

OPERATIONAL FLEET INSIGHT:

The 2021 Report



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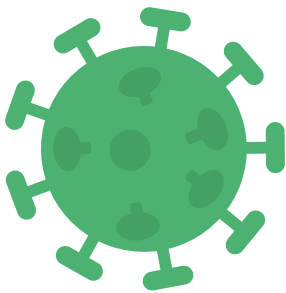
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Key Statistics



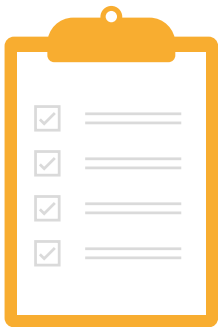
31%

of fleet operators report that COVID-19 has had a negative impact on their financial strategy, but 32% of fleets report that it has had a positive impact.



28%

of fleets have furloughed staff as a result of COVID and of those who have, 69% see this as a short-term change.



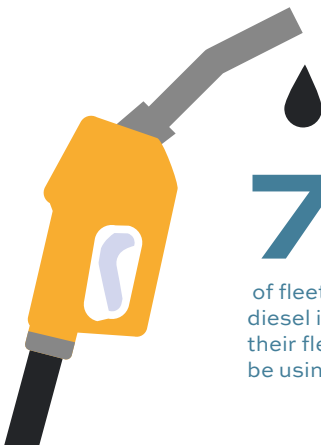
18%

of fleet operators have re-evaluated their mix of vehicles because of Covid-19, and 62% of these see this as a long-term change.



16%

of commercial van users increased the lifespan of their older vehicles as a response to COVID-19.



77%

of fleet operators are using diesel in any capacity across their fleets. 54% expect to still be using diesel in 5 years' time.

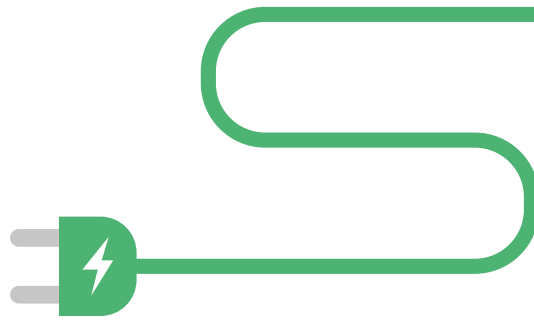
67%

of fleet operators expect to be using EVs within the next 5 years, compared to 26% using currently.



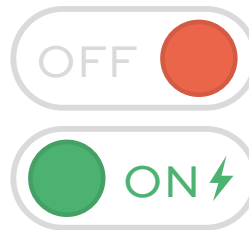
84%

of fleet operators believe that the range of EVs on offer has improved in the last year. 83% feel that manufacturers are producing a wider range of suitable EVs and 82% feel that the quality of EVs on offer has improved since last year.



64%

of fleet operators are aware of the UK Government's announcement on the ban of the sale of new diesel and petrol vehicles by 2030. Of these, 72% are supportive of the announcement.



43%

of those considering using EVs in future report that the ban of the sale of new diesel and petrol vehicles by 2030 is a reason for their consideration



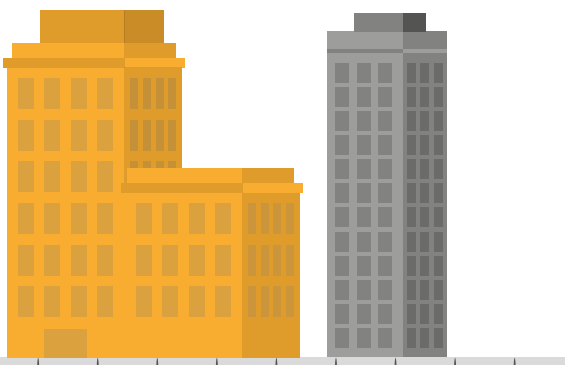
65%

of fleet operators believe that EVs have better whole of life costs than diesel or petrol. 59% believe that EVs require less down-time.



29%

of fleet operators not currently using EVs feel that the initial cost of buying EVs is a barrier to take-up.



72%

of fleet operators currently using EVs prefer at-work or depot charging, amongst the different charging solutions on offer. 13% prefer at-home charging.

The AA

Welcome to the Operational Fleet Report. We're proud once again to partner with Rivus Fleet Solutions to bring you the fifth of our collaborative reports and to continue to provide important insight into the fleet sector's views, challenges and optimism.

It's safe to say, since our last report the world has been turned on its head. We have all faced significant uncertainty, loss and a wide spectrum of challenges on both professional and personal levels as a result of the Covid-19 pandemic. None of us could have predicted what we've been through, yet we've witnessed incredible resilience, innovation and compassion from so many businesses and individuals.

For me, the reaction to the pandemic has brought so many proud moments. Proud to be part of the incredible automotive industry, proud to work for the AA and proud to have so many outstanding people around me, always willing to go above and beyond to help others.

As we continue to head forward with great optimism for the future, the automotive industry is evolving at pace. We're undoubtedly at a landmark point in time as we travel towards 2030 – the government's target for zero emission cars and vans – and we embrace electric vehicles (EVs) and future fuels. This, and the impact the pandemic has had on society, is shaping and re-shaping the landscape for us all. There has never been a more vital time to track the views of the fleet sector.

Importantly, this report has enabled us to take a look at how the sector has reacted to the pandemic and the impact it's had on businesses. We're also still tracking perceptions of EVs versus traditional fuel types and any barriers to adoption

of zero emission vehicles, which makes for interesting reading.

We have a lot to look forward to and we're perfectly positioned to continue to support the operational fleet sector, just as we've done for over a century. Innovation and close customer partnerships are central to this and our ongoing research is helping to make sure we get it just right as we all embrace change. One thing is for sure, we're with you every step of your journey.

I hope you find this report interesting and it offers plenty of fuel for thought and insight for your journey forward.

Take care,

Edmund King OBE
AA President



Rivus Fleet Solutions

Welcome to our fifth Operational Fleet Insight Report. I am very proud to not only introduce the 2021-22 Report with our long-standing partner the AA, but to do so as CEO of Rivus Fleet Solutions, having joined the Group in December 2020.

Just like the rest of the world in 2020-21, the fleet industry has been significantly influenced by Covid-19.

The pandemic has impacted our day-to-day activities, as well as influencing our longer-term organisational strategy. UK businesses will have fared better, worse, or stayed the same commercially in the last 12 months.



But the common theme amongst us all is the need to adapt both operationally and strategically to the 'new normal' in a post pandemic world.

This year's Report shows that whilst many fleets have furloughed staff, the majority saw this as a short-term measure. Operationally, the pandemic led to the necessity of increased cleaning of shared fleet vehicles, as well as implementing more detailed route planning. However, over two thirds of those saw this as a long-term development suggesting the industry can expect an increased focus on cost and operational efficiencies in the post pandemic world.

Looking forward the fleet industry is an evolving landscape as fleet operators need to prepare for the Government ban on the sales of new diesel and petrol vehicles from 2030, and the introduction of many new Clean Air Zones (CAZ) in the UK in 2021.

Our research shows that long-term cost efficiencies and the need to comply with new legislation, combined with technological changes is driving a shift in fleet operators to consider the longer-term benefits of incorporating EVs into their fleet operations.

We hope you find this report as insightful and relevant as we do. It is through research and insight such as this that we can all work together to navigate and plan for the new normal in the fleet industry.

David Myers

Chief Executive Officer, Rivus Fleet Solutions

Overview

Having worked together since 1990, the AA and Rivus Fleet Solutions share a commitment to in-depth research and perspectives which shape policy, as well as innovation that makes a positive difference to end users and a practical focus on further enhancing services for their mutual customer base.

Leading the way in their respective fields, both the AA and Rivus Fleet Solutions have a long and respected track record of delivering exceptional customer service through their thought-leading insight and award-winning technology. Placing them both at the heart of the automotive sector, the annual Operational Fleet Report, which is now in its fifth consecutive year, shares insight and learnings which will support organisations to make informed decisions which suit their drivers.

