

## LOW EMISSIONS

# Are you ready to lead the ULEV charge?

**With UK registrations of ultra low emission cars topping 100,000 and government support still very prominent, perhaps now is the best time for public fleets to take the plunge, says Andy Eastlake**

In the latest report to government, the Committee on Climate Change highlighted that transport is now the largest contributor to UK greenhouse gas emissions and continues to grow. There is no doubt that pressure to change our transport fleet to lower carbon options is only going to increase.

Air quality concerns also remain high on the government and public agenda and for many fleets, particularly those in the public sector, deciding what vehicles to buy next is proving to be very challenging. With diesel being pilloried as the root of all air quality issues (but still with lower carbon emissions), the headlines scream of exponential sales increase of electric vehicles (EVs) and companies like Tesla are the darling of both the financial and technology industries alike. But in the real world, the truth is somewhat different, and for fleet operators ensuring that the vehicles they buy will continue to

deliver the operations expected of them can be a more difficult decision.

The reality is that sales of pure battery electric vehicles have been stable at around 0.4 per cent of all cars for the last two years. The UK-built Nissan Leaf has been the biggest selling battery electric vehicle throughout that time and with the new Leaf just around the corner (with teaser photos emerging every other week), it is hoped that Nissan can maintain that leading position, in what is hoped to be a rapidly expanding market.

But the real growth in ULEV numbers over the last few years has been the Plug-in Hybrid,

many of which deliver dramatic tax savings for the company car driver. However, unless they are regularly plugged in, they do much less for fuel savings. And this is the real heart of the challenge: any electric vehicle, be it pure battery, range extended or plug-in hybrid (the differences are substantial), must be combined with the appropriate duty cycle and complementary charging infrastructure.

This tripartite approach of the 'Right Car, Right Cycle, Right Charging' can deliver dramatic benefits, but if any one of these is wrong or missing, it can all fall rather flat.

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#### BOOMING BUS FIGURES

However, some fleets have embraced this brave new world of ULEVs wholeheartedly, such as bus operators. Uptake of low emission buses was almost 50 per cent of total bus sales last year (compared with just



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majority of today's fleets. Local authorities are likely to be pressured by both the public and central government to do everything possible within their existing powers prior to implementing a charging Clean Air Zone. Changing the public fleets, together with licensing measures on buses and taxis, will be seen as the first step on the road to cleaner air.

We only need to look to London to see how, after radical policies for both their buses and the issuing of London taxi licenses, they are now leading the way both in implementation of clean vehicle policies, with 'T' (toxicity) charges this year, and Clean Air Zones, with the introduction of the ULEZ (Ultra Low Emission Zone) likely in spring 2019. At the recent LowCVP conference on city mobility, the latest announcements from City Hall signalled the creation of Zero Emission Zones in 2025. There is no doubt about the trajectory for vehicles operating in urban areas needing to have at least a capability to run some of the time with zero emissions.

Defra's own analysis shows that, while road transport is the majority source of NOx pollution, it is the diesel car and van (LGVs) fleets which contribute the largest proportions. For these, the emission requirements mandating the extra on road tests are only now forcing the step change in NOx emissions that were seen in trucks and buses three years ago. While it may be right to point the finger at the older diesel cars of yesteryear, suggesting that a Euro 4 petrol vehicle (which is now over 10 years old) is a cleaner solution than next year's Euro 6d, WLTP, RDE, SCR diesel, is just wrong.

### WHEN IS THE RIGHT TIME TO CONSIDER A ULEV?

Support for fleets to adopt ULEVs is probably at its peak right now. Grants for Plug-in cars are confirmed until November 2017 and for charging points until April 2018. When the upsurge in sales really does take off, it is inevitable that government will have to review the levels of incentives given. Funding is also available for larger vehicles, with grants of up to £20,000 for ultra-low emission trucks and even more for buses. But as mentioned earlier, buying the vehicles is only half the story. Infrastructure requirements for significant fleets of vehicles can scupper even the best ULEV business case. The current grants for workplace chargers and supporting infrastructure for trucks and buses are crucial to the early adopters.

Funding to support regional and local initiatives such as those in the Go Ultra Low City scheme is paving the way for additional coordinated measures to encourage ULEV

uptake. Nottingham will introduce their Eco Expressway in 2018, allowing ULEVs to whisk down the bus lanes avoiding the 'conventional' congestion. Preferential parking schemes exist around the country in both public and private parking control, and many commercial businesses are installing charging points, seeing these as a way of attracting the savvy (ULEV driving) shopper. Early adoption by the public sector can highlight the benefits of these vehicles and help target further initiatives to really hit the sweet spots of ULEV uptake opportunity.

### UNDERSTANDING ULEVS

But perhaps one of the major reasons for taking the ultra-low emissions option is education. Mainstream buyers are notoriously difficult to influence and by adopting these new technologies into public fleets and showing how they work in real everyday life, we can all hopefully demonstrate that cleaner and lower carbon transport choices are for everyone.

In today's 'media mistrusting', 'fake news' world it is increasingly difficult to get sensible debate heard. Choosing the right vehicle for your specific transport needs is more complex than ever before. Understanding fuel consumption, electric range, emissions, incentives, charging rates/locations, renewable fuel options, taxation and charging zones is just too difficult for many consumers and indeed for fleet operators. The network of support for the public fleets enables these decisions to be made with confidence and with the backing of central government.

As part of this network, the LowCVP is working to cut through this complexity and present the key facts in an accessible way to both fleets and consumers, whilst simultaneously working with government to develop the policies and support to help every transport operation move to low and zero emissions. For LowCVP, creating the standards and the simple information presentation for clean and low carbon vehicles of all types allows sensible and informed decisions to be made of the fleet renewal policy and targeted funding for new vehicles, fuels, infrastructure or retrofit to be applied in the most cost-effective way.

Armed with this new information and supporting policies, the questions for fleets now should be: 'Which vehicles or fuels are best to change to now and how do I plan my strategy for a ULEV fleet of the future?'. ■

**FURTHER INFORMATION**  
[www.lowcvp.org.uk](http://www.lowcvp.org.uk)

3.3 per cent of cars classified as 'alternatively fuelled'). The bus market obviously has some benefits given the routes are known, which means implementing charging on-route is more straightforward. But the challenge of getting the right specification of bus for the route, together with the battery and charging combination, still leads to a wide range of technical solutions making it to full service operation – including the 18 hydrogen buses currently in service in London and Aberdeen.

The bus market is also one of the most targeted when it comes to air quality, but with the introduction of the Euro VI regulations in 2014 and rigorous complementary on-road testing (which is still yet to come for cars), the focus of 'dirty vehicle' is rightfully turning to the older cars and vans typical of many public fleets. And here is perhaps the most compelling reason for a fleet to consider 'going ultra-low'. There is no doubt that Clean Air Zones are coming, with the first five planned to come into force before the end of 2019 (and likely many more to follow). The vehicles allowed to operate in city centres will be radically cleaner than the