Town and Walthamstow bus stations. The Alexander Dennis double-deck Enviro 400 HE400 buses will be fitted with technology enabling on-board batteries to receive a wireless charge boost at bus stands at either end of the route. It is hoped this will enable the buses to operate in pure electric mode for a significant period of the time they are in passenger service.

The buses have a diesel engine that will be used when the battery power on the bus is depleted, but it is anticipated this will only be a small amount of the time, meaning emissions on these vehicles are greatly reduced. Passengers should notice that these extended range diesel electric hybrid buses offer much lower noise and vibration levels compared to conventional diesel vehicles. The buses have significantly reduced tail pipe emissions, resulting in improved air quality, and because of reduced fuel use will have lower carbon emissions.

The trial will help TfL develop plans for greater use of electric buses in central London in the future, contributing to the Mayor’s vision of a central London Ultra Low Emission Zone.

This trial is part funded as part of a wider European Program called Zero Emissions Urban Bus System (ZeEUS) which is co-ordinated by the International Association of Public Transport (UITP, L’Union Internationale des Transports Publics). TfL is leading a consortium of suppliers all working together to deliver and assess how the technology works in London. These include Alexander Dennis which is delivering the vehicles and IPT Technology which is supplying the bus station charging technology.

The introduction of this technology will complement the existing trial of six pure electric single deck buses, which represent the first step of the Mayor’s plan for all single deck buses in central London to be zero emission at tailpipe, as part of the world’s first Ultra Low Emission Zone, from 2020. A further two pure electric buses are expected to enter service later this year.

The trialing of inductive charged diesel electric hybrid buses is designed to establish whether the technology can stand up to the rigors of operating in an intense urban environment such as London.

Around 800 hybrid buses now operate on the capital’s roads, including the New Routemasters, with more being introduced in a rolling program. By 2016 there will be more than 1,700 hybrid buses in service on London’s streets representing 20% of the total bus fleet.

The system is supplied by IPT Technology, a spin-off of Conductix-Wampfler. First activities in the field of inductive power transfer started at Wampfler (later Conductix-Wampfler) in 1996.