As the UK's most trusted brand and biggest breakdown provider, the AA has partnered with Rivus Fleet Solutions to provide fleet management and maintenance services for around 3,000 breakdown and recovery vehicles. As part of the partnership, Rivus Fleet Solutions carries out 40,000 service and repairs for the AA every year, across 65 dedicated garages.

In turn, the AA provides a wide range of additional products to assist the 80,000 vehicles that Rivus Fleet Solutions maintains, including:

- Fuel Assist, which offers restorative services after incorrect fuelling;
- Key Assist, which delivers mobile key cutting and reprogramming services;
- Battery Assist, which supplies and fits new car batteries when needed;
- EV Support, which provides drivers with help at charge points and helps drivers get to grips with the new technology.

Together, the organisations have launched numerous industry initiatives, operating at the forefront of every major change within the fleet and breakdown sectors. The AA and Rivus Fleet Solutions' joint reputation for high levels of customer service, as well as aligned purpose and values, have seen proactive clinics and repair improvement schemes for operational fleets rolled out nationwide.

Following the outbreak of the COVID-19 pandemic, the Operational Fleet Report serves to better understand the views of fleet operators in a rapidly-evolving automotive sector and ensure

that both the AA and Rivus Fleet Solutions are well placed to meet the needs of customers today and into the future. Providing a current and forward-looking perspective on the operational fleet sector, the research focuses on the impact of COVID-19, EV decision-making, the focus on charging and infrastructure and exciting innovations.

The aim throughout has been to analyse the impact of the pandemic and create a roadmap from which both organisations can deliver sustainable industry growth and product evolution, such as the AA's brand-new innovative Freewheeling Hub.

Throughout the report, we highlight the current state of the nation following the impact of COVID-19, as well as the introduction of clean air and ultra-low emission zones. The report also considers the adoption of EVs within businesses, discussing the take-up with fleet managers to find out their preferred solutions and the challenges they have faced so far.

Both the AA and Rivus Fleet Solutions are exploring the role they will play in supporting organisations going forward as the motor industry continues to develop and adapt on the journey to 2030, the date of the government's ban on new petrol and diesel vehicles. Looking forward, this Operational Fleet Report will support the industry as a guide to our uncertain present and aiding fleet managers to make the right decisions for their organisation and their drivers going forward.

Executive summary

It has been a volatile year for the Operational Fleet industry. The pandemic has had a significant impact on all organisations, with fleet operators often needing to take difficult decisions to safeguard their long-term future. But our report finds a nuanced story across the industry, with many organisations experiencing positive growth. What all have in common is the need to grapple with a dynamic and uncertain present, whilst also reflecting on what the ‘new normal’ will look like, post-pandemic.

This volatility has occurred within an already rapidly evolving industry landscape, with fleet operators considering both immediate and upcoming changes to technology and legislation. This year’s Operational Fleet Report paints a fascinating picture of how operators have shown resilience and ingenuity in dealing with the pandemic, whilst also rising to the challenge of planning for industry changes that they know are close on the horizon.

IMPACT OF COVID-19

As with all sections of society in 2021, the fleet industry has been dominated by one issue. The pandemic has significantly influenced both day-to-day activity and longer-term organisational strategy, and for this reason we have placed coverage of this upfront within our report. What is really interesting is how varied the impact of the pandemic has been across the industry; our survey finds an almost equal split of organisations who have fared either better, worse or stayed the same commercially within the past 12 months.

STATE OF THE NATION

Diesel remains the fuel of choice for most fleet managers this year, but consideration of EVs (Electric Vehicles) and PHEVs (Plug-in Hybrid Electric Vehicles) has increased significantly within the past year. In practical terms, this means that we are still seeing caution in terms of actual procurement of alternative fuel vehicles, and many barriers to take-up still remain. However, momentum does appear to be shifting, and we witnessed larger operators in particular start to more closely scrutinise the latest models and charging infrastructure.

EV DECISION-MAKING

It is useful, then, to examine in more detail what are the key topical factors that are driving decision-making for EVs and PHEVs. The Government's announcement on the ban on the sale of petrol and diesel vehicles by 2030 is top of mind for many, and is close enough to start factoring into long-term planning, if not actual procurement in the here and now.

Operators are also considering how the long-term costs of EVs stack up compared to diesel; we have seen a significant increase in those that agree that EVs require less servicing and have a better whole-of-life costs than diesel or petrol this year. But the barriers to wider EV adoption remain consistent with previous years, with perceived high upfront costs and concerns around charging infrastructure still high on the agenda for many.

FOCUS ON CHARGING AND INFRASTRUCTURE

When we talk to fleet managers who are in the process of considering EVs, it is clear that charging infrastructure is near the top of 'need to know', and so we have showcased current user experiences within this year's report. At work/at depot charging solutions are mostly preferred by those using EVs at present, but the planning and implementation of these can take a great deal of consideration. There is also consensus from those 'in the know' that on-the-go-infrastructure is improving, but this is yet to really filter into the awareness of non-users.

EXCITING INNOVATIONS

Finally, in a period characterised by rapid change and transformation, we have showcased some of the most interesting innovations that have occurred within the past year, from cutting edge route optimisation software through to new industry-standard safety ratings. All are worth finding out about, as they deliver a mix of exciting commercial, organisational and environmental benefits.

The report below provides full details and key stats around all these questions and more, giving a detailed picture of the operational fleet industry mindset in 2021.

Impact of the Pandemic

“It has affected every area of our business. Clearly commercially, but also how we operate internally as a fleet, how we service and MOT our vehicles, the number of drivers we needed. Everything has needed to be thought through.”



DIGESTED READ

COVID-19 has brought considerable challenge, both commercial and logistical, but also opportunity. Operators are considering and planning for the ‘new normal’.

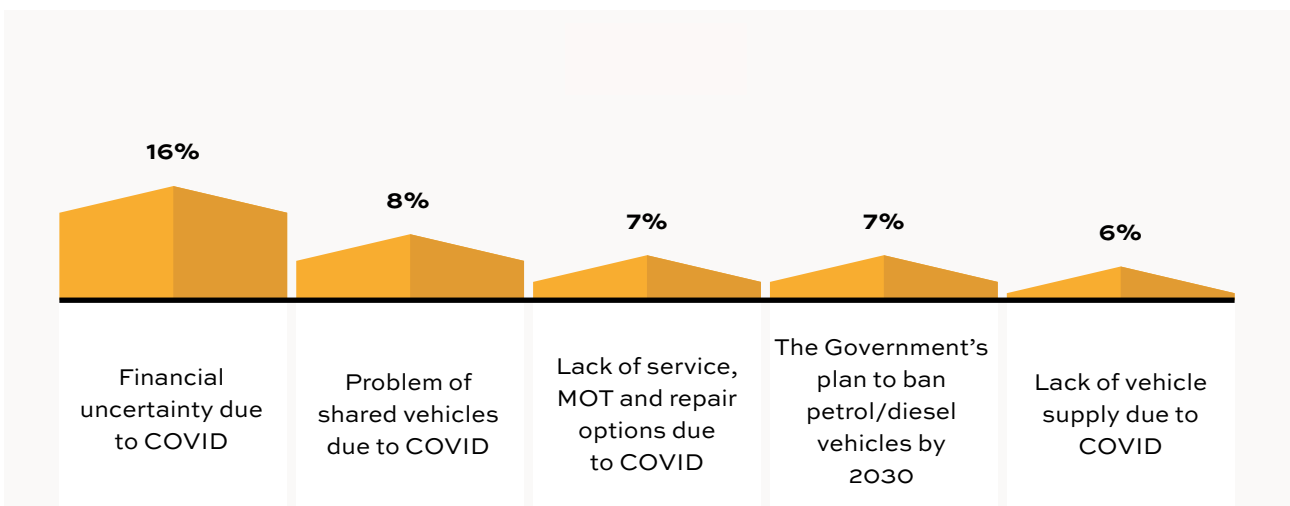
THE DOMINANT INDUSTRY CONSIDERATION

COVID-19 has had a huge impact throughout the industry, with the vast majority of fleet operators confirming that it has affected their business in some way. When asked what are the factors that have most impacted their business in the past year, general financial uncertainty due to COVID has been the number one consideration, and related issues such as the problem of shared vehicles, the lack of service, MOT and repair options and lack of vehicle supply as a result of the pandemic are also very top of mind.

