LeasePlan

What's next?

Electric LCVs

Why they might be right for you and your business.

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The rise of electric LCVs

- Electric light commercial vehicles (e-LCVs) are powered either entirely by electricity or by a hybrid mix of electricity and a fossil fuel.
- They represent a relatively small share of the overall LCV market – but they are growing in popularity.
- 1,270 were registered in the year to January 2019. As the graph on the next slide shows, this is 541% higher than the equivalent figure from five years ago.
- According to the Department for Transport, there were about 7,400 e-LCVs on Britain's roads by the end of 2018.

1,270

registered in the year to January 2019

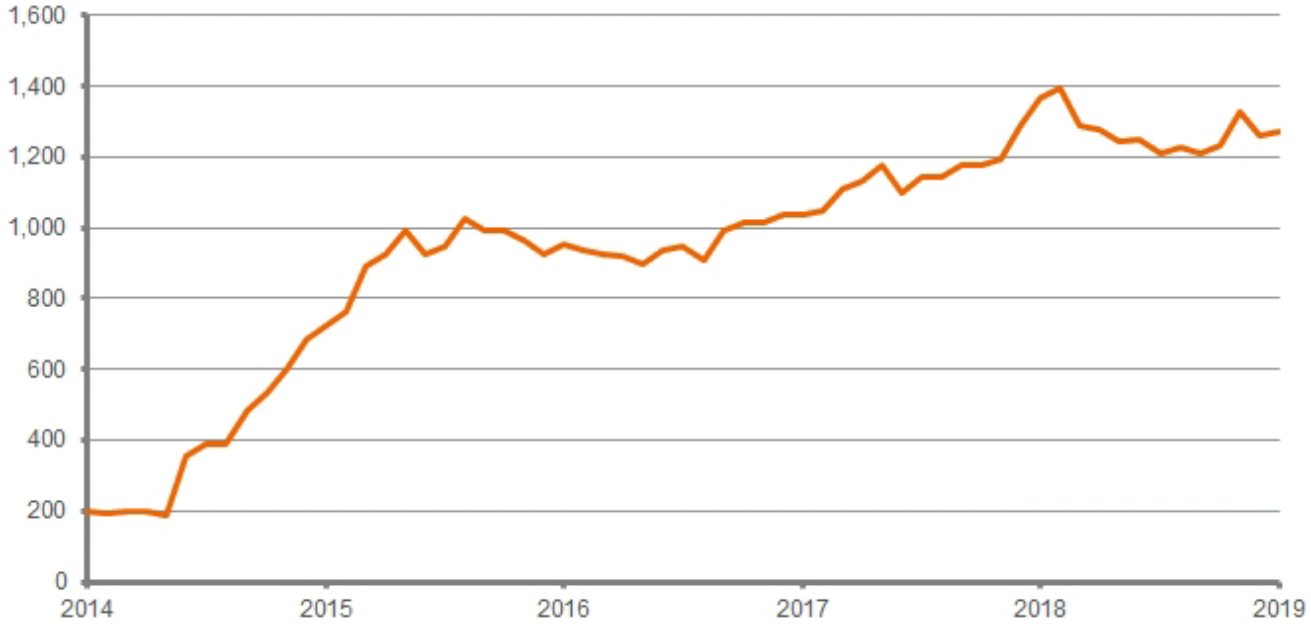
541%

higher than equivalent figure from five years ago

7,400

e-LCVs on Britain's roads by the end of 2018

Registrations of alternatively fueled vans, 12-month rolling total



Source: *Society of Motor Manufacturers & Traders*

Fuel Type & Powertrain Technology

There has never been a better time to buy a new car, with more model choice, more exciting technology and a range of attractive finance options and deals.

Manufacturers have invested in all types of vehicles to suit different lifestyles and driving needs. From the latest low emission Euro 6 petrol and diesel cars, to hybrids, plug-in hybrids, pure electric and even hydrogen vehicles – there is something for everyone, and every journey.

