## PHEV CASE STUDY – TFL



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# FORD TRANSIT CUSTOM PLUG-IN HYBRID

#### USAGE PATTERN

Transport for London, the local government body responsible for large parts of the transport system in Greater London, U.K., tested three Ford Transit Custom Plug-In Hybrid vans for a year. One of the vans was based at the depot in Hammersmith, two more were based at the depot in Stratford, east London, and used by engineers carrying out ultrasonic rail inspections across the network, mainly during the night. Average mileage was low, and almost entirely in Greater London; the vehicles only occasionally entered the Congestion Charge Zone.

Type of organisation	Transport authority
Average daily distance using electric power	19.9 km (12.4 miles) total
Average daily miles using range extender	46.3 km (28.8 miles) total
Longest daily journey	72.4 km (45 miles)
Average electric usage in Congestion Charge Zone	96 %
Average electric usage in Greater London	62 %

#### OPTIMISING PERFORMANCE

Transport for London's primary goal was to optimise electric-only running to help improve air quality in the city. This was achieved by plugging in whenever possible.

## TRIAL HIGHLIGHTS

- Over a total of 40,233 km (25,000 miles), the Transit Custom Plug-In Hybrid vans showed the capability to drive almost exclusively on electric power while carrying out normal operations
- All three were plugged in at their workplace
  overnight and when not in service during the day
- On the occasions when the vans entered the Congestion Charge Zone, they recorded an average of 96 per cent zero-emission electric running

## CUSTOMER STRATEGY

In line with the Mayor of London's aim for London's entire transport system to be zero emission by 2050, Transport for London is introducing electrified vehicles to its fleet, including hybrid and zeroemissions buses. The Transit Custom Plug-In Hybrid vans were well suited to the organisation's needs because they were able to cover TFL's entire transport network without stopping to charge. The vans achieved a high percentage of pure electric running, with an average of 62 per cent in Greater London and 96 per cent in the Congestion Charge Zone where they were exempt from the charge.

Glenn Jones, TfL Vehicle Development Manager said: "Drivers were excited about trialling the new technology and soon began to enjoy their driveability, with the knowledge they were contributing to a cleaner London. The vehicles proved themselves in mixed-use environment on longer and shorter journeys, however, it would ideally be deployed on routes within the Ultra-Low Emission Zone with back to base for recharging, giving us an advantage of a lower operating cost when driving within the zone, as well as the benefits of zero emissions."