“The uncertainty is a big factor. We have a 5-year plan regarding our mix of vehicles, and before this year we’d been trialling new ventures, but that was put on hold at least for the time being.”

LARGER FLEET

Impact of various factors on organisation’s operational fleet, past year: Top 5



VARIED FINANCIAL IMPACT

Many fleet operators characterised the impact of COVID-19 in understandably negative terms.

Over 3 in 10 reported that COVID has had adverse impact on their financial strategy, either via decreased consumer demand for goods and services or via the general financial uncertainty stopping operators from being able to plan too far ahead into the future.

Many have had to make difficult decisions to get through the pandemic; 28% report that they furloughed staff as a result, although most of these see this as a short-term action (69%).

Some industry sectors have clearly been hit harder than others; transport and logistics, construction and facilities management, aviation

and cash delivery services have all suffered from the effect of reduced end-consumer demand.

However, just as many fleets report a positive experience as a result of COVID-19, compared to those who report a negative one. 3 in 10 operational fleets (32%) have experienced a positive impact on their financial strategy, and similar numbers have seen either increased demand for their goods and services or increased mileage for their fleet.

The industry sectors that are most likely to have had a positive experience include IT and telecoms (53%), the retail trade (44%) and manufacturing (42%); all appear to have been either relatively insulated from market volatility or benefitted from increased demand from online shoppers.

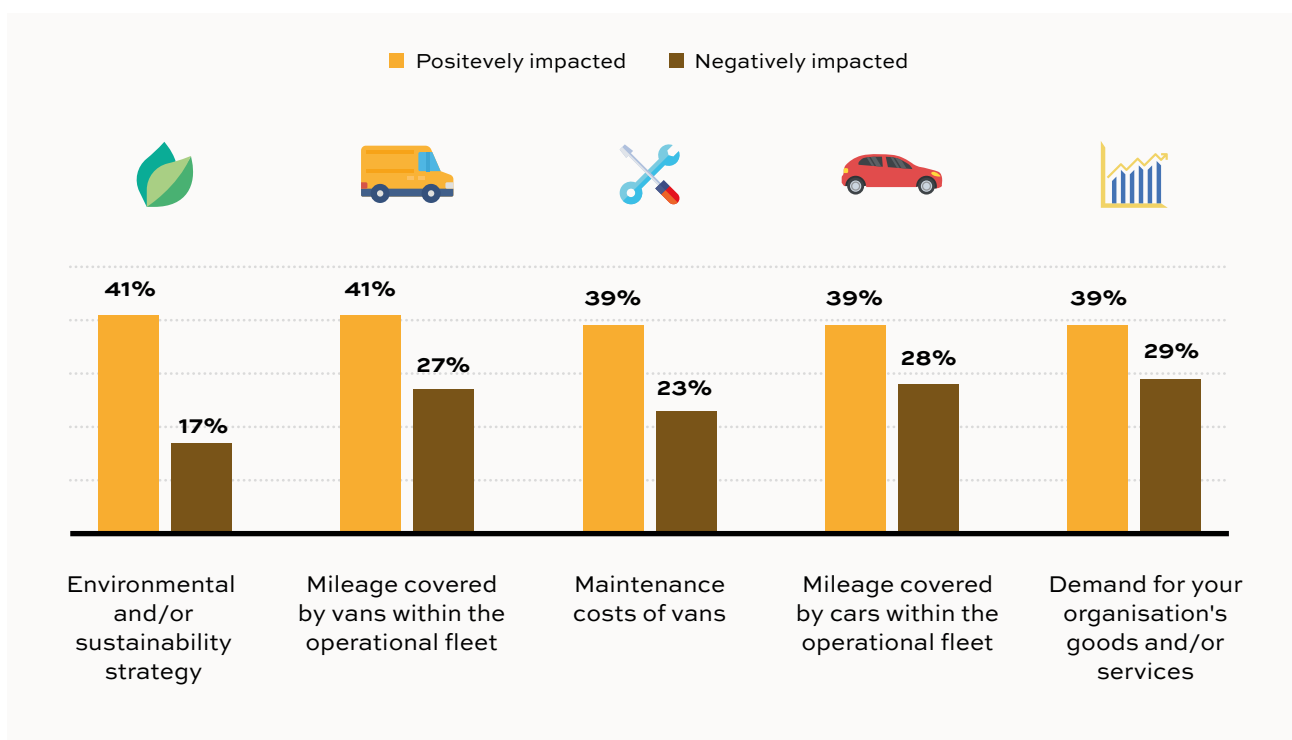
28%

furloughed staff as a result of the pandemic

69%

see this as a short-term action

COVID impact – Top 5 areas rated as ‘positively impacted’



LOGISTICAL CHALLENGES AND INGENUITY

In addition to some fleets feeling the commercial pinch, others have needed to deal with a complex range of logistical challenges as a result of the pandemic.

Sourcing new vehicles has been a particular challenge for some, with lack of stock being widely reported within dealerships. Reduced availability of dealerships and independent garages also lead to a lack of service, MOT, and unplanned repair options for many operators during the past year. Nearly a fifth of fleets have had to adjust their SMR plans (17%) and nearly a quarter have felt a negative impact to the maintenance costs of cars (23%) and vans (23%) due to the pandemic. This sometimes had the knock-on effect of vehicles being off the road for longer than normal,

impacting an operator’s bottom line.

Some operators were able to mitigate the challenges that COVID-19 placed on their fleet by increasing the planned lifespan and mileage of their vehicles, or by turning towards more short-term rentals and leases, whilst others needed to reduce their overall fleet size to reflect reduced demand.

The survey also found some fascinating examples of ingenuity to tackle the problems of the pandemic; the issue of shared vehicles was solved by some via the creation of ‘driver support bubbles’ to allow drivers to be in close contact with each other, whilst others reported more detailed and strategic route planning to create better time and fuel efficiencies.



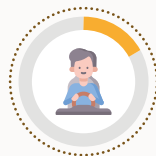
“We have to have a two-man cab for security reasons given our line of business. We created work bubbles of drivers so they could keep working together through the pandemic, we’re really thankful that it’s worked effectively.”

LARGER FLEET

Actions taken as a result of COVID



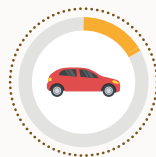
17%
Changed plans for services, maintenance, and/or repairs



17%
Creating 'driver support bubbles' for shared vehicles



16%
Increased life span of older vans



16%
Increased life span of older cars



16%
Reduced the fleet size



15%
Increased the mileage of existing vans

“We took advantage of the MOT extension, that helped as we struggled to book those in. We’ve ended up running some vehicles for an extra year than we planned to, which has worked out OK but we weren’t sure if that would come back to bite us with extra repairs.”

SMALLER FLEET

“We’ve thought a lot more closely about how we can be more efficient in the future, we’re a lot more focused on data now and really driving efficiency.”

