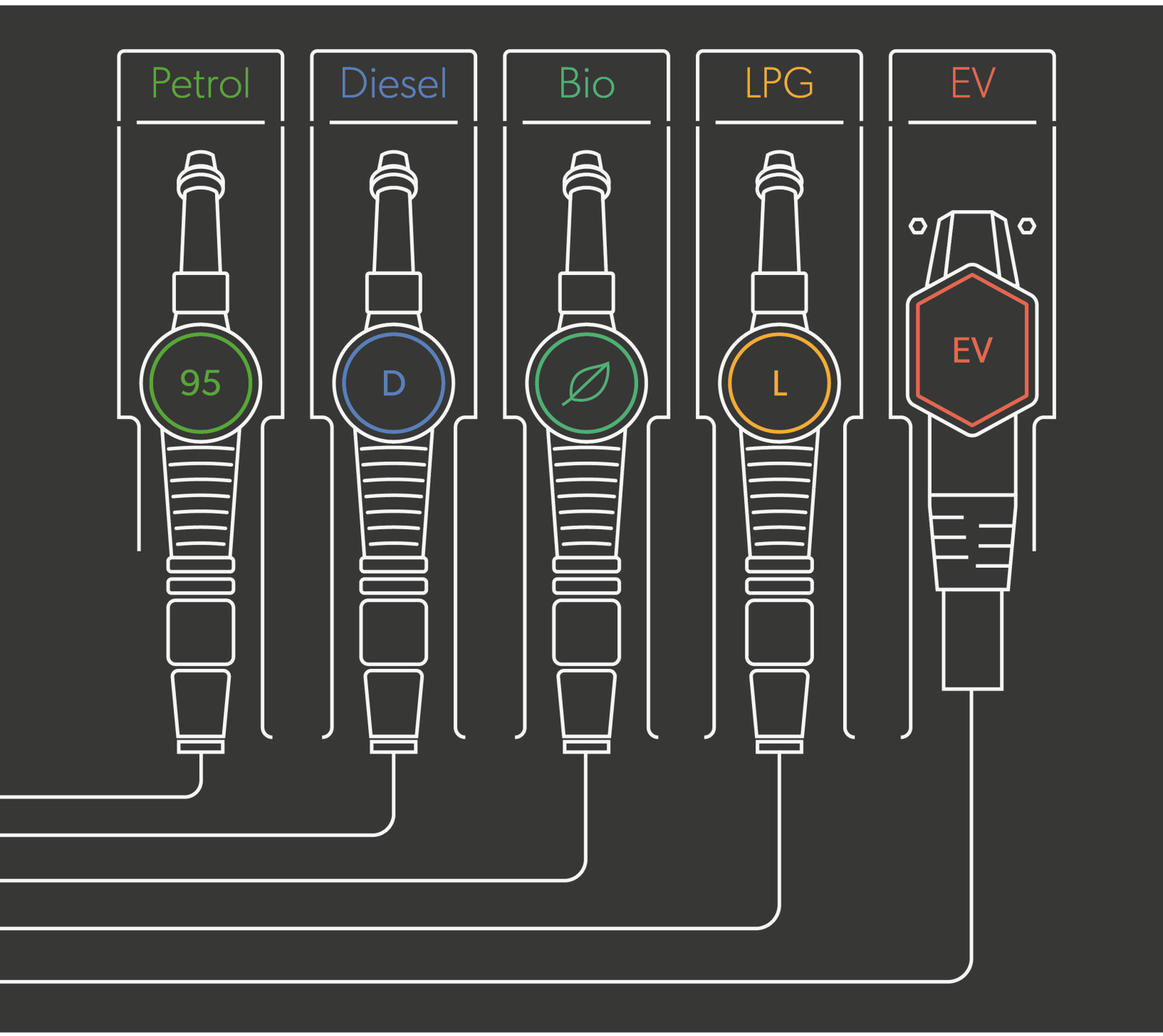
BT

Fleet Solutions



OPERATIONAL FLEET INSIGHT:

Clean Air & Alternative Fuels

2018/19 Report

OPERATIONAL FLEET INSIGHT: THE 2018/19 REPORT

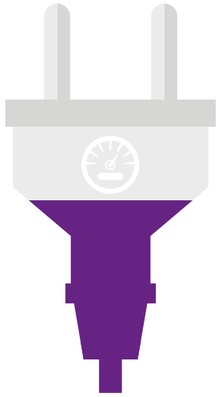
AA

Contents

Key Statistics

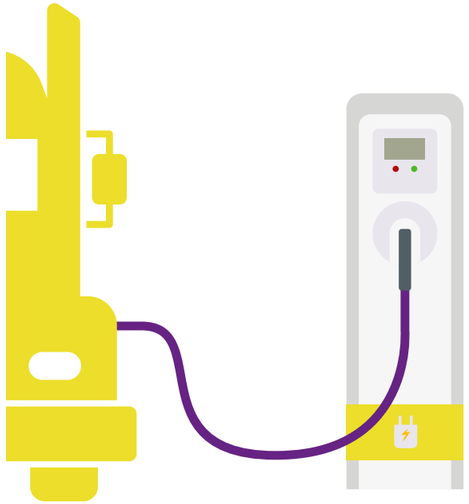
85%

of fleet managers believe that tackling air pollution should be a combined effort between motoring and non-motoring organisations



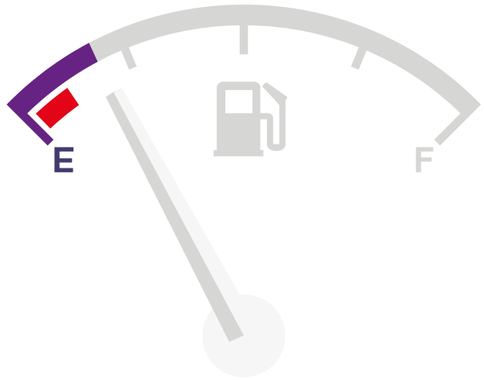
49%

is the believed proportion of fleets that is currently compliant with January 2020 emissions regulations



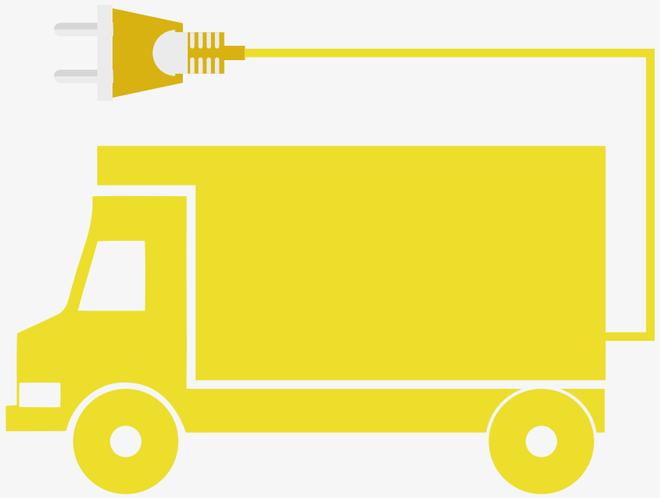
19%

expected increase in the % of fleet managers using fully electric vehicles in five years' time



16%

expected reduction in the % of fleet managers using diesel-powered vehicles in five years' time

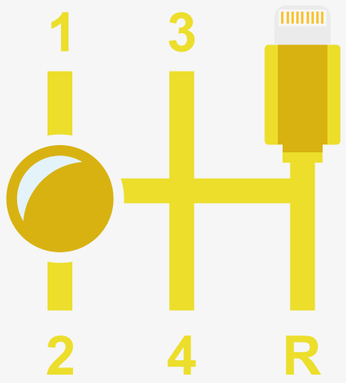


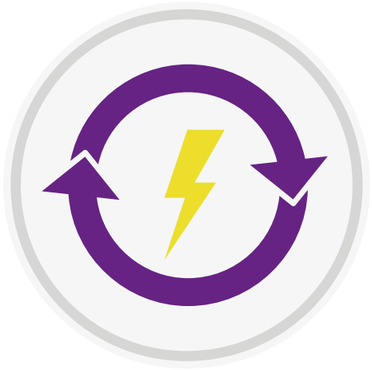
56%

of fleet managers believe fully or hybrid electric vehicles will be the most widely used fuel type beyond diesel or petrol in ten years' time

68%

believe that the quality and functionality of electric cars is superior than for larger vehicles





66%

of fleet managers believe autonomous vehicles would have a positive impact on the environment

72%

of fleet managers believe diesel vehicles have an unfair reputation for producing harmful emissions

66%

claim they have a specific strategy in place for their entire fleet to be compliant (with January 2020 emissions regulations)

86%

believe monetary incentives or grants would have a positive impact on the uptake of alternatively-fuelled vehicles

58%

of fleet managers are aware of the Worldwide Harmonized Light-Duty Vehicles Test Procedure (WLTP)

BT Fleet Solutions

Welcome to our latest Operational Fleet Insight Report. Now in our third year, we are proud to be introducing the 2018/19 report which builds on the insight of our last two successful reports. In conjunction with our friends at the AA, we are bringing you industry-leading research which incorporates the voices and opinions of our peers and colleagues in the fleet industry.

We opened last year's report by saying how it was promising to see the industry making movements into alternative and cleaner vehicle solutions and aligning with the government's strategy to reduce carbon foot prints. Now just a year on, we must begin preparing for monumental change, with clean air targets rapidly approaching and low or ultra-low emission zones on the horizon for many regions across the UK. For those of you that weren't already thinking about it, cleaner vehicle solutions are now becoming a firm reality.

With this in mind, we decided to focus this year's report on the clean air agenda and alternative fuels. We know there are many challenges to reducing emissions - whether that's knowledge, availability of vehicles, infrastructure or cost; but we also know that you already understand why it's important that we change.

As an issue that will affect everyone from owner-drivers to the biggest household names with the largest fleets in the UK, it's no surprise that everyone has their opinion on how it should be dealt with – as you'll clearly see from the report.

The level of uncertainty and apprehension which is always seen before a big change can be felt in every fleet across the UK. However, it is promising to see that 41 percent of our respondents felt they would want their fleet management company to advise on new policies, because ultimately that is what we're here for – to help.