Here are the different types of powertrains available:

- **Diesel**
- **Petrol**
- **Battery electric vehicles (BEVs)**
- **Plug-in hybrids (PHEVs)**
- **Hybrid Electric Vehicles (HEVs)**
- **Mild Hybrid Electric Vehicles (MHEVs)**
- **Fuel Cell Electric Vehicles (FCEV)**

What has caused this rise?

There are a number of factors behind the rise of e-LCVs, including:

1. **Technology**
   Manufacturers have worked to make e-LCVs more practical for businesses, and to address some of the old concerns around payload.

2. **Cost**
   Although the list price of e-LCVs tends to be higher than their traditionally fueled counterparts, a number of considerations could make them cheaper in the long run.

3. **Policy**
   National and local politicians are introducing a number of policies to encourage the uptake of cleaner LCVs, as well as to penalise older diesels that emit harmful air pollutants.

Let’s consider each of these in turn.

Technology 1

The technology powering e-LCVs has improved dramatically over the past five years:

- Most new e-LCVs have an official range of around 100 miles
- However, it should be noted that this can vary on the road, depending largely on payloads – so that the experienced range could be 60-80 miles.
- Some e-LCVs now have an official range of around 170 miles.
- More mid- to large-size e-LCVs, such as the Mercedes eVito, are coming on to the market. Because of advances in battery design and storage, these have similar load volumes to non-electric models.

Source: Parkers.co.uk

Technology Roadmap

Renault ZOE Van

200+ mile CDV Q1 2020

LDV EV30

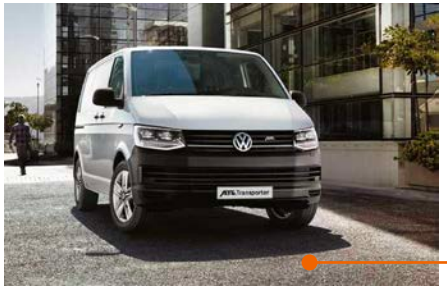
1 tonne Payload, up to 200 mile range Q1 2020

Renault Trafic PHEV

200+ mile CDV Q1 2020

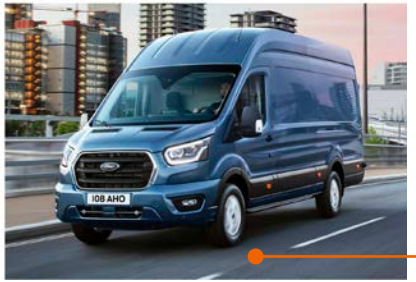
Arrival T4

2 tonne payload c.150 mile range – End 2020



Transporter ABT E- Vehicle

2020



Ford Transit

2021

Technology 2

It’s not just the e-LCVs that have improved. So has the charging network.

- There are now over 27,000 public charge points in the UK in 9,800 locations across the UK
- Almost a quarter of these public charge points are ‘rapid chargers’, which can bring batteries to 80% charge within about 30 to 60 minutes.
- Many of these public charge points require users to subscribe to the network that provides them, but these fees tend to be small.
- That’s before we consider the opportunities for installing charge points at work or at home, as discussed on a later slide.

27,000

public charge points in the UK

Almost

1 in 4

public charge points are ‘rapid chargers’

Cost

- When it comes to their list price, e-LCVs tend to cost more than equivalent diesel or petrol models. For example, the non-electric Nissan NV200 starts at £15k, whereas the Nissan e-NV200 starts at £19k.
- However, an e-LCV will save money, in other ways, over the course of its working life:
  - Electricity isn't subject to Fuel Duty. It costs around £2 to £3 per 100 miles, which is about a quarter of the cost of diesel.
  - As they have fewer moving parts, electric vehicles generally have lower maintenance costs than traditional vehicles.
  - e-LCVs benefit from a number of government policies designed to encourage the uptake of cleaner vehicles.

