

# THE ROAD TO ZERO

## A FRAIKIN EXECUTIVE SUMMARY

SUMMER 2018



*#FraikinFocus*

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# DEMYSTIFYING THE ROAD TO ZERO

In May 2018 the government released its Clean Air Strategy; a wide-ranging report detailing how it intended to tackle the increasing levels of air pollution across the UK.

Because of the significant role the transport industry has to play in that plan, it has been the focus of a second report: The *Road to Zero*. This sets out new measures to clean up the vehicles on our roads, primarily by stopping the sale of new diesel and petrol cars and vans by 2040, with the goal to make almost every car and van a zero-emissions vehicle by 2050. The intention is also to make the UK a world leader in the development, manufacture and use of zero-emission vehicles.

Lofty plans indeed, and for road transport operators plans that could have significant knock-on effects for the future of their businesses.

As the largest independent contract hire, fleet management and rental specialist in Europe, it is our job to understand the impact of these targets and to pass that knowledge on to our customers and the wider industry.

At Fraikin, we have already noticed a significant shift in demand for low and zero-emission vehicles, as well as a need for insights into new legislation, an understanding of when any changes will come into force and what their day-to-day impact will be.

Our executive summary of the government’s *Clean Air Strategy* was extremely well received, so it seemed only logical to produce a similar report on the *Road to Zero*. What follows is a thorough look at the government’s plans, drilling down into the most salient points for commercial vehicle operators.

It’s one of the many steps we’ve been taking to ensure we’re best placed to help customers make the transfer from diesel to gas and electric drivelines, supported by a suite of connected technologies to guarantee our customers can enjoy the maximum efficiency for their businesses.

Across Fraikin, we’re working hard to make the road to zero as smooth as possible.

**James Walker**  
**Commercial Director, Fraikin**



## HIT THE ROAD

The *Road to Zero* looks ahead to 2050, when the government intends for “almost” all vans (and cars) on the UK’s roads to be zero-emission. The sale of new petrol or diesel vans will have stopped in 2040, as laid out in the government’s NO<sub>2</sub> plan earlier this year, by which time it expects most new vans sold to be zero-emission capable, and all new vans built to be zero-emission.

As early as 2030, the government intends for at least 40 per cent of new vans bought to be ultra-low emission vehicles.

Launching the strategy, Secretary of State for Transport Chris Grayling said: “The coming decades are going to be transformative for our motor industry. We expect to see more change in the transport sector over the next 10 years than we have in the previous century.”

He added that the document lays a clear path for Britain to follow in its quest to become a “world leader in the zero-emission revolution, ensuring that the UK has cleaner air, a better environment and a stronger economy”.



## THE TIMELINE FOR THE ROAD TO ZERO

### 2050

Almost every van and car on the road will be zero-emission

### 2040

Sales of conventional diesel and petrol vans and cars end. Most new vehicles sold will have some zero-emission capability and all new vehicles built will be emission free

### 2030

Up to 40 per cent of new vans sold to be ultra-low emission

### 2025

HGVs’ greenhouse gas emissions reduced by 15 per cent (based on figures from 2015)



# REDUCING EMISSIONS FROM VEHICLES ALREADY ON THE ROAD

While the bulk of the strategy focuses on how the government intends to boost uptake of new vehicle and fuel technologies, it also outlines several ways in which it intends to reduce emissions from vehicles already on the road.

Something already in play is the blending of sustainable fuel with petrol and diesel. Since 2008 the largest fuel suppliers have been obligated to ensure a percentage of their fuel is composed of material derived from a renewable source. According to the government, this mixing of low-carbon fuel with petrol and diesel will continue to play an important role in driving down greenhouse gases while petrol and diesel remain a fixture on the UK's roads.

A target within the same obligation encourages the fuel suppliers to improve waste-based fuel technology. These fuels are believed to significantly cut down on greenhouse gases as well as reduce the need for waste disposal.

Waste-based fuel is seen as particularly viable for HGVs, and the government has made £22m of funding for work on this available through the DfT's Future Flight and Freight Competition. This awards grants to projects that aim to produce waste-based, low-carbon fuels for use in HGVs or aircraft, with seven grants of £1m for stage one testing announced in June.

Though the retrofitting of cleaner systems to older vehicles is listed in the report as a viable, lower-cost alternative to buying low emission vehicles, most of the work on this to date has been for buses. While the strategy says that the government believes continuing to develop retrofit technology is "important", it does not outline any new moves to drive the technology. However, it does highlight that research has been funded through the government's Low Carbon Vehicle Partnership's Clean Vehicle Retrofit Accreditation Scheme, which provides evidence in favour of retrofitting HGVs and vans, among other vehicles, and adds that vehicle retrofitting is eligible for a slice of the £220m Clean Air Fund announced in the 2017 Budget.