Although there are challenges to overcome, we believe if manufacturers, government, operators and fuel providers all work together we can deliver cleaner air without damaging efficiency or competitiveness. We thoroughly enjoyed compiling this research and hope you find reading it just as enjoyable, enlightening and thought provoking.

Henry Brace

Managing Director – BT Fleet Solutions

The AA

The AA is very proud to be co-sponsor the third Operational Fleet Report with our friends at BT Fleet Solutions. It is an exciting and interesting time to be working within the fleet sector.

We know how important fleets are to the economy. Most of the UK's freight is distributed by road, so it is important to keep businesses moving forward. But, they can only do that if they know where they can turn to for advice and support. They also need interaction from Government as they ramp up their ambitions towards electric vehicles, ultra-low emission vehicles, improving air quality and autonomous vehicles.

The role of electric and ultra-low emission vehicles is playing a key role in the current and future make up of fleets. Some are leading the way, while others are struggling to plan for a fleet where it will cost significant sums to 'green the fleet'. Clearly, incentives such as grants would be a great help in transitioning the fleet sector from petrol and diesel to electric. Improving the charging infrastructure is important too, and many fleet managers want to see more activity to increase the number and availability of charging points.

Air quality is very important to fleet managers and many agree that it must be tackled. However, fleet managers would like to work co-operatively with Government in order to reach policies which are beneficial for all. By not doing so could hamper businesses as well as the economy, so collaboration from both parties is key throughout future discussions.

Looking further into the future, the role of autonomous vehicles in fleets is viewed with a great deal of scepticism. Job losses for drivers tops the concerns, but fleet managers feel there could be environmental challenges too. This is all the more reason for Government to discuss such matters with fleets as soon as possible.

Here at the AA, we will focus on making sure we modernise the way we approach things, at pace and in readiness to support the industry and by putting ourselves at front and centre of the move towards a cleaner air future. The findings from this key piece of research will undoubtedly help us to achieve those aims.

Jennie Hill

Director, Business Services - The AA

Overview

BT Fleet Solutions and the AA have harnessed their combined insight to explore the impact that alternatively fuelled vehicles, emerging clean air policies and digital technology are having across the fleet landscape with a view to how this will progress over the next five years.

As leaders in their field, the AA and BT Fleet Solutions have created an in-depth report on the views, ambitions and concerns of numerous decision-makers and industry experts, to better understand where the industry should be heading, and what it needs to do to get there.

The two companies have enjoyed a long and thriving partnership. Together, they have launched numerous industry initiatives including proactive clinics for operational fleets and repair improvement initiatives such as 'Battery Guard'.

The relationship between the two began in 1990, when BT Fleet Solutions appointed the AA to manage its HGV vehicles and in 2005 the contract was extended to cover the LCV fleet. In 2003, the AA was BT Fleet Solutions first external customer, the relationship has grown from initial maintenance on the AA recovery fleet to SMR on the 3000+ AA yellow resources.

The AA provides a wide range of additional products to assist the 120,000 vehicles that BT Fleet Solutions maintains, including: Fuel Assist, which provides restorative services after incorrect fuelling; and Key Assist, which provides mobile key cutting and reprogramming services.

Over the past 28 years, BT Fleet Solutions and the AA have been at the forefront of every major change within the fleet and breakdown sectors. Their reputations for high levels of customer service have also given them exclusive access to the views of industry professionals, many of whom feel both excited and nervous about the future of fleets.

The Operational Fleet Insight Report was launched two years ago to better understand the changing behaviours, perceptions and expectations of these industry professionals. It has since covered numerous relevant industry topics, including sustainability, driver safety and connected car technology. The aim of this report, and its precedents, is to build an effective roadmap for the industry's future growth.

This year's report examines industry behaviour towards stricter environmental legislation and increasingly complex, data-driven technology. As awareness of carbon emissions, clean air zones and government targets gains traction, so too does the proliferation of alternatively fuelled vehicles, such as electric vehicles. As this report demonstrates, the industry is open to such changes, albeit with reservations. Among such concerns are an uncertainty regarding the feasibility of such vehicles for heavy goods.

The report notes a growing need for collaboration with the Government, on behalf of the fleet industry. The speed at which new policies are being launched is making it difficult for operators to plan properly in a world which works on 5-7 year vehicle replacement cycles. The uptake of alternatively fuelled vehicles is a key part of the business strategy for both the AA and BT Fleet Solutions. And it becomes evident from the report that there is more that could be done to incentivise and support fleets in meeting government targets. This is, and will continue to be, a priority for both businesses.

An additional area of focus in this report is the prevalence of digital technologies, particularly those integrated into newer vehicle models. Both BT Fleet Solutions and the AA are exploring the role they can play in supporting organisations to enjoy the benefits of the 'Connected Car'. They have formed numerous industry partnerships to explore how software and connected data can be used to make vehicles safer, more efficient, and more reliable.

The potential of a greener and smarter fleet industry should not be underestimated. The purpose of this report, therefore, is to identify where potential knowledge gaps exist, so that future actions, strategies and roadmaps can serve to fill them.

Executive Summary

This is a challenging time to be part of the operational fleet industry. Economic and political uncertainty, rising costs, regulatory changes and environmental challenges make for a list of obstacles for fleet managers. The Government's clean air agenda represents a key concern for the industry, working hard to invest and organise itself to play its part in improving the air in our cities.

In this report we investigate how fleet managers are rising to the challenge of rapidly implemented Government policies, how they are actively adopting alternative fuels and pressing on with planning for a future with cleaner air.

The operational fleet industry agrees that action needs to be taken to deal with the quality of air in our cities. Fleet managers feel, personally and professionally, that tackling air pollution is important. It is good for our cities, good for our families, good for our future and ultimately good for business.

However during our research we discovered that many fleet managers feel that effective planning is severely challenged by Government policies which have been implemented too quickly and with a lack of clarity. They also cited vehicle supply and infrastructure limitations on alternatively fuelled vehicles as key challenges.

What of the role of alternative fuels? Fleets are already using some alternatively fuelled vehicles and they are satisfied with these vehicles' performance. Ultimately whilst most fleet managers do expect the proportion of this type of vehicle in their operational fleets to increase (EVs in particular) and the number of diesel and petrol vehicles to decrease, many remain unconvinced about the suitable alternatives for heavy goods and long distance use.

We asked what fleet managers would like to see done to help them meet the clean air challenge. To encourage take up of alternative fuels and achieve the common goal of cleaner air, the industry would like to see further government incentives; more investment in charging/refuelling infrastructure; more effective collaboration between government, trade bodies, manufacturers and the fleet industry.

Finally, we look to the future use of autonomous vehicles. While fleet managers do not see autonomous vehicles as the answer to the environmental challenge of cleaner air, some do believe that they could have a place in their operational fleets within the next five years.

The report that follows provides a wealth of detail about how the industry is rising to the challenges presented by a rapidly changing operational environment and looking to the future of cleaner, alternatively fuelled fleets in the UK.

State of the Nation

“The big challenges I face daily at the moment are the green agendas that we’re facing and the general barrage of rules and regulations that all appear to have collided at one time. I’ve worked in and around fleet for around 30 years, and I’ve never known as much change in a small period as right now.”

Uncertain and unstable times

It is no secret that we live in turbulent times with UK businesses having to navigate the difficult waters of Brexit, a global economy affected by political instability, changing trade arrangements and an uncertain UK economic outlook. The operational fleet industry is at the heart of the economy and consequently it is challenging to future proof a fleet, particularly in 2018.

"IN THIS CURRENT CLIMATE, WHERE THERE'S NOT JUST UNCERTAINTY AROUND FREIGHT, THERE'S BUSINESS UNCERTAINTY, THERE'S BREXIT UNCERTAINTY, IF YOU PUT ALL THAT TOGETHER I THINK PEOPLE ARE NERVOUS."

"REGULATION AND LACK OF CLARITY ARE THE BIG BARRIERS. WOULD I WANT TO INVEST IN AN INDUSTRY WHERE THE FUTURE IS NOT CLEAR? IF IT WAS MY MONEY, PROBABLY NOT."

Rising costs, increasing regulation

There are set challenges that fleet managers face day-to-day such as rising costs of fuel and the costs of maintaining and buying new vehicles.

"LIKE MANY OTHER SECTORS WITHIN THE INDUSTRY THAT RUN SPECIALIST VEHICLES, OUR VEHICLES COST A LOT OF MONEY TO BUY AND WE INVEST HEAVILY IN OWNING THEM OUTRIGHT."

However these financial and budgeting pressures are exacerbated by a rapidly changing regulatory environment, making it hard to plan financially and operationally for the future and this is an issue we will explore in detail in the next chapter. The industry experts we interviewed agreed that fleet managers are facing the largest change in their industry for more than a century with the difficult challenge of deciding "where to put their chips" as they try to balance the day-to-day commercial and operational context of running their fleets with planning for an unclear and rapidly changing future.

Environmental impact

Environmental regulation is having the single biggest impact on fleet managers with new regulations around vehicle emissions compliance, the new WLTP testing regime and clean air zones all affecting the next 5 years. As we will explore in the next chapter, fleet managers are supportive of the aims of Government policy in this area, however speed of change and a perceived lack of clarity about regulation is making it difficult to plan properly in a world which works on 5-7 year vehicle replacement cycles. In some cases fleet managers are having to delay decisions on vehicle replacement until they feel certain about what the rules and regulations will be.

"WE RUN THEM BETWEEN SEVEN AND NINE YEARS. IF WE'RE HAVING TO REPLACE THOSE EARLY AT A COST OF £100,000 EACH DUE TO HASTILY CONSTRUCTED PLANS, OBVIOUSLY THAT'S A HUGE COST THAT WE'RE BEARING.
SO I FIND THAT FRUSTRATING."

Towards a stable but different future

While fleet managers are pragmatic and adaptable in nature, they do not expect the current period of instability to last. They believe the next 5 years will bring change and will then be followed by a new, more stable fleet landscape with new opportunities.

