

## Case Study – Mercedes Vario 614D Minibus



image from [http://www.usedcoachsales.co.uk/mercr126/tm\\_imgp1142.jpg](http://www.usedcoachsales.co.uk/mercr126/tm_imgp1142.jpg)

The Mercedes Vario 614D minibus is popular with community groups and charities and for community transport. This vehicle has been retrofitted with level floors, wheelchair lifts and wheelchair anchoring points, making it very valuable to the charity that owns it.

The Gross Vehicle Weight of the vehicle is 6,000kg, which means that it has been affected by the Low Emission Zone since July 2008. It was first registered with the DVLA in 1998 which means it originally only met the Euro 2 emissions standard.

The minibus operates in London, so in order to meet the LEZ emissions standards from 2008 it was fitted with a partial filter. This brought the vehicle up to the Euro III standard for particulate matter.

However from January 2012 the standard will tighten to Euro IV and the minibus will no longer meet the required LEZ emission standards. The owners needed to take action in order to continue driving the minibus within Greater London from January 2012.

The owners could have replaced the vehicle, but as it is fully paid for and has been retrofitted for wheelchairs, the replacement cost would have been relatively expensive. The charity therefore decided that the easiest way to bring it up to the required emissions standard was to replace the partial filter with a full diesel particulate filter. A range of solutions are available and the owners discussed the engine's condition and the vehicle's duty cycle with several suppliers in order to find the best solution. The total cost of retrofitting this minibus was around £2,500.

Only approved filters are accepted by TfL. There is a list of approved filters and suppliers available at [tfl.gov.uk/lez](http://tfl.gov.uk/lez). The owners of the vehicle spoke to several suppliers on this list before choosing the solution mentioned above. It is important to do this to ensure you get the best price and because not all filters are suited to all vehicles and operating conditions.

Once the filter was fitted, the owners needed to get a certificate to prove that the filter is working properly. The owners booked a test at the nearest VOSA test station, which they found through the VOSA website at <http://www.dft.gov.uk/vosa/>. After the minibus was tested, the owners received a Low Emission Certificate (LEC). It took 10 working days for TfL to receive the certificate information from VOSA. The charity can now drive the minibus within the LEZ from 3 January 2012 without having to pay the daily charge.