

LOWCVP NEWS

18 November 2020

Decarbonising UK trucks - results of three-year, £32m LEFT programme to cut freight emissions published

From city centre deliveries to international haulage, vans and trucks are delivering essential goods across the country, but as the drive for net zero by 2050 gathers pace, road transport needs to change. Transport now represents around a third of all UK greenhouse gas emissions and trucks and vans are responsible for a third (and growing) of that impact.

With major action just announced in the car sector for 2030, trucks and vans also need to step up their contribution to decarbonisation, so we welcome today's Government announcement of the promise of a consultation on the phase-out of new diesel HGVs "to put the UK in the vanguard of zero emission freight" in the 'Ten Point Plan for a Green Industrial Revolution'. The LEFT results presented today will provide an evidence base for the coming consultation.

The Low Emission Freight and Logistics Trials (LEFT) was a £20 million government-funded programme (2017-2020) to cut emissions and improve air quality by focusing on emissions-busting technologies for trucks and vans. An additional £12m was contributed by private sector trial participants.

In these industry-led trials, everything from renewable hydrogen fuel and battery electric trucks through to biomethane fuel, kinetic energy recovery systems and even lightweight and aerodynamic trailers have been put through their paces. They've been trialled in all driving operations to show how these low and zero emission alternative technologies can make a difference and to encourage their widespread introduction to UK fleets.

The funding was delivered by the Office for Low Emission Vehicles (OLEV) and Innovate UK, with extensive data management and analysis from the trials carried out by TRL supported by LowCVP and Millbrook.

The LEFT report, **published today to coincide with the opening of Cenex-LCV2020** – the UK's leading low carbon vehicle event – points to a range of tried and tested solutions which it categorises as 'Revolution', 'Transition' and 'Evolution' technologies depending on the potential contribution to the net zero agenda

- Revolution technologies include battery electric vehicles
- Transition technologies include range-extended electric vehicles; dedicated gas vehicles and hydrogen/gas dual fuel vehicles
- Evolution technologies include lightweight & aerodynamic trailers and trailer kinetic energy recovery systems (KERS)

The trials found that there is a wide range of revolutionary, transitional and evolutionary technologies and alternative fuels that can all help to decarbonise commercial vehicles and road freight both in the next few years and out to 2050. The battery electric vehicles and range-extended electric vehicles (REEVs) achieved

significant emission reductions across almost all cycles and assessment criteria and all of the other technologies achieved improvements in at least some.

Eight of the funded consortia completed the trials. All the projects monitored vehicles in service within their fleets and analysed their own data. TRL carried out data collection and independent analysis of the performance, cost savings and environmental impacts of the trial vehicles. Uniquely for this programme, every technology was put through comparative laboratory or track-based tests over the full operating range to give a direct comparison to the current state of the art conventional Euro VI diesel truck performance.

The programme allowed the emissions and energy performance of the LEFT technologies, and the practicalities of their in-fleet integration and implementation, to be compared with equivalent conventional diesel-powered Euro 6/VI vehicles.

Commenting on the trials and the report, LowCVP Managing Director **Andy Eastlake** said: “We’re seeing an acceleration in the rate of innovation towards lower emissions in the freight sector but there’s still a long way to go and we still need to understand the best technical options for different uses.

“The LEFT programme has significantly added to our understanding of the different options and has shone a light for fleet managers on the directions they can take now to cut emissions.

“It’s clear that this Government backing for trials of technology development projects has been instrumental in encouraging innovation and private-sector deployment of low emission vehicles and fuels that otherwise would not have happened.”

Dr Francesca Iudicello, Programme Manager – Automotive, Low & Zero Emission Vehicles – UKRI, Innovate who helped to fund the trials said: “The LEFT programme has produced invaluable data from freight and logistics trials for wide range of low and zero emission technologies and fuels, which will inform future government policy and shape decisions in the van and truck industry and operation. This is particularly important as the UK transport decarbonisation plan to meet net zero by 2050 is being finalised.”

Justin Laney, General Manager – Fleet, for John Lewis Partnership (and a LowCVP Board member) which hosted and contributed to the trials (Maximising CNG Benefits section) said: “Innovate trials are a highly effective catalyst for new technologies. The LEFT initiative has generated the really robust and valuable insight that is needed to guide decision making in the complex area of sustainable road freight.”

Peter Harris, International Sustainability Director for UPS (also a LowCVP Board member), the multinational package delivery and logistics company which participated in the smart electric urban logistics (SEUL) and the Tevva range-extended electric vehicle projects said: “As a global logistics provider at the forefront of companies working to address environmental challenges, we have a long history of developing and promoting the use of efficient last-mile delivery solutions that will allow us to continue to keep moving the world forward by delivering what matters long into the future.

“Being involved in this project has helped us to foster a culture of sustainable innovation within our business.

“It has been a privilege to collaborate with our project partners, who have provided us with invaluable external expertise, to explore the innovative technologies that will help the industry move toward a more sustainable future.”

DOWNLOAD THE LOW EMISSION FREIGHT TRIALS [REPORT HERE](#).

Images to support this story are available via contact below.



NOTES TO EDITORS

The **LowCVP** (www.lowcvp.org.uk), 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.

NB The LowCVP has responded the announcement on the phase-out date for conventional ICE petrol and diesel vehicles and consultation on phase-out date for new diesel HGVs. Visit the [LowCVP website](http://www.lowcvp.org.uk) or contact Neil Wallis for comment once the Government announcement has been made.

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