"THE UK FLEET MARKET REFLECTS THE UK ECONOMY AND AT THE MOMENT, THERE'S A LOT OF UNCERTAINTY IN THE UK ECONOMY AROUND BREXIT. BUT THOSE ISSUES WILL FLUSH OUT IN DUE COURSE AND THEN I'M CONFIDENT WE WILL RETURN TO NORMALITY."

"I THINK AS AN INDUSTRY WE REALISE CHANGES ARE COMING, AND THAT WE NEED TO ADAPT!"

The following chapters examine in detail how fleet managers are responding to these challenges brought by uncertainty and how industry experts perceive the future of the operational fleet industry.

Clean Air Policy

“I think they’re absolutely right to introduce them. Doing nothing is not an option. We really do need to clean up our act. I can’t help but think that the road transport industry has become the easy target”

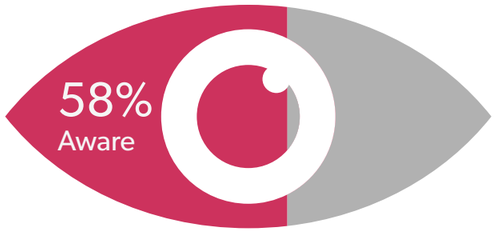
High awareness but lack of detailed knowledge of clean air policies

The Government's clean air agenda is front of mind for most fleet managers and is something which informs their short, medium and long term planning. Awareness of the rollout of low emission zones is high but the understanding of how this would work in practice and the specific implications for their businesses is still missing.

Therefore, as will be discussed, the industry does not feel fully informed about clean air plans and feels the Government could have done/could still do more to communicate these plans effectively and in full.

Awareness of WLTP/Euro 6 Compliance

Awareness of Worldwide Harmonized Light-Duty Vehicles Test Procedure



"THERE'S NO NATIONAL POLICY, AND THAT'S A PROBLEM FOR EVERYBODY, BECAUSE HOW CAN YOU PLAN WITHOUT POLICY? IT'S FRAGMENTED, AND THEREFORE YOU'RE GETTING LOTS OF DIFFERENT IDEAS, AND DIFFERENT THINGS THROWN INTO THE MIX."

Fleet managers told us that the lack of information and in particular the lack of clarity about plans, presents barriers to them actively planning for compliance with 2020 emissions requirements. Awareness of specific regulatory changes such as WLTP is mixed, with those responsible for larger fleets and businesses operating in London showing the highest level of awareness.

A third of fleet managers told us they do not currently have a strategy in place for making their whole fleet 2020 compliant with around half of those citing lack of clarity and lack of information as the reasons why.

"THE LACK OF CLARITY GOING FORWARD AS AN INDUSTRY. GOVERNMENTALLY. REGULATORY. ALL OF THOSE THINGS MAKE IT VERY DIFFICULT TO PREDICT AND PROJECT AT THIS MOMENT IN TIME. HOW DO I FIND A VEHICLE THAT COMPLIES WITH ALL THE DIFFERENT ZONES WHEN IT'S NOT CLEAR WHAT THE ZONES WILL LOOK LIKE?"

Our industry experts agree that the Government is putting new regulations into place without a fully understood and communicated long-term strategy on clean air. Furthermore, regulatory changes which take a short-term approach or even favour one fuel type over another are reducing clarity for the overall clean air strategy.

"THE GOVERNMENT NEEDS TO BE AGNOSTIC AS TO TECHNOLOGY OR MANUFACTURER, AND NEEDS A COHESIVE, LONG-TERM STRATEGY IN PLACE THAT ALLOWS PEOPLE TO PUT INVESTMENT IN."

Our research results show that there is room for both better publicity around specific plans, such as changes in testing regimes and the potential implications for the operational fleet industry, as well as wider advice for fleet managers on how they can meet the challenges of 2020 compliance.

Personal support for cleaner air but professional challenges to implementation

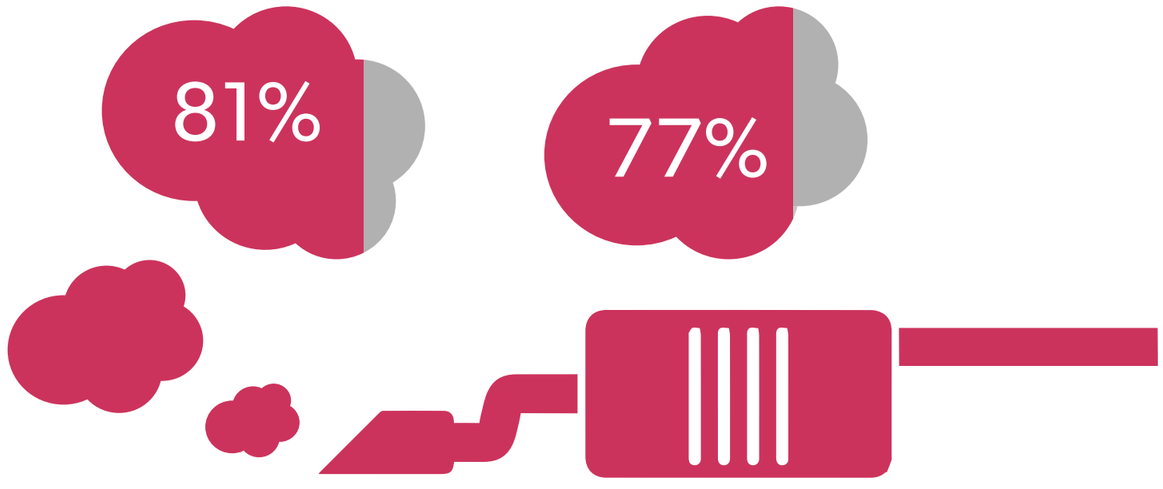
Many of the fleet managers we spoke to feel personally supportive of the need to take action on air quality, especially in cities, with 81% agreeing that "tackling air pollution is important to me personally", rising to 91% of those with larger fleets. When we asked them why they were supportive we were met with discussions on the dangers of pollution, the effect on the health of wider society, on their own families and the importance of working towards a positive environmental legacy for future generations.

They also report that their businesses are broadly supportive of changes to deal with pollution and air quality with 77% agreeing that "tackling air pollution is important to my organisation", rising to 89% of those with larger fleets.

However many also noted a visible tension between the concept of cleaner air and the commercial reality of putting plans into place to meet the new regulations.

Tackling air pollution is important to me **personally**

Tackling air pollution is important to my **organisation**



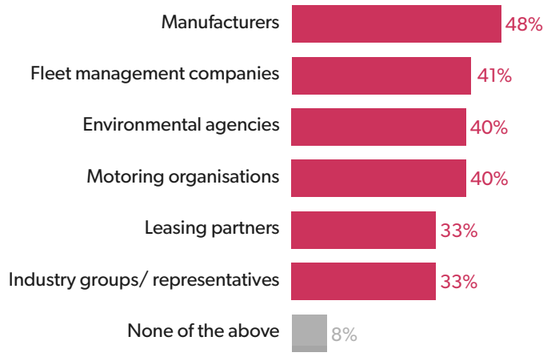
"THERE IS OBVIOUSLY AN UPFRONT INVESTMENT IN INFRASTRUCTURE, SO YOU'VE GOT TO BUILD CHARGING STATIONS, THAT'S A CHANGE YOU HAVE TO DO… THERE'S AN EDUCATION OF THE DRIVERS AND THE FLEET MANAGERS, THERE'S A HUMP YOU HAVE TO GET OVER AT THE BEGINNING AND SOME BEHAVIOURAL CHANGES…"

The cost to business was mentioned, as was the way that road transport is being "singled out" as the main culprit at the heart of air pollution. In addition to this, a lack of collaboration and wider discussion between different bodies is leaving fleet managers feeling under pressure and struggling to manage rapid change in their industry.

"I'M A SUPPORTER OF CLEANING THE AIR UP; IT'S KILLING PEOPLE, SO WE'VE GOT TO DO SOMETHING ABOUT IT. BUT I THINK GOVERNMENT SHOULD BE LOOKING WIDER THAN JUST HAMMERING COMMERCIAL VEHICLE OPERATORS."

"I THINK THEY'RE VERY POOR. I THINK THEY LACK CLARITY, AND I THINK THE GOVERNMENT ARE TAKING THE PATH OF LEAST RESISTANCE."

The figures in the table below support both the personal importance fleet industry professionals place on tackling air pollution but also their call for a considered "whole industry" response.



There was some discussion during our research about the advantages and disadvantages of local authorities being able to have autonomy on the rules and arrangements for their own low emissions zones. Broadly those surveyed are supportive of this localised control with 72% supporting this.

However in the qualitative interviews, some sounded a note of caution that this could cause further confusion and become hard to manage for fleets operating on a national scale, with different rules applying depending on the city.

"THERE IS A DANGER WE'RE GOING TO HAVE A PATCHWORK OF DIFFERENT STANDARDS HERE, WE'VE GOT, POTENTIALLY, 30 DIFFERENT CONURBATIONS NOW WORKING ON THEIR OWN PLANS INDEPENDENTLY."

Our industry experts tended to agree with the caution of some of our interviewees. They empathised with fleet managers struggling to plan for a potentially fragmented clean air regime, calling for a more cohesive national policy framework to be put in place to set clearer parameters.

Tackling air pollution should be a combined effort between motoring and non-motoring organisations

"IF I WERE A FLEET MANAGER, THINKING, AM I GOING TO BE ABLE TO DRIVE MY PRODUCT INTO A PARTICULAR AREA, IT'S EXTREMELY DIFFICULT TO PLAN."

Some fleet managers also spoke vociferously about the frustration they feel with plans still not being clear whilst the "clock ticks", making it very hard to effectively plan, cost, re-organise or mitigate against the imminent changes coming into force.

"WE STILL DON'T KNOW WHAT THAT LOOKS LIKE. WHETHER IT'S GOING TO AFFECT OUR VEHICLES, WHEN IT'S COMING IN? WHAT IT'S GOING TO COST IF WE'RE NOT COMPLIANT? A NUMBER ARE DUE IN 2019 SO BY THE TIME THOSE PLANS DO GET ANNOUNCED LATER THIS YEAR, WE COULD POTENTIALLY HAVE LESS THAN A YEAR TO REACT."