The £220m Clean Air Fund was made available to local authorities in March 2018. Each authority can bid for a portion of the money to support air quality improvements and projects in their areas, including, but not exclusively, implementing and preparing businesses

for Clean Air Zones. A chunk of the fund - £36m - has been dedicated to the 28 authorities with the worst air quality, including Birmingham, Southampton and Leeds.

The strategy also involves encouraging more efficient driving to lower vehicle emission output, particularly for fleets and new drivers. To achieve this, the government will work with driving instructors and make efficient driving more noticeable in DVSA documentation, including driver trainer literature.

Elsewhere, the DVSA's roadside checks for AdBlue emulators in HGVs found that almost one in 12 of the vehicles stopped were fitted with the device aimed at providing a false emissions reading. The *Road to Zero* states that the government intends to work further with the DVSA to make sure that the regulations and enforcement procedures are good enough to continue to tackle the issue.





## ENCOURAGING CLEANER VAN UPTAKE

Encouraging drivers to buy or lease the newest, cleanest vehicles, is central to the government's plans to make the UK a leader in zero-emission vehicle technology.

The regulation of emissions created by new vehicles is particularly noteworthy when considering the UK's imminent exit from the EU. The *Road to Zero* states that the government intends to set new emissions standards "at least as ambitious" as those the country has been held to during its membership of the union.

The strategy recognises that the expense of clean vehicles provides the major obstacle to their uptake. Buying incentives, such as the plug-in van grant, will remain a key tactic to help consumers see past the cost obstacle. However, figures in the strategy highlight the extent to which electric van take-up trails that of cars; as of 2017 just under three per cent of the 163,000 vehicles bought through the grant have been vans. Of course, the lower availability of electric vans is a contributor here, with just nine models qualifying for the plug-in grant available, all at 3.5 tonnes or less.

While *The Road to Zero* says some form of consumer incentive will stay in place after 2020, which is when the current buying

help scheme comes to an end, it's hard to say how much help will actually be on offer.

Car owners running electric vehicles do not pay excise duty, and the government has said it will consult on making a similar move for vans. A benefit for van drivers that's already in effect is the reduction in the van benefit tax, which sits at a 40 per cent reduction for zero-emission vehicles, with fully electric vans not subject to it at all.

Communicating with fleet owners and drivers is seen as vitally important to the strategy, given the obvious effect that consumer appetite for clean vans and cars will have on the government's envisaged timeline.

Its marketing campaign – Go Ultra Low – has been running since 2014, and in 2017 launched a new website providing consumers with tools to help calculate running costs. More than 600,000 people have accessed the site since its launch last October, with 96 per cent of a surveyed sample group saying the campaign's adverts made them feel more positive about buying an electric vehicle.

A partnership between the DfT and leading motoring organisations, called the Road Transport Emissions Advice Group,



will work on ways to give clear advice on aspects of clean vehicles, such as testing methods, the introduction of any new fuel labels and Clean Air Zones.

Poor vehicle residual values are another obstacle to consumer uptake, and the strategy suggests that a lack of understanding from auction houses and dealers of ultra-low emission vehicles,

alongside low consumer confidence in the life of vehicle batteries, is at least partly behind this. To combat this the DfT will produce guidance on electric vehicles for dealers and auction houses, as well as fund retailer training. It will also launch a forum with both the BVRLA and sellers to work on improving uptake and boosting used vehicle prices.



## HGVs

The approach to HGVs in the strategy is very different to vans, primarily because of the difference in the technology available. The long-term goal of zero-emission output remains the same, but the document admits the “pathways to achieving this are not as clear as for cars and vans”.

While zero-emission HGVs look to be on the way – with Tesla notably making international headlines last year with the announcement of its all-electric semi truck – HGV operators will need to see evidence of how the vehicles perform before they become a feasible investment.

Meanwhile, the DfT has paired with the FTA and the RHA in order to set the industry a voluntary target to reduce greenhouse gas emissions by 15 per cent by 2025. The

*Road to Zero* suggests that working towards the target, based on figures from 2015, will also bring commercial benefits from improved fuel and operational efficiencies.