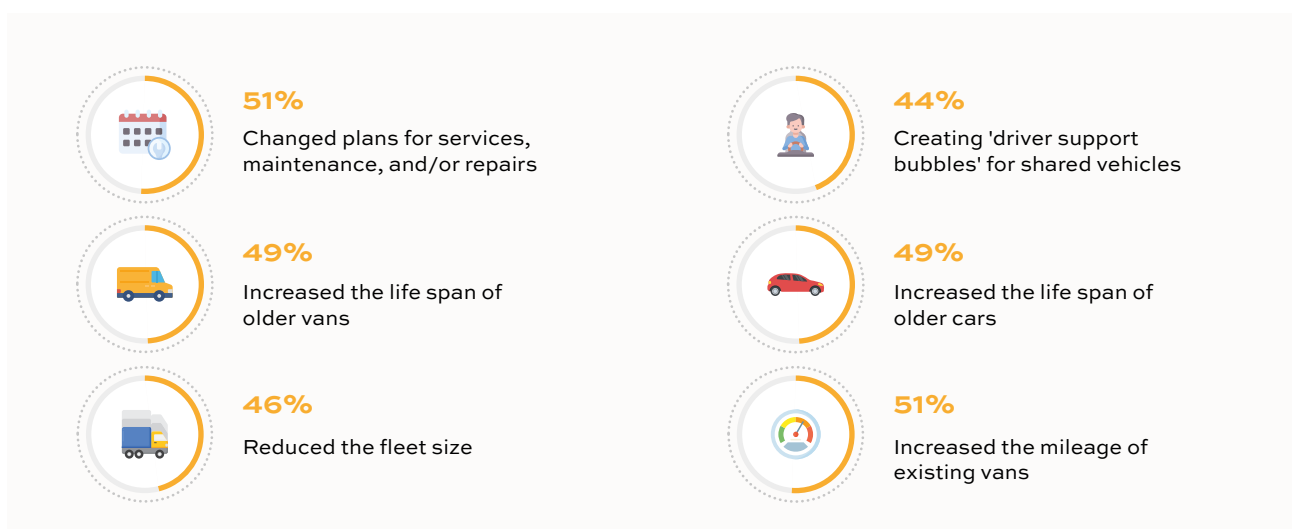
LARGER FLEET

PREDICTING THE ‘NEW NORMAL’

How much is the impact of the pandemic temporary, and how much is long-lasting? Given the volatility of the past 12 months, it is perhaps no surprise that there is no clear consensus amongst operators as of yet, but there are some interesting indicators of potential directions of travel, nonetheless.

Some organisations have used the past year to reflect on the make-up of their fleet. Of the 18% who have re-evaluated their mix of vehicles because of COVID-19, 62% see this as a long-term change. In addition, just under half of those who have reduced the size of their fleets, plan to make this a long-term strategy. More agile and focused fleets could therefore become more common place in future.

COVID impact - whether actions taken are long term



In addition, of the 17% that have created more detailed route planning as a result of COVID-19, 68% see this as a long-term change, suggesting an increased focus on efficiency could be an emerging industry theme.

State of the nation

“We’re still pretty much business as usual for this year. We would like to increase our electric vehicle range, but we still lack the data needed to understand how to scale this up, and it became really difficult to run trials on new vehicles in the past year due to COVID.”



DIGESTED READ

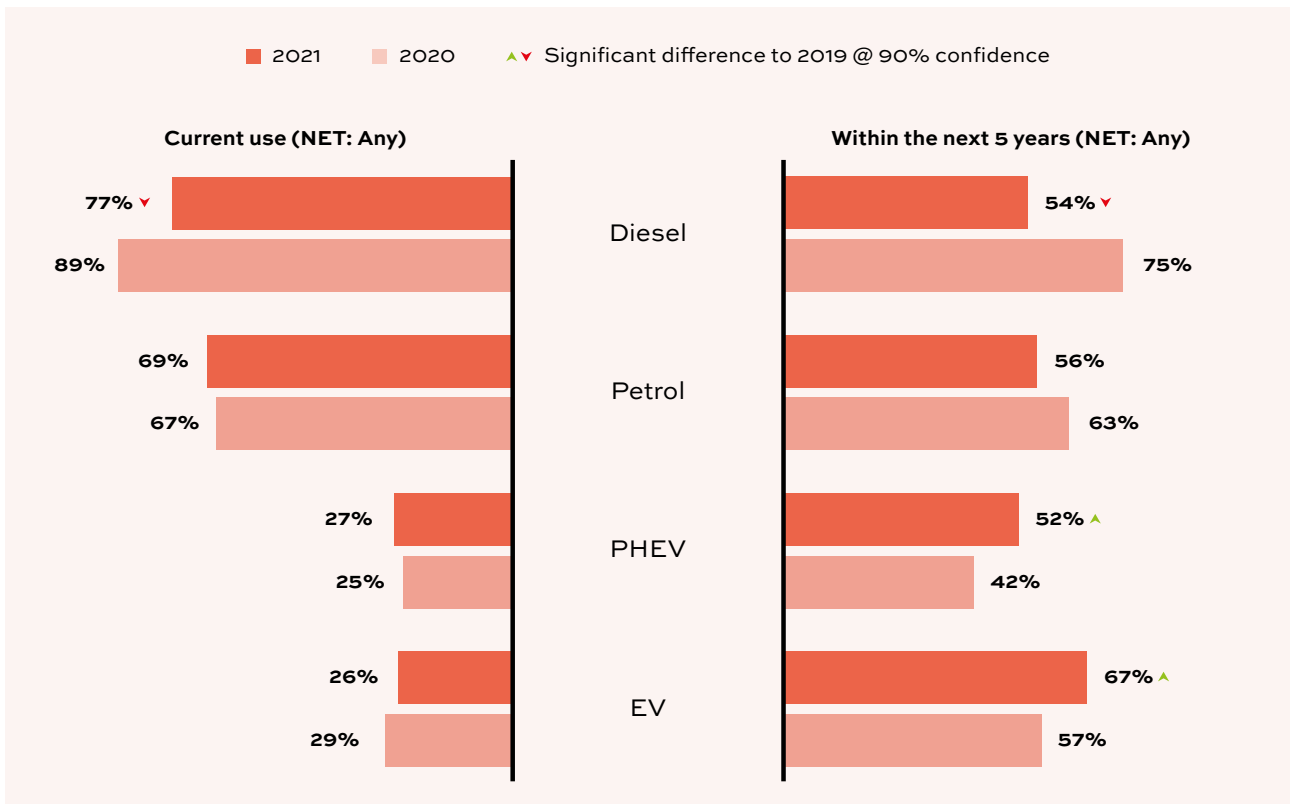
Diesel still dominates, but interest in EVs and PHEVs is strong and growing across the industry.

DIESEL IS STILL KING, FOR NOW

This year’s survey found that diesel remains the fuel of choice for fleet operators, with 77% overall using diesel across their fleets. Diesel still meets the needs of the majority, and from an emissions and legislation perspective, operators have seen no need for significant change in the immediate sense, with Euro6 compliant engines being suitable for Clean Air Zones and older, pre Euro6 stock still able to do a serviceable job elsewhere. For those procuring new vehicles, diesel vehicles’ relatively lower upfront costs in comparison to alternative fuel vehicles is also an important factor, all the more so during times of economic uncertainty.

However, only 54% expect to still be using diesel across their fleets within the next 5 years. This is a significant drop since last year, when 75% were expecting to be using diesel in the coming half-decade, suggesting that change is on the way.

Alternatively fuelled vehicle adoption - current and within next 5 years (NET: Any use)



EV AND PHEV TAKE-UP HAS STALLED IN THE PRESENT, BUT IS TOP OF MIND FOR FUTURE

The reduction in expected usage of diesel is explained by a corresponding significant increase in fleet managers expecting to use EVs and PHEVs, with two thirds of fleets (67%) expecting to use EVs within the next 5 years (a jump from 57% last year) and just over half of fleets (52%) expecting to use PHEVs, up from 42% last year.

However, industry moves towards electrification of fleets appear to be future focused, and not in the immediate here and now. Reported current usage of PHEVs has stayed very similar to last year's survey (a slight increase from 25% to 27%), and a similar story can be told for EVs (in fact a slight drop here, from 29% to 26%). Concerns around the current infrastructure and available charging points, the higher upfront cost of procuring EVs and PHEVs, and general commercial uncertainty due to COVID all appear to have stalled demand for EVs and PHEVs in the past year.



“We have plans for 20% of our fleet to be electric or hybrid vehicles by 2026. It’s not going to happen overnight, we have 6-year vehicles life cycles to consider. But the emissions piece is an important part of our overall corporate social responsibility plan, and we’re committed to moving forward with it.”