Experts echoed this, pointing to the problems facing the market to meet the short term demands for cleaner vehicles using alternative fuels. This is especially troubling given the considerably longer time required to develop new products, bring them to market and manufacture in enough volume to meet demand.

"TO PUT ARBITRARY TIMELINES FOR INTRODUCTIONS OF TECHNOLOGY AGAINST AN INDUSTRIAL DEVELOPMENT CYCLE IS QUITE WRONG."

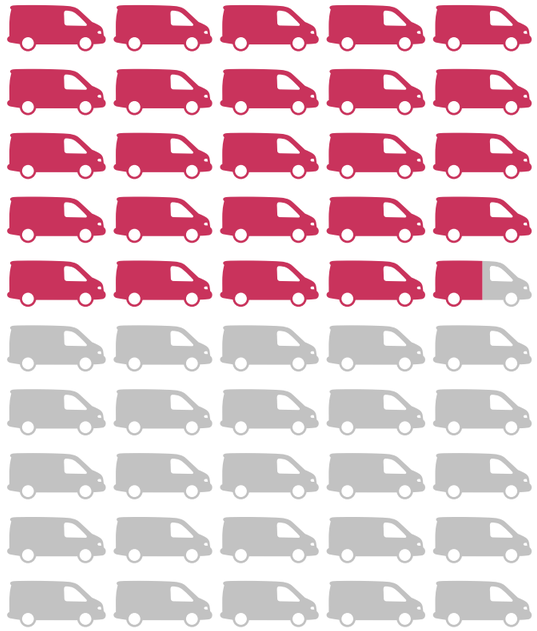
Ultimately, whilst fleet managers are happy for them and their industry to play its part in dealing with air pollution, and whilst they personally support the need for cleaner air, the vast majority (85%) feel that a wider coalition of motoring and non-motoring organisations is required to fully meet those shared objectives. In particular they would like to see manufacturers & environmental agencies work with the road transport industry to support and advise on new policies.

Plans are afoot, but not for all

On average, fleet managers indicated that around half of the vehicles in their fleet are currently compliant with 2020 regulations and two thirds claim they have a plan in place to ensure that all their vehicles would be compliant by 2020.

New Regulation Compliance and Future Planning

49% Claimed Proportion of Fleet Currently Compliant with January 2020 regulations



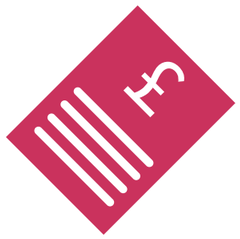
Current levels of compliance are generally consistent across different fleet sizes

The specific actions that businesses have already taken and the plans they have in place to ensure their vehicles are up to Euro 6 standards include: replacing vehicles with Euro 6 compliant models and absorbing the costs within the business (35%), passing the cost onto their customers (29%), investing in alternatively fuelled vehicles (31%) and converting existing vehicles (30%). Interestingly, some businesses are either moving non-compliant vehicles to parts of the country without emissions regulations (25%) or simply paying fines (19%).

Some fleet managers we interviewed felt that whilst it is commercially practical to operate less polluting vehicles within low emissions zones and operate non-compliant vehicles outside those zones, this is at odds with the overall goal of reducing harmful emissions. Moreover, this is not a choice open to all fleets. For example some businesses operate predominantly in cities/urban locations and so they cannot avoid operating most of their vehicles within low emissions zones; others operate vehicles which must be able to cover large areas and diverse locations as the need arises, thus reducing their control over where and when a given vehicle can be deployed.

25%

'Bought/leased new vehicles and used older elsewhere



19%

Paid fines, cannot afford to buy/lease new vehicles

"THE LATEST SHIFT WAS TO DEVOLVE IT THROUGH TO LOCAL AUTHORITY GOVERNANCE. WELL, THAT'S OKAY IF YOUR VEHICLE NEVER LEFT LONDON, AND DIDN'T HAVE TO GO INTO MANCHESTER OR LEEDS, OR BIRMINGHAM, OR WHATEVER."

In the next chapter we will dive further into businesses' future plans and discuss the specific experiences, attitudes and challenges around adopting various new, cleaner technologies and fuels.

Alternative Fuels

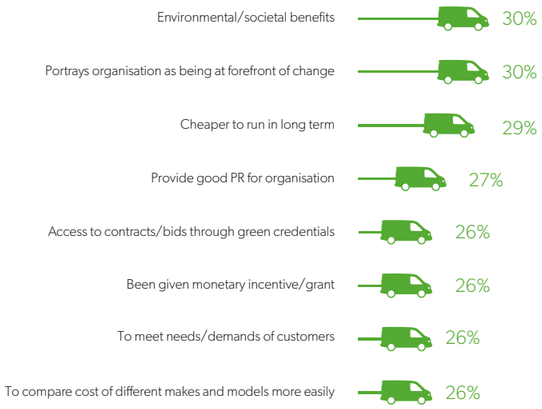
"Are we going total electric? No. We'll try one, we'll see how we get on. We'll trial it for two years. I think the electric truck market is in its infancy."

Alternatively fuelled vehicles are already present in operational fleets

Fleet managers have been incorporating alternatively fuelled vehicles into their fleets for some time now. This can be as part of an ongoing decarbonising program of the fleet, or indeed the wider company, as a more specific response to the upcoming clean air legislation. This demonstrates how businesses across the UK are confronting this change as a "toe-in-the-water" experiment or to lead the market rather than follow others, thus generating positive PR.

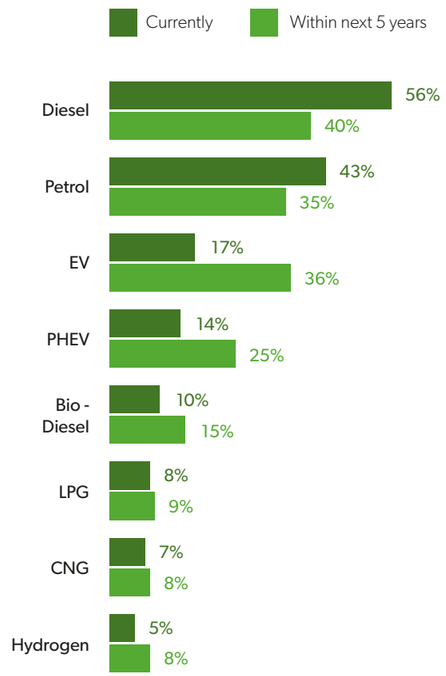
Another motivation to begin the decarbonising process is the long term reduction in running costs. However as initial costs can be higher for alternatively fuelled vehicles, it is no surprise that monetary incentives or grants are also mentioned as playing a part in take up of alternative fuelled vehicles.

Reasons For Using Vehicle Type (Average Across All Vehicle Types)



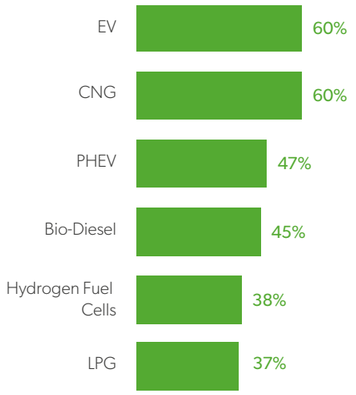
Which alternatively fuelled vehicles are fleet managers adopting? There is a feeling amongst fleet managers and industry experts that there is momentum at a Government and industry level towards EVs and we will focus specifically on EVs in the next chapter. This is reflected in the current and future predicted take up of different vehicle types. Whilst diesel and petrol dominate existing fleets, research suggests that electric and hybrid vehicles have been the most popular alternatives to traditional fuels. Bio-Diesel and natural gas are also used by a minority. Hydrogen is least popular in terms of current use, although some see it as the best long term future fuel.

Fuel Types Used in Fleet (Average Across All Vehicle Types)



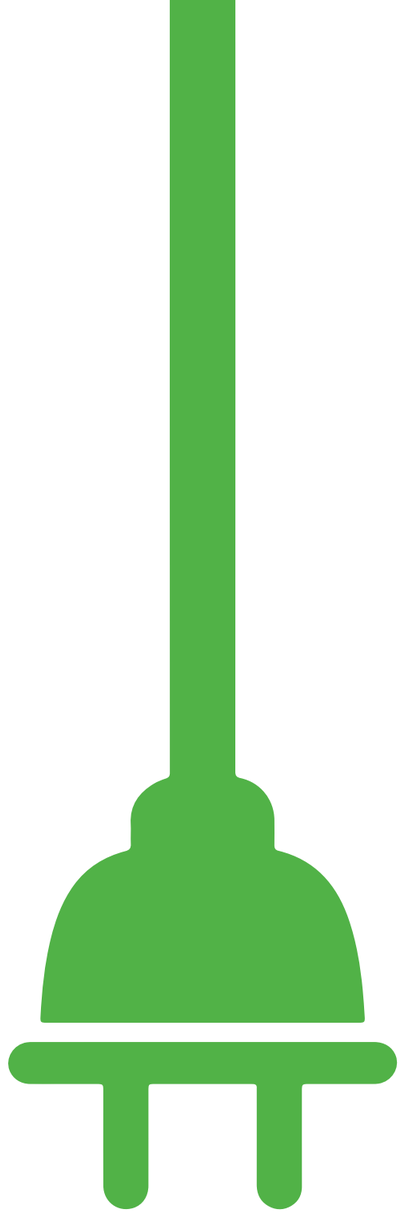
The early adopting fleet managers who are already using these alternatively fuelled vehicles are largely satisfied with their performance where they have been deployed (e.g. in cities and urban areas where EVs need to travel shorter distances and are likely to be closer to existing charging points).

Satisfaction with Vehicle Types (Currently Using) – very satisfied



However fleet managers are also clear about the limitations posed by different fuel types for operational fleet applications, which we will discuss shortly.