£4,000

price premium for electric Nissan e-NV200

£2-3

per 100 miles

Quarter of the cost of diesel

Policy 1: Clean Air Zones

- In its Air Quality Plan of 2017, the Government ordered 29 local authorities to draw up their own plans to tackle illegal levels of air pollution. After a court case, another 33 local authorities were added to the list.
- These plans can include Clean Air Zones (CAZs), which are areas where special action is taken to improve air quality.
- There are two types of CAZ:

    1. **Charging CAZs** impose fees on vehicles that do not meet emission standards – which are typically Euro 6 for diesel vans and Euro 4 for petrol vans.
    2. **Non-charging CAZs** rely on other measures, such as improved road layouts or cleaner public transport.

- It is expected that most CAZs will be introduced in 2020 or 2021.

+33

local authorities added to the Government's Air Quality Plan

Policy 2: London’s ULEZ

- London’s Ultra-Low Emission Zone (ULEZ) is, in many ways, representative of a charging CAZ.
- As of 8th April 2019, cars and vans had to meet minimum emission standards to travel through the ULEZ – or pay a £12.50-a-day fee on top of the Congestion Charge.
- These standards are Euro 4 for petrol vans and Euro 6 for diesel vans. e-LCVs will be exempt – and some are even exempt from the existing Congestion Charge.

What’s next?

The ULEZ will expand outwards, to the North and South circular roads, in October 2021.

Policy 3: The new VED system…

One to watch…

- In Autumn Budget 2018, the Chancellor revealed the outcome of the Government's consultation into a new Vehicle Excise Duty (VED) system for vans.
- Following the consultation, the Government is minded to introduce a new VED system based on a van's carbon dioxide (CO_2) emissions.

What's next?

It's not expected until after 2021 on the advice of the British Vehicle Rental and Leasing Association.

…continued

Three other things about the new VED system for vans:

1. It will take into account the effect of the new testing regime on emissions data, as discussed on the next two slides.
2. It will divide vans into two weight categories.
3. The Government will provide more incentives, beyond VED rates, for van drivers to choose cleaner vehicles.

Policy 4: The new emissions tests…

The longstanding New European Driving Cycle (NEDC) has been replaced by a new emissions testing regime, composed of two parts:

1. **The Worldwide Harmonised Light Vehicle Test Procedure (WLTP)** is the new method for measuring both fuel consumption and CO_2 emissions.
2. **The Real Driving Emissions (RDE) tests.** These have been developed by the European Commission to more accurately reflect the emissions produced on the road, especially nitrogen oxides (NOx).

…and their effects

- These new tests are already yielding higher emissions figures than were obtained under NEDC. Where taxes are based on emissions, this could push vehicles into higher bands.
- As purely electric vehicles do not emit CO_2, they have been mostly be unaffected by the new regime. However, the new tests may produce different values for their range and mpg may be affected.
- Plug-in hybrids are seeing their fuel consumption and emissions figures affected by the move to WLTP.
- As a result, some vehicles may no longer count as Ultra-Low Emission Vehicles (ULEVs), which are defined as emitting 75g CO_2/km or less. This could affect their eligibility for certain financial benefits.

“the new tests may produce different values for their range and mpg may be affected”

Policy 5: Plug-in Van Grant

- The Plug-in Van Grant gives 20% off the purchase price of e-LCVs, up to a maximum of £8,000.
- To be eligible, an e-LCV must emit less 75g CO_2/km and have a zero-emission range of at least 10 miles.
- 10 vans are currently eligible:
  - **BD Otomotiv eTraffic**
  - **BD Otomotiv eDucato**
  - **Citroen Berlingo**
  - **Mitsubishi Outlander Commercial**
  - **Nissan e-NV200**
  - **Peugeot ePartner**
  - **Renault Kangoo ZE**
  - **Renault Master ZE**
  - **LDV EV80 van**
  - **LDV EV80 chassis cab**

Policy 6: Electric charging grants

A number of grants are available for installing charge points at home or at work:

- **Electric Vehicle Homecharge Scheme.** Cuts the cost of installing a charge point at home by 75%, up to a maximum of £500.
- **Workplace Charging Scheme.** Provides vouchers worth £300 for each of the first 20 charge points installed by an employer.
- **A 100% First-Year Allowance** applies for businesses installing charge points. This initiative was extended to 2023.