LARGER FLEET

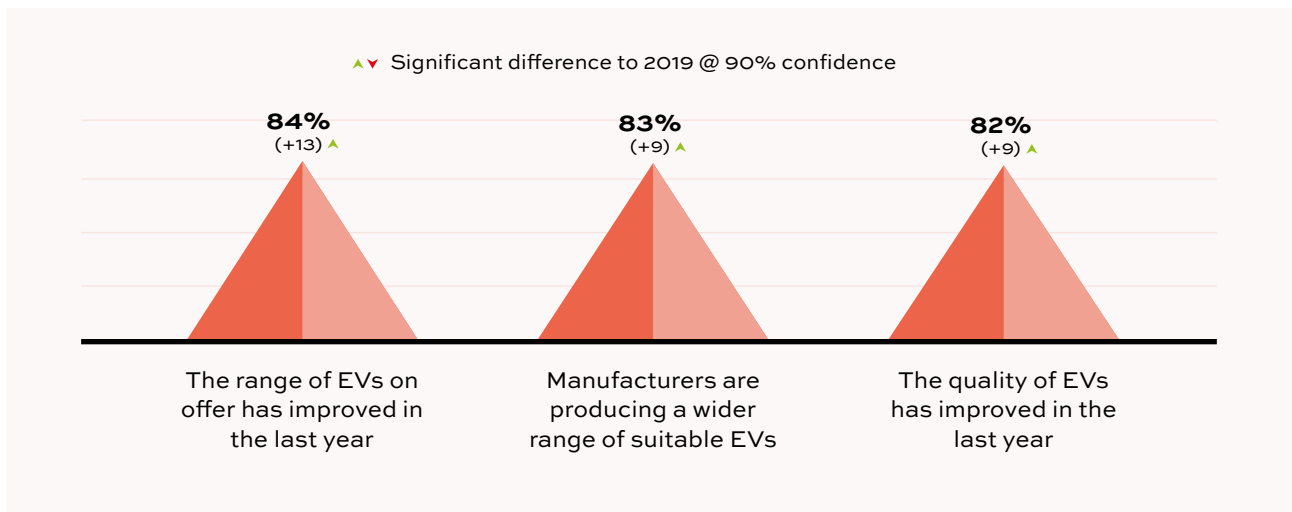
NEW AND UPCOMING EV MODELS CREATING A BUZZ

Our review of the ‘state of the nation’ has so far focused on commercial demand for different fuel types, but it is also interesting to review the supply side of the equation, and how fleet operators perceive the range of models that are available. This year, there is a general perception amongst fleet managers that leading manufacturers are starting to turn the corner in terms of producing new models that genuinely warrant serious consideration. 84% of fleets agreed that the range of EVs on offer has improved in the last year, 83% agree that manufacturers are producing a

wider range of suitable EVs and 82% feel that the quality of EVs on offer has improved since last year (all significant year-on-year increases).

Digging below these headline figures within our in-depth qualitative discussions with fleet operators, we found that a real step-change is felt to be occurring with manufacturers, with more leading brands offering more choice, better mileage range and in general, more serious options for consideration.

Perceptions of EVs (% NET Agree)



The new Ford Transit Hybrid and upcoming E-Transit have certainly captured attention, as has the upcoming VW e-Crafter. The reported 200+ mile range of the new Vauxhall Vivaro-E, Citroen E-Dispatch and Peugeot E-Expert has also been noted as a potential game-changer in some quarters. Whilst concerns and financial considerations still remain in terms of wholesale take-up of EVs for many, it does appear that this increased choice and competition is starting to drive consideration for others.

EVs also appear to be increasingly on fleet managers’ day-to-day radars, if not their actual stock-count. 78% of fleet managers believe the number of electric vans on the road have increased in the last year, up significantly from 65% last year, suggesting that as consideration increases, vehicles start to become a lot more visible.

“Yes, there’s definitely more choice on the horizon. I would say that a lot of the bigger brands are starting to take this more seriously now, pretty much all of them have new model or something in the offering, and they’re scaling up the manufacturing it looks like.”

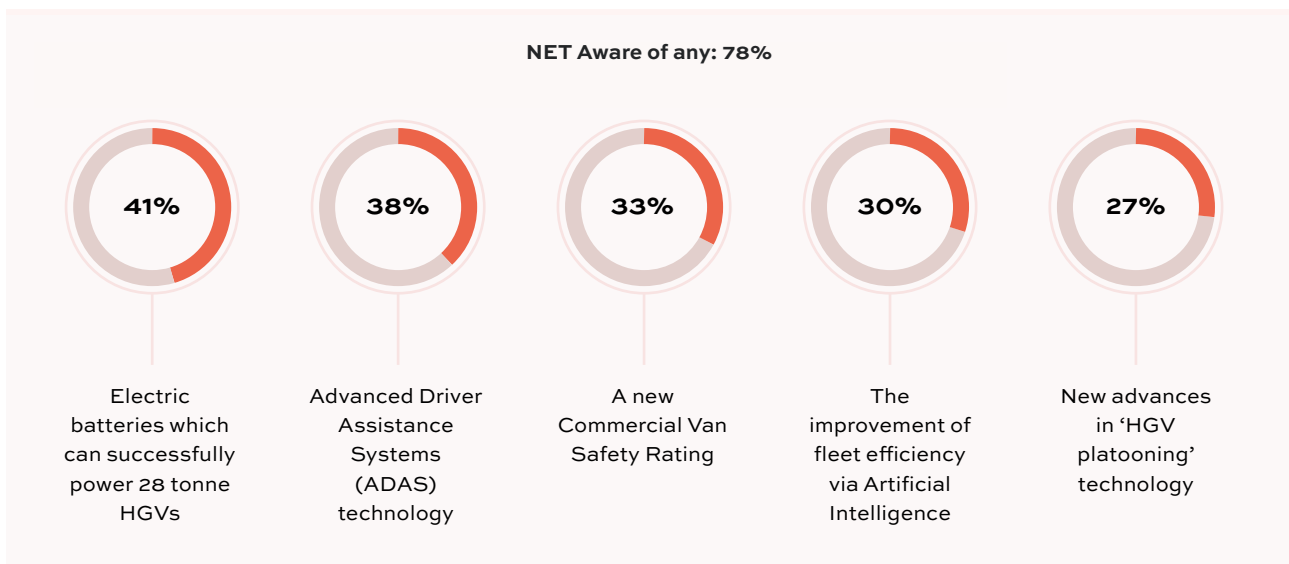
MEDIUM SIZED FLEET

INCREASED AWARENESS OF NEW INNOVATIONS

In addition to improvements to vehicle models, 2021 has seen a range of exciting innovations within the sphere of EVs and fuel efficiency, which have potential to deliver exciting commercial, organisational and environmental benefits for fleets. We will showcase these innovations in detail in the final chapter of this report, but for now, it is illuminating to know that awareness of many of these innovations seems to be high, with 4 out of 5 of those surveyed being aware of at least one of these developments, showing that fleets are tuned in to the ever-evolving nature of the industry.

Chief amongst new innovations in terms of awareness is the development of electric batteries to power 28 tonne HGVs (41% aware), and the introduction of Advanced Driver Assistance safety technology (38%). Our final chapter will explore these innovations in more detail and should make for interesting reading among both those unaware and those who would like to find out more.

Area of innovation – awareness and appeal



OTHER ALTERNATIVE FUELS LACK SERIOUS CONSIDERATION

At a contrast, other alternative fuel types remain much more distant in fleet managers' consideration at present. Hydrogen is a fuel that has been on the radar of HGV operators for a few years now, but most lack sufficient knowledge or awareness of this technology for it to be a viable option. For those who feel more in the know, there are concerns around existing infrastructure and prohibitive costs of entry for hydrogen in the here and now, although the potential benefits in the form of increased range and smaller, lighter batteries make it something to still watch out for in future.

The detail of EV consideration

“The 2030 announcement has prompted us to look into electric vehicles in more detail. It is like a line in the sand, something you know you have to plan for as it’s not really that far away.”