"THE INITIAL COST OUTWEIGHS THE FINANCIAL BENEFIT. YOU WON'T SPEND AS MUCH ON FUEL, ABSOLUTELY, BUT YOU'VE GOT A HIGHER OUTLAY AT THE BEGINNING. YOU'RE NOT SPENDING £30,000 ON A VEHICLE, YOU'RE SPENDING DOUBLE THAT."



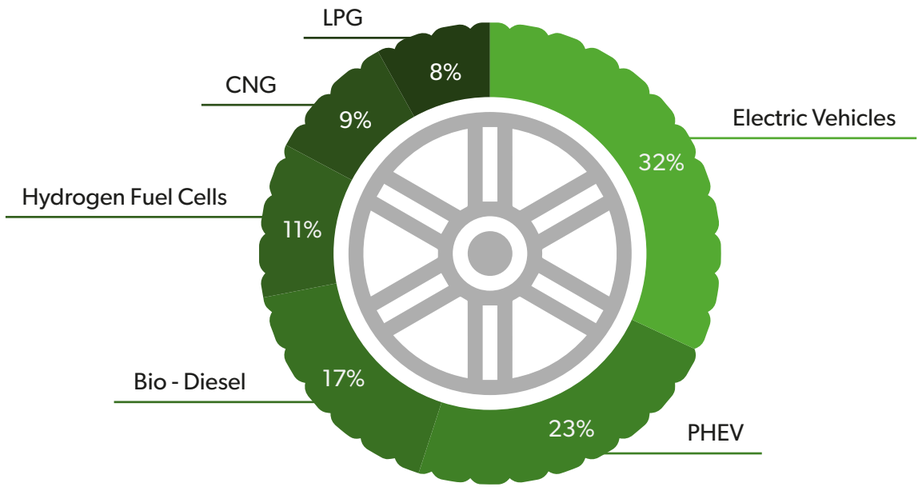
Predictions and perceptions of alternative fuels

EVs are the alternatively fuelled vehicles of the moment and they are also the vehicles which fleet managers generally expect to become more prevalent in their fleets in the medium and longer term. 35% of fleet managers expect to be using EVs in the next 5 years compared with 17% who use them now. Additionally, a similar proportion believe that EVs will be the most prevalent alternatively fuelled vehicles in 10 years' time.

Despite the narrative undoubtedly favouring EVs, other fuels are still being tried and are expected to increase in the makeup of future fleets. Hybrid vehicles are expected to become more prevalent as is bio-diesel.

Changes to Operational Fleet Vehicles

Alternative fuels perceived to be most widely used in ten years' time



Whilst natural gas is expected to have a part to play in the alternative fuel mix, it is not set to increase in penetration within operational fleets, perhaps because of the disadvantages which we will discuss shortly.

Hydrogen is an emergent fuel with some seeing it as being a strong long-term contender but which remains lacking in understanding and unappreciated by many. However our data suggests a slight increase in predicted popularity with Hydrogen, meaning it could be a fuel to watch especially if EVs fail to develop in a way which mitigates their disadvantages to operational fleets.

The advantages that fleet managers see in EVs include their long term cost effectiveness both in fuel and maintenance, their clean running credentials, the fact that they still attract subsidies and grants as well as the quality of the drive.

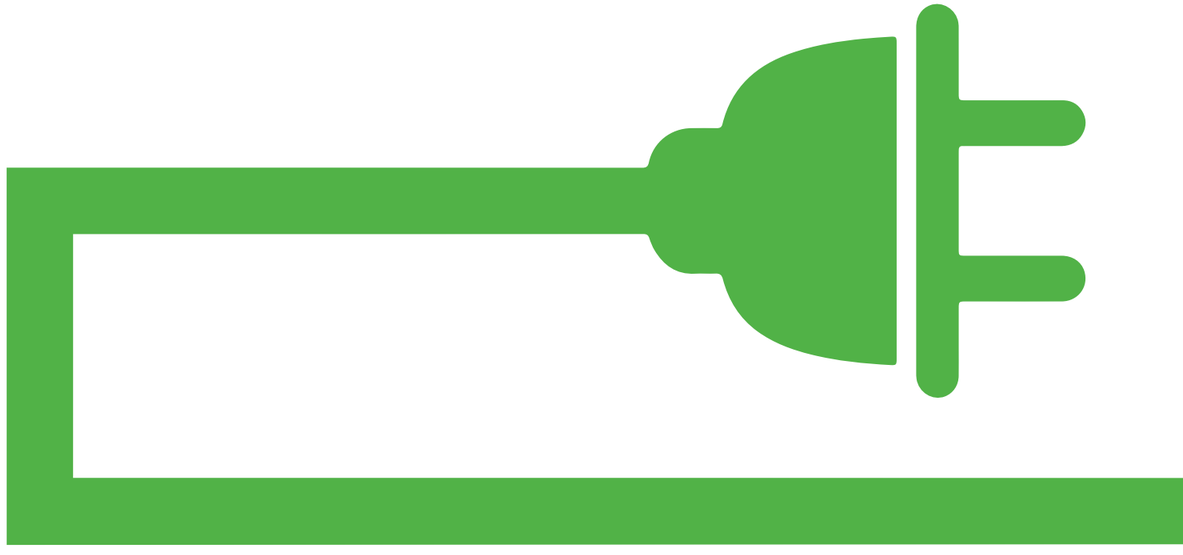
"THE GOOD NEWS IS THAT MANY TYPES OF ALTERNATIVE TECHNOLOGIES, SPECIFICALLY ELECTRIC VEHICLES ACTUALLY HAVE LOWER MAINTENANCE COSTS THAN CONVENTIONAL DIESEL OR PETROL BECAUSE THEY ARE ULTIMATELY SIMPLER MACHINES."

Natural gas (CNG and LNG) also has advantages in the view of some fleet managers and industry experts. The main one being that it is as effective on payload and range as diesel HGVs and so if cleaner and potentially cheaper to run, it could be significantly advantageous.

However as well as the advantages that alternative fuels can deliver, there are also downsides relating to the operation of the vehicles themselves and to the wider context. Indeed one of the significant challenges facing fleet managers, in addition to the challenges of planning for rapid and dynamic regulatory change, is the viability of the "cleaner" alternatives for operational fleet requirements.
Light vans and cars are perceived to be more easily replaced with existing alternative vehicles (especially EV and hybrid), but when it comes to needing to cost effectively carry a heavy payload and to drive for long distances without refuelling, alternatively fuelled vehicles can be seen as poor replacements for diesel especially.

"THINKING ABOUT COMMERCIAL VEHICLES, THE TECHNOLOGY IS NOT THERE YET FOR HEAVY TRUCKS."

"ARE WE GOING TOTAL ELECTRIC? NO. WE'LL TRY ONE, WE'LL SEE HOW WE GET ON. WE'LL TRIAL IT FOR TWO YEARS. I THINK THE ELECTRIC TRUCK MARKET IS IN ITS INFANCY."



The lack of viable alternatives is apparent in the survey data where the decrease in diesel and petrol vehicles is not matched by a suitable alternative for HGV and long distance commercial use.

In our qualitative interviews we also heard concerns about specific disadvantages of each alternative fuel e.g. range and payload for EVs, poor re-fuelling infrastructure for natural gas etc.

"ELECTRIC VANS ARE MORE EXPENSIVE, THEY ARE LIMITED IN WHAT THEY CAN DO, BECAUSE OF THE CHARGING, THERE'S NO INFRASTRUCTURE FOR ELECTRIC VEHICLES"

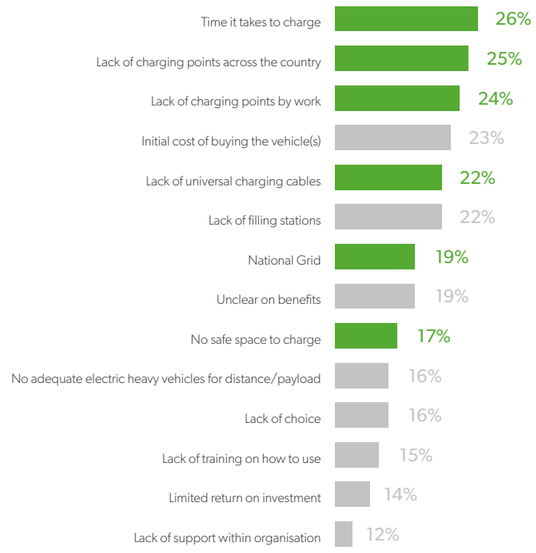
For all alternatively fuelled vehicles, the disadvantages for operational fleets also include cost as they are seen as more expensive to buy or lease and supply restrictions with few available and a limited product range. One thing is for certain, fleet managers do not expect existing large manufacturers to be able to meet sudden demand even for standard spec vehicles let alone one highly customised.

"FROM AN ELECTRIC VEHICLE PERSPECTIVE, THERE IS STILL A BIG SHORTAGE OF APPROPRIATE VEHICLES ON THE MARKET"

All these factors are discouraging the interest in take up and weakening the perception of a practical alternative to the current "classic" fuels.

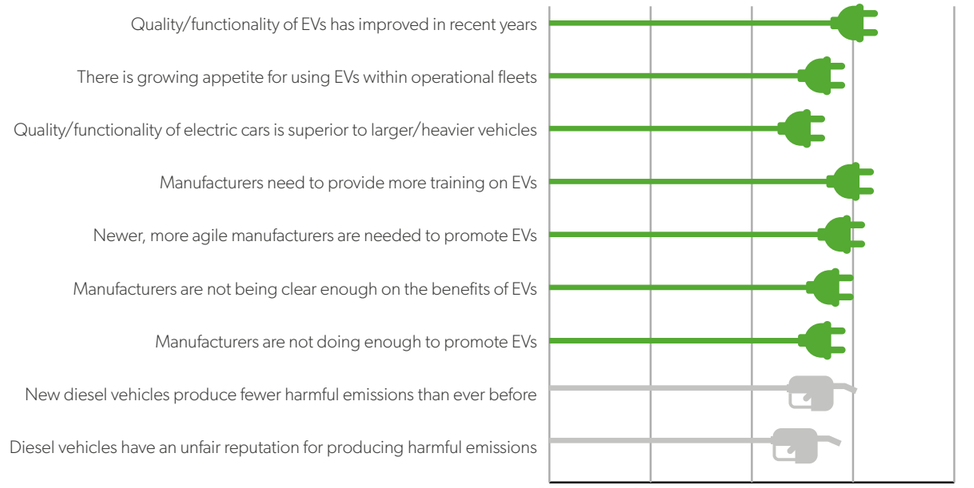
Reasons For Not Using Vehicle Type (Average Across All Vehicle Types)

Green codes only asked about EVs - scores relatively consistent across different fuel types



Given the absence of a currently available, abundantly supplied, cost-effective, operationally appropriate, alternatively fuelled vehicle, it is no surprise that diesel remains a popular fuel for many fleet industry professionals. Our survey revealed that around three quarters of fleet managers agree that "diesel vehicles produce fewer harmful emissions than ever before" and that "diesel vehicles have an unfair reputation for producing harmful emissions".