Conclusion

- e-LCVs may not be ideal for every business or for every job undertaken by vans within a business.
- However, thanks to technological advances, cost considerations and government policies, e-LCVs are becoming more and more attractive for many jobs – we are already seeing cost parity for smaller vans and expect to see this across larger vans across the next 2/3 years.
- They are currently particularly attractive for short-range work where they can be recharged overnight – for example, urban delivery operations.

“we are already seeing cost parity for smaller vans and expect to see this across larger vans across the next 2/3 years”

Next steps

Manage your LCV fleet proactively

It is vital for fleet managers to adopt a proactive approach, starting right now. Based on lessons learned from the introduction of WLTP & RDE in the passenger car market and our experience in the LCV market, we propose the following steps:

Short-term actions

1) Identify renewals in your current LCV fleet for the next 12 months (until Q2 2020).

2) Contact your leasing supplier to discuss the OEM availability of the LCV models to be replaced.

3) In the case of limited supply for certain models, factor in longer lead times and order in advance if necessary

Next steps

Medium-term actions

1) To keep the LCV ordering process running smoothly post WLTP testing onwards, it is wise to inform your fleet-management team in good time and to allow for a certain financial deviation from the thresholds set in the LCV policies.

2) Contact all selected LCV OEMs to check which discounts will apply to newly introduced models and renegotiate new discounts if necessary.

3) Recalibrate the expected fuel spend in the TCO to reflect the switch from NEDC CO2 values to WLTP CO2 values.

Next steps

Long-term actions

1) Check whether your selection of LCV models is aligned with the current and proposed Access Regulation Schemes in the urban areas in which your company operates.

2) Evaluate the TCO of your current fleet and include the distance travelled daily by LCVs to determine whether introducing E-LCVs would make financial sense.

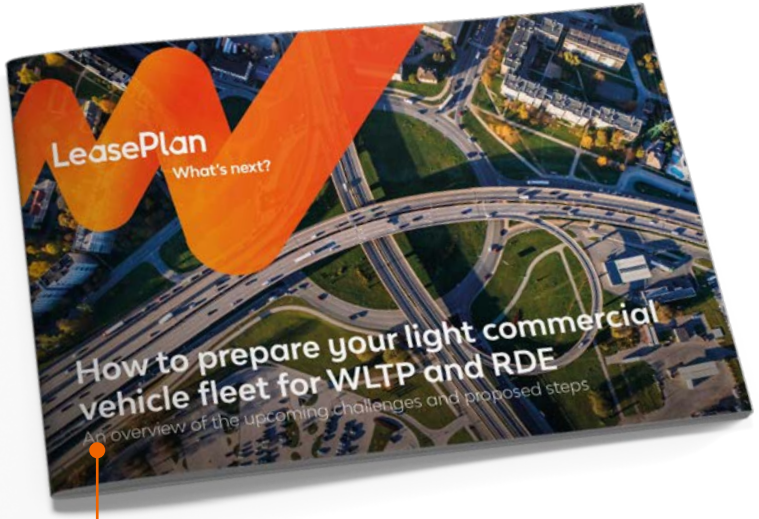
Further resources

Visit **insights.leaseplan.co.uk** for whitepapers, guides and articles on:

- Emissions Testing Regime - WLTP and RDE
- Regulation changes
- Clean Air Zones
- Taxation and Legislation

To discuss your options, please talk to one of LeasePlan's advisers newbusiness@leaseplan.co.uk or call **01753 802109**

Whitepapers



How to prepare your light commercial vehicle fleet for WLTP and RDE

https://www.leaseplan.com/corporate/~/media/Files/L/Leaseplan/documents/news-articles/2019/wp-lcv-fleet-preparation.pdf

The Total Cost of Ownership of electric vehicles

https://www.leaseplan.com/corporate/~/media/Files/L/Leaseplan/documents/news-articles/2019/whitepaper-tco-of-ev-online.pdf

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What's next?