DIGESTED READ

The Government's '2030' announcement is a key new consideration factor for take-up of EVs but concerns and barriers remain.

UPCOMING DIESEL AND PETROL BAN IS TOP OF MIND

The UK Government's announcement on the ban of sales of new diesel and petrol vehicles has cut through with the majority, with 64% aware. An interesting implication of this is that just over one third were unaware of the announcement, suggesting that more needs to be done by the Government to encourage preparedness within the industry at this early stage.

For the majority who are in the know, the 2030 announcement appears to already be having an impact on EV consideration. Just under half (43%) of those who are actively considering EVs state the 2030 announcement as being a key driver of this, making it the third highest consideration factor for EVs behind environmental benefits and potential long-term cost benefits.

But how do fleet operators actually feel about the announcement? Do they feel apprehensive, or are they accepting? Overall, 72% of those who are aware of the ban say that they support it, and when we dug below the surface with our in-depth qualitative interviewing, we found mostly pragmatic acceptance; a general attitude that this has created a clear 'marker in the sand' to work towards, and that there is now a need to start planning for what a future without diesel and petrol vehicles will look like. However, there are also concerns from some about the proximity of the ban, and pace of change that this will demand, especially from those who do not currently have any EVs or infrastructure.

64%

of fleets are **aware** of the 2030 announcement

36%

of fleets are **unaware** of the 2030 announcement

The news of the ban in sales of petrol/diesel vehicles by 2030 has been a trigger for current use of EVs among **30% of those using EVs** and consideration of use within the next 5 years for **43% of those using/considering EVs**.



“2030 is close enough to start factoring into our planning, yes. For example, what happens to the residual values for any new diesel or petrol vehicles that we purchase from now on? Will they become difficult to sell in 5 years' time?”

LARGER FLEET

“We operate 8 electric vehicles and they’ve been relatively trouble-free. We reduce our emissions and, we increase our uptime and reduce our maintenance costs for those vehicles.”

MEDIUM SIZED FLEET

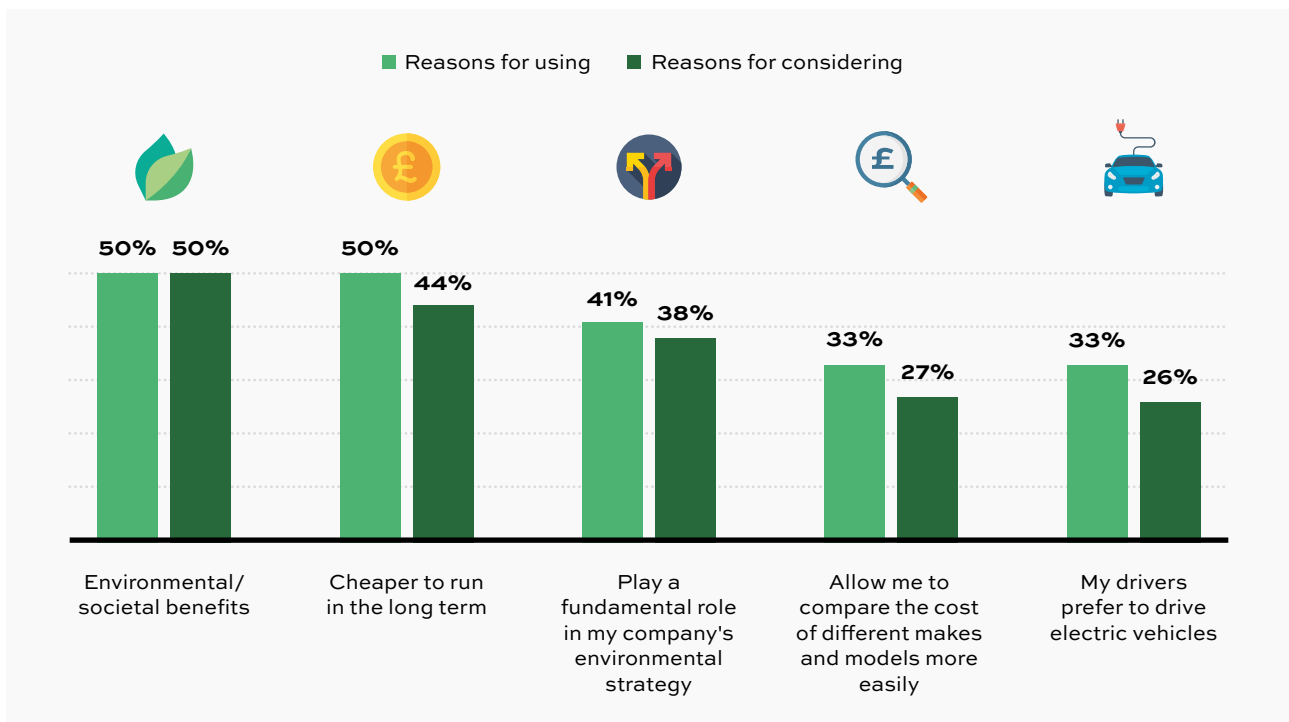
LONG TERM COST BENEFITS ARE INCREASINGLY RECOGNISED BY EV USERS

Our survey reveals that long-term cost efficiencies are a key driver for current users of EVs, with 50% saying that they have decided to include EVs within their fleet due to them being cheaper to run in the long term. This is a significant increase since last year’s study, suggesting that there is a growing focus from fleet managers on potential commercial benefits of including EVs within their organisations. Environmental factors are also important, with 50% stating environmental / societal benefits as being a driver, and 41% saying

that EVs play a fundamental role in their overall environmental strategy.

These key drivers are also very similar for those considering EVs, suggesting that the twin considerations of cost efficiencies and environmental benefits are key across the industry. For considerers, the government 2030 announcement is the next most important factor, illustrating the relative impact that this has had in the short time since announced.

Reasons for using vs considering EVs



AN INCREASED FOCUS ON WHOLE LIFE COSTS

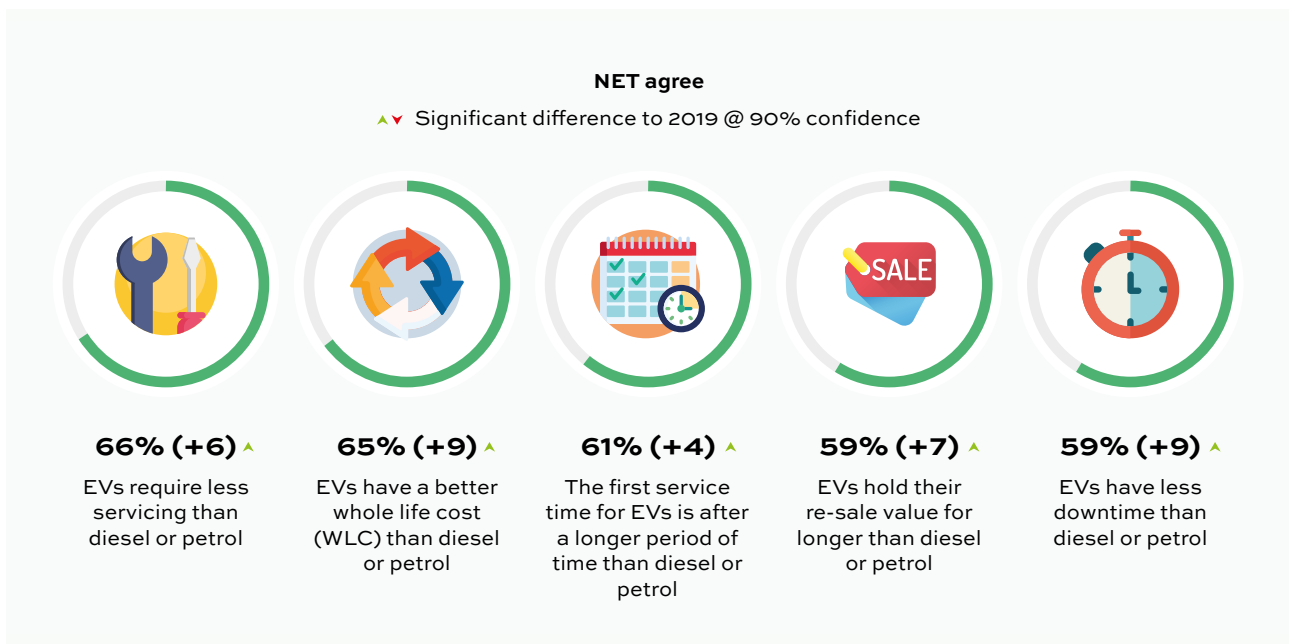
There is a growing awareness and appreciation of the potentially lower servicing costs of EVs. Some of the larger fleet operators we spoke to are actively investigating this as a factor in their decision-making. In general fleet managers perceive that EVs, while expensive to buy initially, are cheaper to maintain as they have significantly fewer mechanical parts and are less likely to be off the road for repair or maintenance.