EV/Diesel Diagnostics (% Agree)



Some industry experts and fleet managers feel that the current support for EVs is somewhat arbitrary and politically driven rather than being part of a rounded, long term strategy to reduce air pollution. Few even suggest this can be achieved more realistically through more advanced diesel and better real world emissions testing.

"I THINK THE MAIN ONE THAT COMES TO MIND IS THAT THERE HAS JUST BEEN A LOT OF PROPAGANDA ABOUT DIESEL OF LATE, WHICH IS A REALLY ODD THING BECAUSE TEN YEARS AGO THE GOVERNMENT WERE PROMOTING IT AND THE TAX ADVANTAGES."

Indeed "Diesel gate" and the subsequent "dirty-diesel" narrative is frustrating to people who view new cleaner diesel vehicles as meeting the needs of the clean air agenda efficiently and effectively.

"IF YOU ACTUALLY LOOKED AT THE FUELS, A EURO 6 ENGINE TODAY IS PUMPING OUT MORE CLEAN AIR EMISSIONS THAN IT'S SUCKING IN. THEY ARE VERY EFFICIENT."

Therefore whilst fleet managers are highly engaged in operating, trialling and understanding more about alternatively fuelled vehicles, traditional fuels, especially diesel HGVs, are likely to dominate in the short to medium term with its cleaner running form.

"Manufacturers are between a rock and a hard place. The challenge they have is that they can see where the future of the market is going but they can't afford for it to go there too quickly, because they have to make the return on what they've already spent [on conventional vehicles]. So that's difficult for them. Therefore, what we're finding is actually a lot of the innovation is coming from smaller organisations that are able to act more quickly."

Focus on EVs

"Yes, there's no stopping the road towards electrification. I think there are parts of the market where it will not work in the short-term, so for example, HGVs and not all vehicles on the motorway. Electrification is not ready for that yet. It might happen in the longer-term but my guess is it's at least ten or twenty years away."

EVs are the alternative fuel of the moment

As we discussed in the last chapter, electric vehicles are the most talked about and popular alternatively fuelled vehicle in fleet management circles.

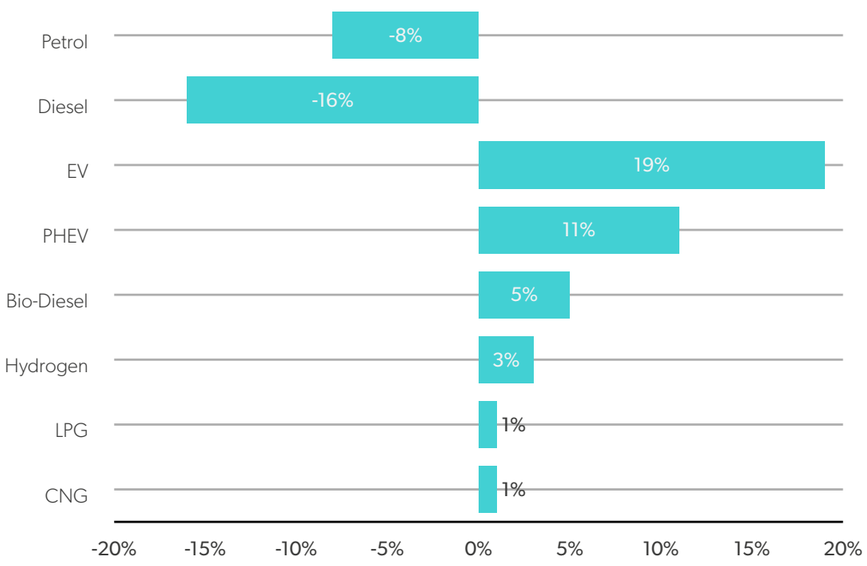
"WHEN YOU TALK ABOUT CLEAN AIR AND ALTERNATIVE FUELS, ELECTRIC'S THE ONE THAT GETS THE PRESS, IT'S THE ONE THAT HITS THE NEWS HEADLINES."

This industry discussion and interest is reinforced with action, showing that EVs are the most popular alternative fuel type currently deployed with 17% of fleet managers already incorporating EVs in their fleets. To further support this notion of popularity, 60% of those currently using EVs express satisfaction with the performance of the vehicles. Looking ahead to future predictions and projections, EVs dominate with hybrid as the only alternative coming close. Almost three quarters agree that there is growing appetite for using EVs in operational fleets.

"I THINK IT WILL BE ELECTRIC. I THINK IT WILL BECOME MORE AVAILABLE. THE PACE OF CHANGE IS INCREDIBLE."

However, despite its popularity it is important to point out that while EVs are predominantly expected to replace cars and LGVs in fleets, they are not expected to replace HGVs.

Change in Expected Fuel Types Used in Fleet Within Next 5 Years (Average Across All Vehicle Types)



EVs have advantages and disadvantages for fleet managers

What is the appeal of electric? First and foremost fleet managers appreciate the environmental benefits that EVs offer, namely zero tail pipe emissions. This helps position an organisation as forward thinking, contributing to the business from a PR perspective or even give them a competitive edge in cases where their customers prefer to use partners with strong environmental credentials.

"THERE'S ANOTHER NEED BEING DRIVEN, AND THAT'S GENERALLY THROUGH LOCAL GOVERNMENT, GOVERNMENT CONTRACTS."

However some experts are more cautious about the environmental credentials of EVs pointing out that electricity in the UK approx. 50% of electricity is still generated through fossil fuels. Taking this into consideration, EVs are not as green as they may have originally seemed as a fuel source, due to the raw materials used and carbon produced throughout manufacturing. This is mainly down to the countries that are used to produce the batteries, (cheap labour), this means these countries are heavy users of fossil fuels to provide their electricity, so all we are effectivity doing is producing the pollution somewhere else in the world.

Nonetheless, for many fleets they remain an environmentally clean choice. Moreover they can attract government grants which is a key benefit for some fleet managers; enabling them to start incorporating EVs into their fleets.

Reasons For Using Vehicle Type (Average Across All Vehicle Types)

30%

Use vehicle type for access to contracts/ bids through green credentials

26%

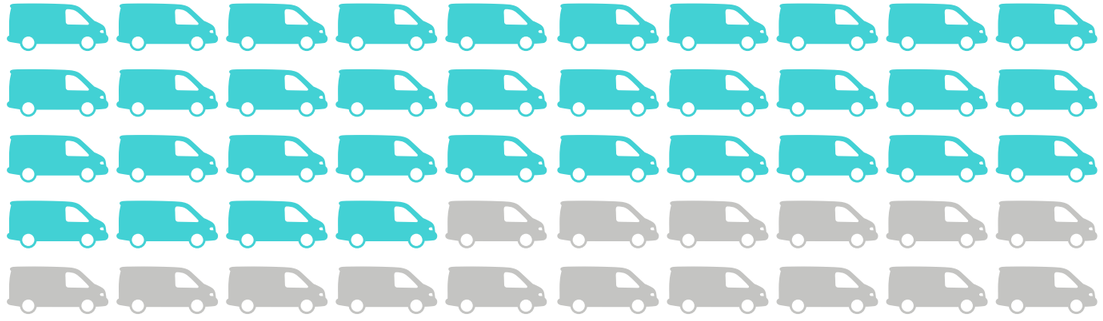
Use vehicle type for environmental/ societal benefits

As previously stated, most fleet managers running EVs are satisfied with their performance with a high proportion (81%) saying that the quality and functionality of EVs has improved in recent years.

EV/Diesel Diagnostics (% Agree)

68%

Say quality/functionality of electric cars is superior to larger/heavier vehicles



However not all Fleet managers have used EVs and so some doubts remain about the appropriateness of EVs for operational fleets.

Both those currently using EVs and those considering incorporating them within their operational fleets in the future, were most concerned about the fact that EVs were only appropriate for short journeys, in locations and operational environments where charging could take place when the vehicle was "off duty" close to or within its operating area. In practice this amounted to cities, especially London.

For HGVs or LGVs running long distances up and down the UK motorway network, EVs are not yet suitable. The additional weight and space taken by batteries as well as the relatively short range before requiring recharge, renders them unsuitable for this type of "workhorse" activity.

For some, these disadvantages are enough to stop them from using EVs both now and in the immediate future. The time taken to charge EVs is a key barrier for some fleet managers, coupled with a feeling that the charging infrastructure is somewhat poor – both across the country and nearby places of work.

"INFRASTRUCTURE IS ABOUT THE ABILITY TO CHARGE. IF A VEHICLE IS SAT IN TRAFFIC, IT'S USING FUEL, AND IF THERE'S NOWHERE TO REFUEL THAT VEHICLE, IT LIMITS THE AMOUNT OF JOURNEY TIME FOR THE ELECTRIC. THAT'S A BIG CONSIDERATION. IT'S OUR ROAD INFRASTRUCTURE, IT IS OUR CHARGING INFRASTRUCTURE. IT'S ACCESS TO THAT CHARGING INFRASTRUCTURE."

Concerns over secure charging locations, particularly for vehicles containing valuable goods or tools and equipment, is another barrier for EVs. As is the inconsistency of standards in charging cables leading to fleet managers worrying about the compatibility.

