



LowCVP's Andy Eastlake

Air quality and carbon: are fleets the problem or the solution?

This was the question we tackled at the GreenFleet Arrive 'n' Drive workshop in September at Rockingham

Though Britain's air quality has been improving steadily for some time (most pollutants have been on a steady downward trajectory since 1990), it has not been improving fast enough in the worst affected areas. The science around health impacts has become more focused and some of its findings alarming. Nitrogen oxides and particulates, and particularly nitrogen dioxide (NO₂) have been singled out as the primary exceedances in terms of impacts on human health, particularly of the young, the old and the most vulnerable.

This year's government Plan for Tackling Roadside Nitrogen Dioxide Concentrations, was the latest response to increasing pressure to deal with air pollution. A new Clean Growth Plan, expected to be announced soon by BEIS, will provide more evidence – if any is needed – of the direction of travel.

Coming back to my original question and the workshop, I think we established that green fleets are definitely one of the quickest ways to a solution to our urban AQ problems and to reducing carbon. The emission standard required has been clearly set (Euro VI and Euro 6), but reaching these levels without completely renewing the whole fleet can be challenging and needs a variety of approaches.

Switching key vehicles to new technologies with low or zero emission capability is obviously one of the options, but cost and the availability of suitable vehicle choices (particularly for larger vehicles) may be unsurpassable barriers for many operations right now.

Thankfully, other possibilities are now available. Working with the Government's Joint Air Quality Unit (JAQU) the LowCVP has identified and assessed some of the most effective vehicle retrofit technologies capable of making a near-term impact on air pollution in Britain.

Using the LowCVP's analysis, a new £30m government grant scheme – the Clean Bus Technology Fund – is now open to local authorities in England and Wales who are looking to implement accredited, rapid, cost-effective and reliable emissions-reduction retrofit programmes in bus fleets. LowCVP are championing the need for a similar scheme for freight operators, for which similar retrofit technologies can be suitable and will be accredited.

LowCVP has just published its Evaluation Report on the previous Clean Vehicle Technology Fund (CVTF) and Clean Bus Technology Fund (CBTF) Programmes to assess a range of retrofit technologies tested through these public grant schemes.

Our work has shown that very large NO_x emission reductions (85-95 per cent) can be obtained through retrofit SCR after-treatment systems as well as diesel bus engine conversion to use an electric or gas powertrain. Some smaller but significant (25-29 per cent) improvements can also be achieved by retrofit thermal management and flywheel hybrid technologies.

Working with the Energy Saving Trust (EST), we've developed the Clean Vehicle Retrofit Accreditation Scheme (CVRAS) which will enable fleets with vehicles operating mainly in urban areas to be fitted with proven emissions-control solutions.

Read more on the Clean Vehicle Retrofit Accreditation Scheme on page 44.

FURTHER INFORMATION

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