LOWCVP NEWS

20 June 2019

LowCVP publishes new resources to help vehicle operators tackle air pollution on Clean Air Day

- ***Retrofit solutions for existing vehicle fleets; cut emissions and help operators avoid ULEZ/CAZ/LEZ charges***

- ***TRU Guide presents first steps towards a robust methodology for measuring the energy consumption and emissions performance of the ancillary loads of refrigerated commercial vehicles***

To coincide with National Clean Air Day, the Low Carbon Vehicle Partnership (LowCVP) has published a Clean Vehicle Retrofit Technology Guide to highlight the role that the wide range of retrofit technologies can play in improving air quality by cleaning up the existing vehicle fleet.

There is a significant air quality challenge currently facing UK towns and cities, with an estimated 40,000 early deaths caused by poor air quality, with the poorest and most vulnerable in society most affected. Road transport is responsible for up to 80% of roadside NOx in towns and cities, with older diesel vehicles contributing most of the harmful emissions.

As part of the *UK plan for tackling roadside nitrogen dioxide concentrations*[1], DEFRA and DfT have defined the introduction of Clean Air Zones (CAZ) to discourage the use of older, more polluting vehicles in areas where air quality is worst.

To support business and vehicle operators in meeting the emissions standards, the Joint Air Quality Unit (a collaboration between DEFRA and DfT) commissioned the Energy Saving Trust and the LowCVP to produce a robust accreditation process for retrofit technologies; the Clean Vehicle Retrofit Accreditation Scheme (CVRAS)[2].

The Clean Vehicle Technology Guide provides an in-depth explanation of the proven retrofit technology solutions and suppliers that have been approved under the CVRAS, demonstrating - over a robust and representative test cycle - that they can help existing vehicles achieve Euro 6/VI-equivalent emissions levels.

NOx abatement technologies such as Selective Catalytic Reduction (SCR) and Euro VI engine repower can provide cost-effective alternatives to purchasing new CAZ or ULEZ-compliant vehicles. Of course,

[1] https://www.gov.uk/government/publications/air-quality-plan-for-nitrogen-dioxide-no2-in-uk-2017
[2] https://www.energysavingtrust.org.uk/transport/freight-and-retrofit/clean-vehicle-retrofit-accreditation-scheme-cvras

retrofitting a fully electric drivetrain will also eliminate tailpipe emission, but these too, need to be accredited to ensure robust conversion standards.

The CVRAS standards have also been adopted by Transport Scotland and TfL, so that a vehicle with CVRAS-approved technology installed can enter the Low Emission Zones in Scotland, the CAZs across England and the ULEZ in London, without receiving a penalty charge.

The Clean Vehicle Retrofit Technology Guide also provides insight into the developing policy framework relating to air quality in the UK's towns and cities as well as national and local funding schemes (such as the Clean Air Fund) designed to support vehicle operators and businesses in retrofitting their vehicles and avoid charges associated with entry to the various types of clean air zones. Each technology chapter is supported with case studies and total cost of operation estimates for different technology types.

LowCVP's Managing Director, **Andy Eastlake**, said: "Clean air is one of the most urgent challenges we face and retrofit solutions have been one of the key 'tools in the box' to help owners of existing vehicles meet the strengthening emissions requirements without completely replacing their fleet in one go.

"Twenty years ago the uptake of particulate traps was accelerated in this way and, today, NOx reduction technologies (mandated on all new vehicles) are now available to be retrofitted to a wide range of commercial vehicles. With funding support for both testing and purchase there is now another option for hard pressed operators to lead the way in clean vehicle uptake."

Colin Smith, Programme Manager at Energy Saving Trust, commented: "The Clean Air and Low Emission Zones aim to deter the most polluting vehicles from driving in zones with the worst air quality, but replacing all old vehicle with cleaner alternatives is no easy feat. The retrofitting of existing vehicles is a cost-effective solution to meeting Euro 6/VI emissions equivalence and achieving compliance with Clean Air Zone requirements.

"This new guide is a helpful resource for those wanting to learn more about retrofitting and the options available, complementing the CVRSA Register and accreditation well.

"The CVRAS Register is a useful free tool to identify which CVRAS-approved companies and emission reduction systems suit vehicles best, based on make, model and engine type to support companies' efforts to improve their fleets, and lists the only retrofit options available that comply with the Clean Air Zones, Ultra Low Emission Zones, and Low Emission Zones."

The Register is available at: www.energysavingtrust.org.uk/transport/cvras-approved-suppliers

The CVRAS covers the following vehicle types: buses; coaches; trucks; refuse collection vehicles; black cabs. Van and passenger car processes have been established to allow options in these categories too.

The scheme is open to all retrofit technologies that can demonstrate Euro VI-equivalent emissions or better. Technologies currently approved under CVRAS are:

- Exhaust aftertreatment: Selective Catalytic Reduction
- Diesel Euro VI System Repower
- Battery Electric Repower
- Repower and LPG Conversion

A digital download of the report is available here.

With the radical reductions in tailpipe emission from all new vehicles sold (and now retrofits for the tailpipe of existing vehicles), focus is naturally moving to other sources of pollution from vehicle systems and ancillary loads operating in the 'real world'.

The LowCVP has also today published a separate, new report: ***Development of Emissions Testing Procedures for Transport Refrigeration Units (TRUs***). This specialist project supported by Innovate UK, is an early step in plans to develop a robust, representative and cost-effective methodology for measuring the energy consumption and emissions performance of refrigerated commercial vehicles. It will ultimately help to provide solutions to polluting and greenhouse gas emissions linked with the operation of transport refrigeration units in commercial vehicles (**Download link here**.)

NOTES TO EDITORS

The **LowCVP** (www.lowcvp.org.uk), which was established in 2003, is a public-private partnership that exists to accelerate a sustainable shift to lower carbon vehicles and fuels and create opportunities for UK businesses. Over 200 organisations are engaged from diverse backgrounds, including automotive and fuel supply chains, government, vehicle users, academics, environment groups and others. Follow us on Twitter: @theLowCVP

Energy Saving Trust is an organisation providing evidence-based advice and ground-breaking research that helps people save energy, every day. Trusted by consumers, businesses and organisations for our expertise and independence, our goal is to find new and better ways to drive change and reduce energy and fuel consumption. www.energysavingtrust.org.uk

These reports have been published to coincide with **Clean Air Day** (20 June): www.cleanairday.org.uk

For further information, please contact:
Neil Wallis, Head of Communications. neil.wallis@lowcvp.org.uk Tel: 0207 304 6806 M: 07974 255720