Finally there are concerns that the national grid is not geared up to deliver the power when and where it is required for charging. This can be both a general worry that our power system is not geared up for the demands of EV charging or a specific practical concern for companies worrying about encountering difficulties installing charging points on their premises or who are considering new premises with a power supply appropriate for future EV charging.

"WHEN IT COMES TO THE ELECTRIC VEHICLES, THE WAY THAT THE MARKET WORKS FOR POWER GRID REINFORCEMENT NEEDS TO BE REVIEWED BECAUSE IT IS OBSTRUCTIVE."

Fleet Managers want more from manufacturers

The short term development and supply of alternatively fuelled vehicles remains a concern for fleet managers and industry experts who fear that the pace of regulatory change and subsequent demand is likely to outstrip the supply of suitable clean vehicles. This is certainly a worry when it comes to EVs. Electric might be the leading alternative fuel right now, but that does not mean that the correct vehicles have been produced or that they can be made available in sufficient numbers to meet the specific needs of operational fleets.

In addition to the predicted supply and demand discrepancy, fleet managers want to see manufacturers taking an active lead in promoting and educating the industry on EVs. Almost three quarters (73%) of those surveyed said that manufacturers are not doing enough to promote EVs with 75% indicating that manufacturers are not being clear enough on the benefits of EVs. Moreover a majority of 80% of fleet managers said that manufacturers needed to provide more training on EVs.

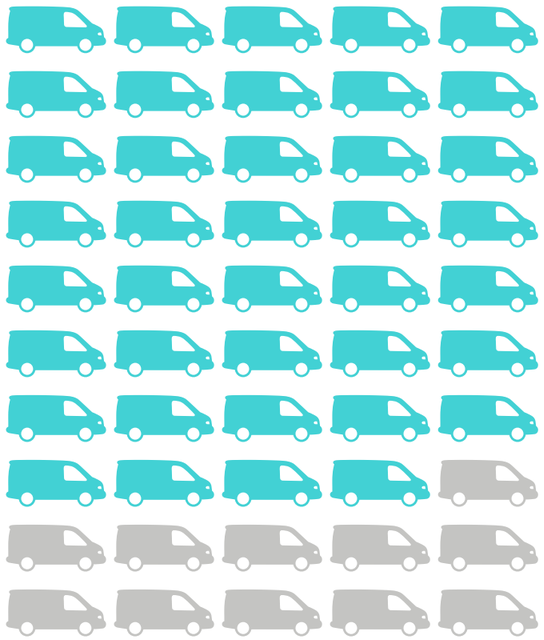
"I THINK MANUFACTURERS NEED TO GET MORE INVOLVED. I THINK IF YOU HAD A MANUFACTURER-LED INITIATIVE, IT WOULD PROBABLY SIT BETTER WITH LARGER FLEETS."

All this evidence points to a real hunger amongst fleet managers for manufacturers to play a much bigger part in the industry discourse on EVs, whether that is promoting the technology more assertively or educating the industry more effectively.

EV/Diesel Diagnostics (% Agree)

78%

Say newer, more agile manufacturers are needed to promote EVs



Interestingly, a significant majority (78%) of fleet managers feel that the existing large manufacturers of vehicles will not be able to meet the demands of a changing operational fleet landscape alone and that newer, more agile manufacturers are needed to promote EVs. This reflects a wider frustration that fleet managers feel exposed and alone in meeting the challenge of reducing pollution and contributing to cleaner air in our cities and towns.

Is there a place for EVs in fleets?

Whilst EVs are not the only answer to the challenges that fleet managers face in meeting the needs of clean air policy and regulatory changes, they are seen by many professionals in the industry as being a significant part of the solution in the medium and longer term.

"As a business if you respond in a way that puts you at the leading edge of change, then there are many more commercial advantages that we earn in terms of being seen as that leader. It's to build your brand with customers, engage with employees, shape the regulatory debate and even to change the culture of the business in terms of making it more innovation focused."

The Future

“So autonomous technology will happen. There’s no question about that. It’s not clear as to how quickly they will happen but they are coming. We are working in that field.”

The greatest change in fleet management for over 100 years.

The clean air agenda can be expected to drive fleet manager's business planning in the foreseeable future which is something they also personally believe to be important. We have also seen that there are significant professional and industry challenges when it comes to finding solutions to the problem of air quality; notably the speed of introducing clean air policies coupled with the absence of suitable operational fleet vehicles.

Ultimately they believe the future for operational fleets is cleaner with alternatively fuelled vehicles and EVs especially playing a significant role.

Incentivising the take up of alternatively fuelled vehicles

How should fleet managers be encouraged to meet the challenges of clean air more confidently or positively and what is the role of incentives?

Some fleet managers have already welcomed the available incentives and subsidies for alternatively fuelled vehicles. Many are already using the opportunity to purchase or lease EVs. However they would still like to see more incentives of different kinds available.

> "TAX BREAKS, FINANCIAL INCENTIVES FROM GOVERNMENT, THAT BECOMES A BIG DRIVER."

The unprompted suggestions they made for further government incentives fell into three categories: financial, infrastructure and information.

As far as financial incentives were concerned, fleet managers want to see lower initial costs of vehicles compared with traditionally fuelled diesel or petrol vehicles as this can be a significant barrier in entering the market and trialling alternatively fuelled vehicles.

> "THESE ARE RELATIVELY EXPENSIVE PRODUCTS. THEY ARE OFTEN BEYOND A LOT OF PEOPLE'S BUDGETS. BECAUSE THESE PRODUCTS ARE FAIRLY UNIQUE, THEY ARE QUITE EXPENSIVE."

Interestingly they see the responsibility for this lying with both Government and manufacturers; either through direct or indirect Government subsidies or by manufacturers reducing list prices and giving bigger discounts normally associated with the bulk purchase of diesel vans.
Fleet managers would also like to see Government use fiscal levers to encourage greater take up of alternatively fuelled vehicles. They suggested schemes to help initially purchase cleaner vehicles, reduce road tax and VAT rates, ultimately influencing lower fuel costs and lower insurance costs. All of these would enable fleet managers to create a more compelling business case for investment in alternatively fuelled vehicles within their organisations and get the buy in they need.

> "I DON'T THINK FROM A COMMERCIAL VEHICLE POINT OF VIEW, THEY'RE DOING ANYTHING TO ENCOURAGE UPTAKE. THERE'S NO EARLY SCRAPPAGE SCHEME BEING OFFERED, THERE ARE NO FINANCIAL INCENTIVES TO DO IT. IT'S ALL STICK AND NO CARROT."

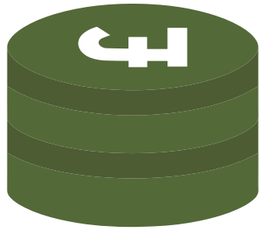
When asked, the vast majority of fleet managers (86%) said that monetary incentives or grants would have a positive impact on their adoption of alternatively fuelled vehicles.

However it is also worth noting that only 56% of fleet managers surveyed were actually aware of current Government grants available, indicating that there is a need for greater promotion of the existing support accessible.

Fleet managers also reverted back to the infrastructural challenges associated with EVs and other alternative fuels. The charging and re-fuelling infrastructure needs to be improved to enable them to confidently incorporate these vehicles into their fleets. This would level the playing field for alternatively fuelled vehicles and enable them to operate in a similar way to their traditional fleets.

Finally there was a call for continued promotion and further information of alternatively fuelled vehicles by the Government and manufacturers so that fleet managers could feel fully able to make informed decisions and plans. Another suggestion was that manufacturers could also offer additional technical support and training for the maintenance of alternatively fuelled vehicles to fill the knowledge gap caused by rapidly emerging technology in the automotive sector.

When asked about other potential incentives, over three quarters of fleet managers said that free parking (82%), access to dedicated lanes (80%) and access to bus lanes for alternatively fuelled vehicles (76%) would positively impact their interest and take up of cleaner vehicles.



85%

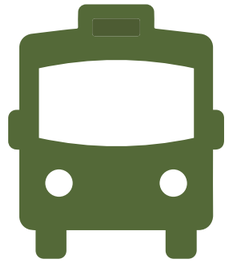
Monetary incentives/ grants

82%

Free parking

80%

Access to dedicated lanes



78%

Access to bus lanes

Gig economy and the final mile

The final mile landscape is changing, presenting both opportunities and challenges to fleet managers. The implications are more overt for businesses involved in distribution where smaller vehicles and even non-vehicle solutions, like bikes, are changing the way that goods are delivered.

Fleets heavily involved in this sector therefore need to adapt and become more agile in the final mile. However fleet managers believe the physical and competitive congestion is causing a knock on effect on businesses with the clean air agenda having implications for all fleets operating in urban environments.

Smaller EVs, in particular are being used more in urban environments due to a number of factors including access to more charging points and shorter operating distances. Some fleet managers had expected operators to open more hubs outside city centres with the appetite for electric fleets to be used for the final mile delivery and operation.

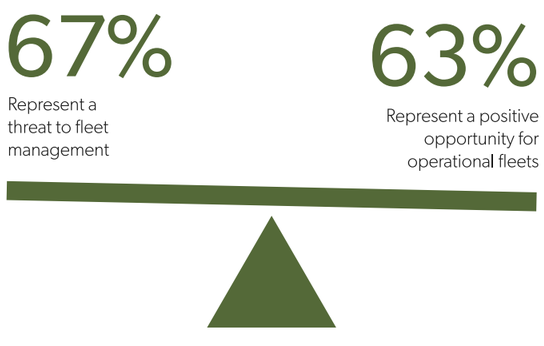
There is a division within fleet managers, with some imagining a future which does not involve traditional operational fleet vehicles, largely driven by the push of the clean air agenda and expect bikes, delivery on foot, drones and end-customer collection points being more prevalent.

"LOOKING FORWARD, WHERE'S THE NEXT STEP GOING TO COME? AMAZON, FOR EXAMPLE, HAVE ALREADY TALKED ABOUT DRONE DELIVERY, AND HAVE DONE FOR SOME TIME."

This future represents a challenge for those not involved in distribution who believe that their vehicles will still need to carry a full complement of tools and equipment to deal with the wide range of applications they need to cover. They feel that the "hub" model cannot work for them or would still require significant change in their operational models.