Therefore, lower service, maintenance and repairs

(SMR) costs will be a positive factor in the overall whole life cost business case for investing in EVs.

However, a note of caution was sounded by some fleet managers who said, whilst EVs might indeed be more reliable or require less maintenance than diesel or petrol-powered vehicles, engine servicing and repairs are a relatively small part of the whole life cost equation. This additional benefit is therefore not enough in isolation to convince some fleet operators to change.

Service, maintenance and repairs (SMR) for EVs versus diesel/petrol



“You can’t always plan the business case for EVs based on whole of life costs so easily, as the majority of repairs are clearly for wear and tear and not battery related. Which means that the higher upfront cost of EVs remains a barrier, yes.”

LARGER FLEET

BARRIERS REMAIN CONSISTENT

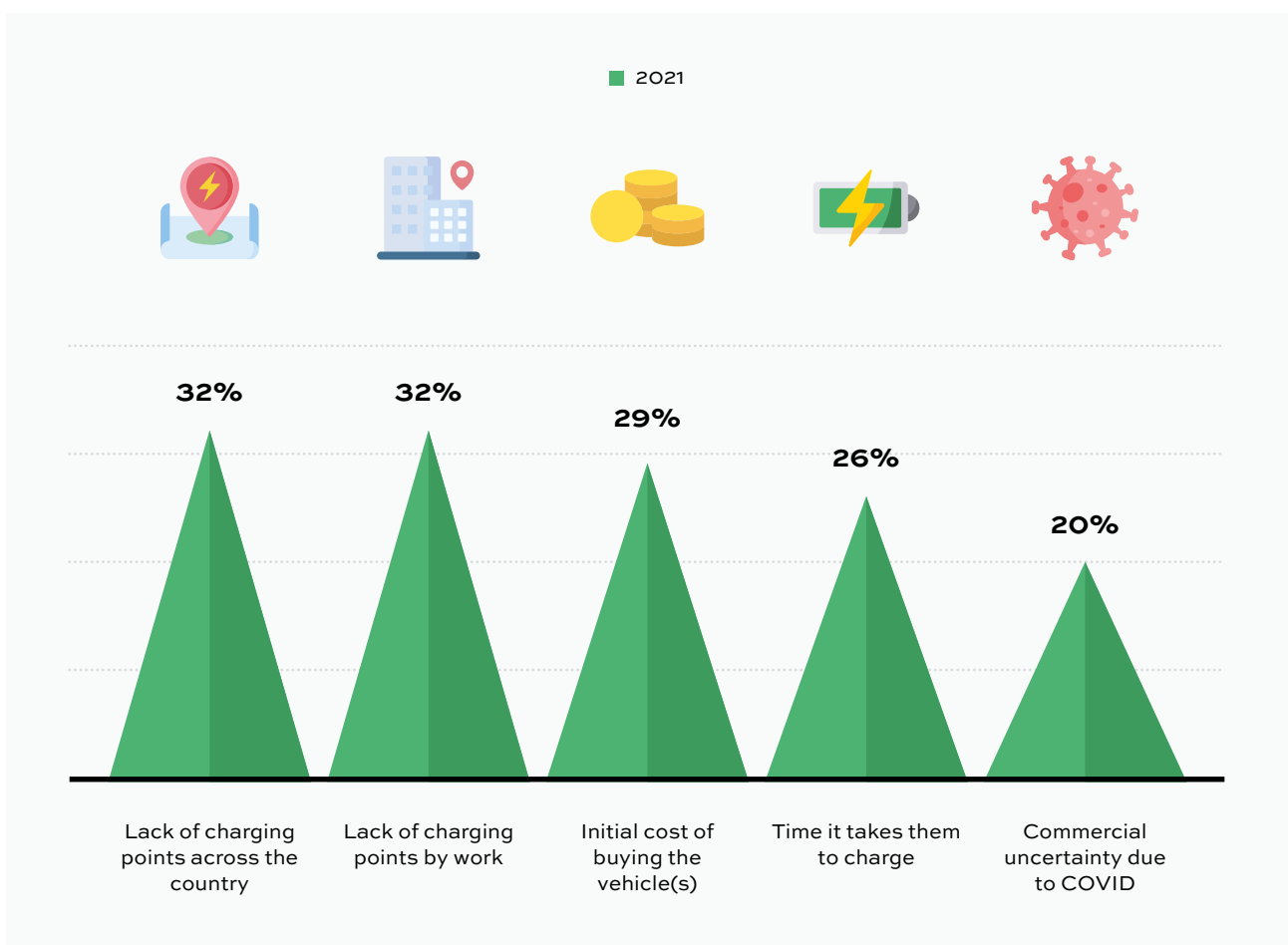
Although fleet managers are starting to take a closer look at the detail and practicalities of EV adoption (SMR amongst these), the barriers to take up remain consistent with previous years. This year’s survey found that a lack of charging points around the country and at work are the top two barriers for EV take-up, slightly eclipsing concerns around the initial cost of purchasing the vehicles, and we found that uncertainty of the pandemic also adds to these financial concerns.

As fleets start to increase their serious consideration of EVs, many businesses are looking more forensically at the detail of ‘what’, ‘how’ and ‘how much’, and key to this decision-making is both the cost of vehicles (upfront and whole life) and the cost, complexity, and availability of infrastructure. Whilst fleets are keen to learn more, certainly for now many remain cautious, undecided, or unconvinced.

“We’re running a trial with a manufacturer for modified commercial vans. I’m increasingly confident that they make commercial sense for urban jobs, but whether we can scale out to national, higher mileage jobs is something we’re still looking into.”

MEDIUM-SIZED FLEET

Barriers to using EVs – Top 5



Industry hot topic: EV charging & infrastructure

“This is the type of thing that fleets really want to know more about, the actual practicalities of depot charging, what exactly do I need to know and how have others done it.”





DIGESTED READ

Charging and infrastructure is a key need-to know for considerers; a positive story from current users.

CHARGING IS A KEY CONSIDERATION

When we talk to fleet managers who have adopted or are in the process of considering EVs, charging infrastructure is right at the top of consideration factors and ‘need to knows’. Although there is a perceived lack of infrastructure from many, which can create a barrier to adoption in the here and now, fleet operators are keen to learn more around the practicalities and fine print for how this can be made relevant for their business.

“Home charging would make a lot of sense given the make-up of our fleet, and we’re looking into better options for this. But we don’t want to put all the onus on our drivers who take vehicles home, it’s a big investment and we’re not convinced that this would work at scale just yet.”

MEDIUM-SIZED FLEET

“It’s not just what charging infrastructure you need, it’s also the power supply. The speed that you can charge is just as important as the size of the battery, or at least needs serious consideration.”