Reaching this target will be a challenge for a sector operating with low margins and a high proportion of SMEs, so the DfT has put forward a number of ways in which it intends to help operators hit the 15 per cent reduction:

- The Energy Saving Trust (EST) will build a freight portal to advise HGV operators on how they can cut their carbon footprint and improve their fuel efficiency. Aimed mostly at smaller hauliers, the government will work with trade associations to keep the advice relevant and up-to-date
- The government will look into what is preventing HGV operators from improving their emissions and how these obstacles will be overcome

- Working with Highways England, the government will aim to understand the road freight sector’s needs in the face of increasing congestion on UK roads, with a view to keeping HGVs moving
- The DfT plans to develop an Ultra-Low Emission Truck Standard (ULET) with the help of the industry. This will aim to provide more clarity on what emission standards are expected to be, which should encourage and enable more technology research and development on cleaner, alternatively-fuelled HGVs
- A promise to seek opportunities to give regulation benefits to those using

cleaner vehicles is also made. While no specific example is given for what this could mean for HGVs, the strategy points to new legislation allowing standard driver’s licence holders the right to drive alternative fuel vans weighing up to 4.25 tonnes, instead of 3.5 tonnes

The strategy also touches on work the government is doing to understand the environmental impact of transport refrigeration units, as they are typically powered by combustion engines, either via the vehicle’s engine or a standalone unit. Refrigeration unit emissions may be included in the ULET mentioned above.