Is the future autonomous?

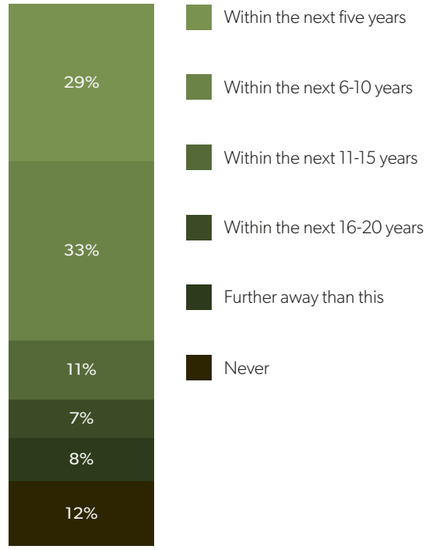
Autonomous vehicles are a controversial subject amongst fleet professionals. While some fleet managers see fully autonomous vehicles as an exciting technology that will happen with certainty once the practical considerations have been addressed, many remain sceptical. Indeed 29% said they would expect autonomous vehicles to be used in operational fleets within 5 years.



At the other end of the scale, many fleet managers feel that autonomous vehicles are a "fantasy" and are unlikely to be seen on UK roads for some considerable time, with 20% saying that autonomous vehicles will not be a feature of the fleet landscape over the next 20 years or at all.

"IT'S GOING TO BE QUITE A LONG JOURNEY TO GET THERE. THE TECHNOLOGY IS GOING TO BE POSSIBLE BEFORE IT'S GOING TO BE IMPLEMENTED, PUT IT THAT WAY."

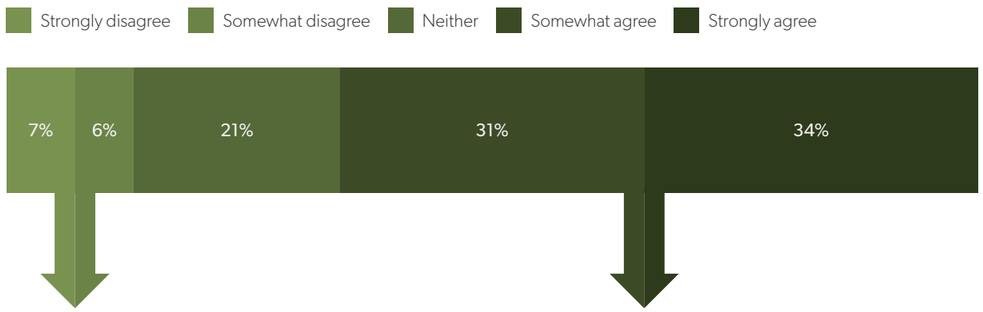
However some fleet managers sounded a note of caution on the impact of autonomous vehicles on employment in the industry with three quarters saying that autonomous vehicles would result in job losses, including fleet managers (70%) and 67% seeing them as a threat to fleet management.



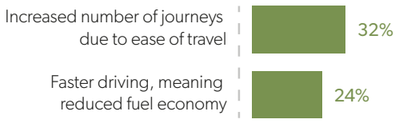
Semi-automation of individual automotive features is a more likely and palatable scenario for many fleet managers with automatic braking, distance sensors etc. becoming mainstream in the near future on commercial vehicles.

When looking at the impact autonomous vehicles have on the environment, the majority of fleet managers (66%) feel that they could have a positive effect because of better fuel efficiency and reduced vehicle weight. However a small minority (13%) disagreed and cited a potential increase in journeys made and faster driving leading to a negative impact on the environment.

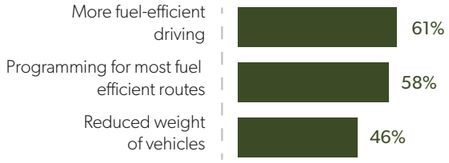
Analysis of the statement that 'Autonomous vehicles would have a positive impact on the environment'



Reasons why (among those that **disagree**)



Reasons why (among those that **agree**)



Other positive impacts of autonomous vehicles that fleet managers envisage include the reputational effect of being seen as innovative as well as having potential safety benefits.

Closing Remarks

We have heard about the challenging times that the operational fleet industry is working in and have seen that the industry is keen to take action to enhance its environmental impact. We have also heard from fleet managers and industry experts that they are challenged in this aspiration by policies and regulations that have been imposed too quickly and without enough clarity, consultation and cross-industry cooperation.

However the operational fleet industry is future focused and many people are already incorporating more and more alternatively fuelled vehicles into their fleets and expect the numbers to increase, especially among EVs. Fleet managers are now looking to the wider industry and Government to meet the demand for appropriate alternatively fuelled vehicles as well as investing in the infrastructure required to keep the UK's future cleaner operational fleets on the road.

Research Methodology

Qualitative interviews with operational fleet managers and industry experts

Populus, an independent research agency, conducted 12 one-hour depth interviews with fleet decision makers/managers from large enterprises and 6 face-to-face interviews with industry experts, achieving 18 interviews in total. Additionally, 1 90-minute focus group with sme fleet decision makers/managers was also completed, with 6 participants in a central location in London. SMEs were defined as companies with fewer than 250 employees, and the focus group included two sole-traders.

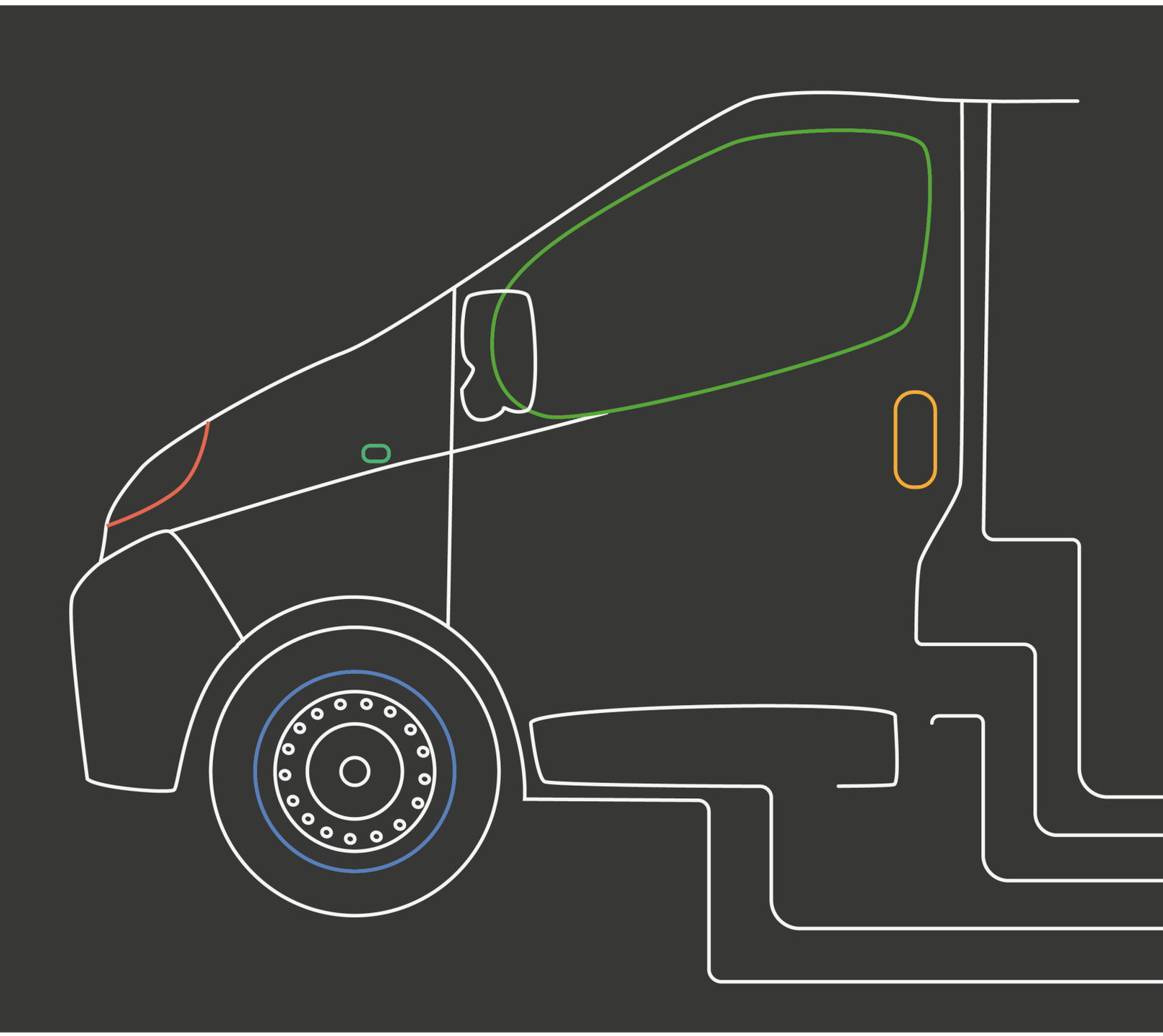
Insights from the depth interviews and focus group were used to shape the key areas of interest and questions to take forward into the quantitative stage of the research.

Quantitative survey of operational fleet managers

Populus further conducted a survey of 505 respondents responsible for maintaining the fleet of operational vehicles at their organisation. The survey was conducted online and took 15 minutes to complete. Respondents were recruited via specialist business panels, and the sample consisted of a combination of those working for large, medium and small organisations, each with varying fleet sizes.

About Populus

Populus is a full service research and strategy consultancy, named the UK's fastest growing research agency of 2014 by the Market Research Society, with an operations team that has won the Market Research Society award for best data solution for the last three years in a row. They work with clients across a wide range of industry sectors both in the UK and internationally. Populus developed and runs The AA motoring panel, which is now the largest dedicated motoring opinion panel in Europe, and works extensively with different divisions within BT.



Automobile Association Developments Limited.
Registered office: Fanum House, Basing View, Basingstoke, Hampshire RG21 4EA.
Registered in England with company number 1878835.