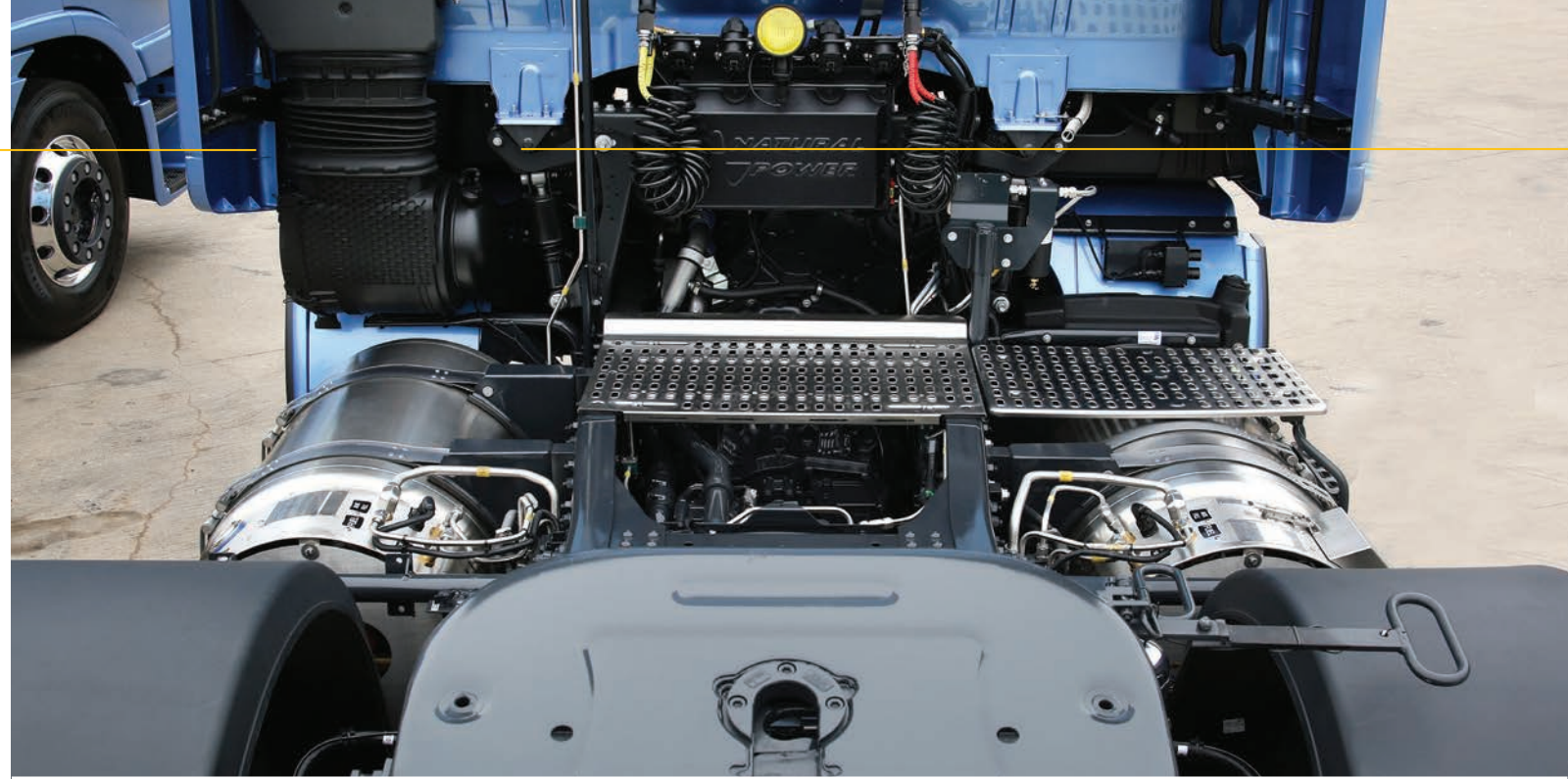
## ALTERNATIVE FUELS FOR HGVS

Existing low-carbon fuels – such as biodiesel – can be used in diesel HGVs, but there are numerous reasons why operators choose not to make this shift, for example a change to the vehicle's warranty status. The government intends to work with the industry to identify these barriers and try to reach solutions to them.

The National Infrastructure Commission has already been put to work by the government on a study into the future of freight. Its goal is to identify how the UK's freight sector can continue to deliver while reducing its impact on congestion and carbon emissions.

Elsewhere, the government is also keen to continue investing in trials for natural gas-powered trucks, with work from the Office for Low Emission Vehicles expected to influence fuel duty rates for alternatively fuelled vehicles in the 2018 budget.

When it comes to zero-emission HGVs, however, the strategy highlights that electric vehicles – in their different stages of development – as the most likely solution, but puts forward hydrogen-powered trucks as an alternative option.





# CONDITIONS FOR SUCCESS

The government has set itself some ambitious goals in the *Road to Zero* strategy, though it stipulates how various market conditions will need to be seen if it’s going to be able to meet them.

Supply is a crucial factor, especially when it comes to commercial vehicles. While alternatively-fuelled vans and HGVs are on their way, uptake is low and will continue to be until the technology has proven itself commercially viable. Having almost all new vans on the road producing no emissions by 2050 relies on there being enough variety and availability for businesses to make a fleet choice that suits them.

Consumer appetite will also determine how successful the government’s vision becomes; if the market isn’t strong enough and consumer confidence doesn’t grow at the rate it hopes, the landmark years for the scheme may quickly be pushed back.

The key hurdle, though, surrounds the country’s charging and refuelling infrastructure. In its current state, it would not be fit for purpose if there was any kind of rapid surge in the sale of electric or alternatively-fuelled vehicles.

The *Road to Zero* states the intention for the UK to have one of the best electric vehicle infrastructure networks in the world, something it aims to achieve by making electric charging points available at all motorway service areas, building all new homes with access to a charging point and by making charging points available on public streets.



## Road to Zero overview

To reduce emissions from vehicles already on the road, the government will:

- Fund projects to research and develop waste-based low-carbon fuels
- Continue to crack down on vehicle emissions tampering
- Extend the clean vehicle retrofit accreditation scheme from buses and HGVs to include vans
- Encourage fuel efficient driving
- Encourage more work towards engine retrofitting

To encourage uptake of the newest and cleanest vans, the government will:

- Continue and extend plug-in vehicle grants and develop new consumer incentives
- Consult on removing VED from zero-emission vans
- Educate and work with vehicle dealers and auction houses to improve residual values
- Improve the charging and refuelling infrastructure in public and private spaces
- Run a campaign educating consumers about the benefits of ultra-low and zero-emission vehicles
- Linking industries, consumers and government with a new Road Transport Emissions Advice Group

To reduce emissions from HGVs, the government will:

- Set the industry a voluntary target to reduce its greenhouse gas emissions by 15 per cent by 2025
- Investigate what’s preventing hauliers from investing in the newest, cleanest vehicles and how this can be overcome
- Work with industry to create an Ultra-Low Emission Truck Standard
- Seek out regulatory benefits to running ultra-low emission or zero-emission HGVs
- Build an advice portal to educate operators on how they can improve logistic and fuel efficiencies

### Key terms

- Ultra-low emission vehicles:**  
A car or van that emits less than 75 g/km of CO<sub>2</sub> from the tailpipe, measured against the European test cycle.
- Zero-emission vehicle:** Vehicles with no greenhouse gas or air polluting tailpipe emissions.





This executive summary aims at highlighting key aspects of the Government's *Road to Zero*, as published in July 2018. However, this summary is for information purposes only and we do not make any warranty or representation on the completeness, correctness, accurateness, adequacy, usefulness or reliability of such information. Therefore, neither Fraikin, nor any of its affiliates, will accept any liability whatsoever based on any information provided in this document, or any use of or reliability on any such information.

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