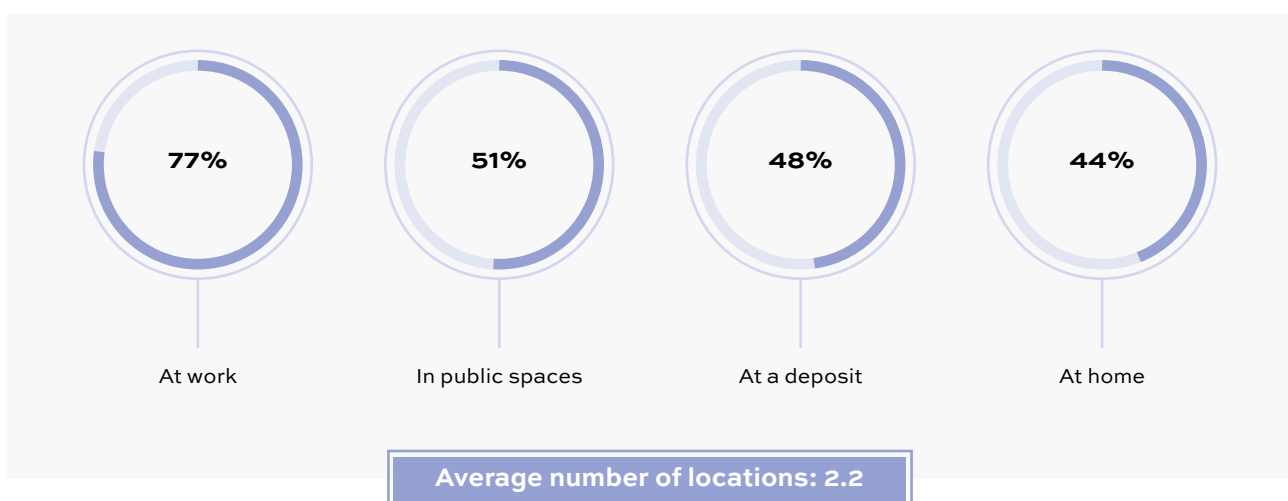
LARGER FLEET

AT-WORK CHARGING MOST POPULAR

For those who have already adopted EVs, at work and at depot charging is the current preferred charging set-up. For fleets whose drivers can start and end their day at a depot, or at least visit for charging at some point during the day, this is clearly a practical and popular solution. The practicalities of planning depot and work-based charging infrastructure can take a lot of careful planning though, with operators weighing initial investment and complex depot logistics with long-term impact. Key considerations include the number of charging points per depot, charging schedules to optimise efficiency, whether to choose central ‘charging hubs’ or spread these across more depots, and what power supply is needed to facilitate these (and at what cost).

Home-charging is a consideration for businesses to work out or work around, as many vehicles would normally be taken home by drivers at night. At the moment though, 13% of fleets with electric vehicles say that at-home charging is their preferred EV charging option, and there are a range of barriers to take up of this at present; 75% state that home charging places too much responsibility on drivers, and 69% feel that drivers themselves would prefer not to charge from home, suggesting that fleets do not want to put the onus on already busy drivers to self-charge at present. Whilst home charging could add real benefits in the form of flexibility and convenience in future, the practicalities of how to deliver this successfully has not yet been solved for the mainstream.

EV charging locations



ON-THE-GO CHARGING OPTIONS IMPROVING

Current EV users report improved on-the-go charging infrastructure in the past year, even if this is not filtering through to the broader market. 84% of fleet managers who have EVs within their fleet agree there has been growth in the number of charging points in the past year, and 80% believe information about charging points has become more widespread.

For those ‘in the know’, there have been some exciting and highly beneficial developments in charging accessibility technology in recent years. The Zap Map app, which provides clear visual mapping of nationwide charging points, is becoming increasingly popular as an on-the-go tool. Similarly, the ‘All Star’ fuel card and app has growing appeal, with users perceiving its key benefit as allowing access to charging points offered by multiple providers, without having to register for each, therefore heightening on-the-go convenience. EV-only charging hubs (suitable for both consumer and commercial vehicles) are also starting to creep onto operators’ radars, and for some these provided evidence of growing mainstream momentum of EVs in general.

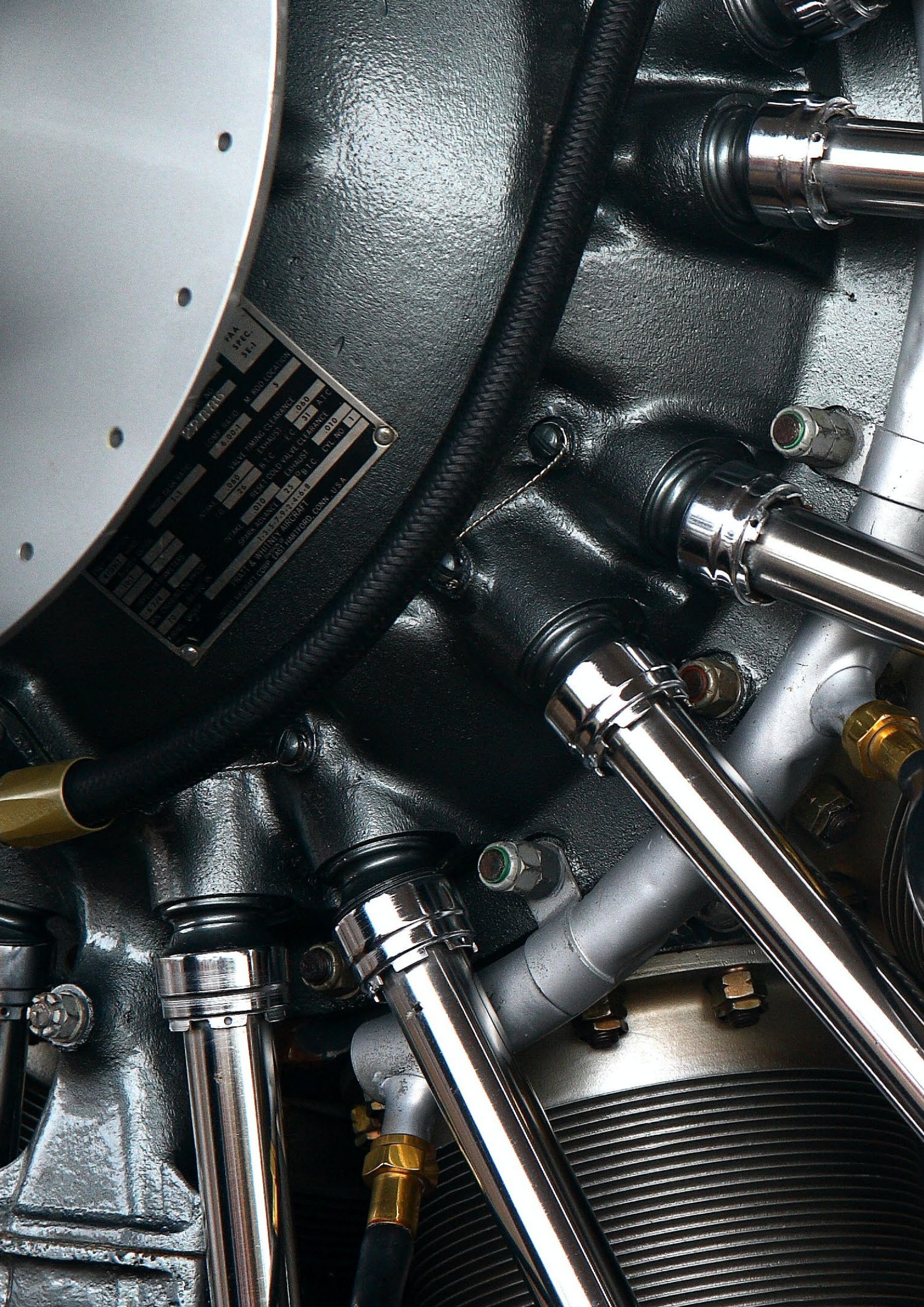


“Zap Map has been really useful for our drivers; it gives confidence for longer journeys. It shows not only where the charging points are but also whether they are in use or not, which is important as it’s not like a quick diesel top-up so we can’t afford to be waiting around.”

SMALLER FLEET

Industry innovations

It's been a break-through year for electric battery technology. Technology continues to develop at pace.



FAA
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M. H. HARRIS
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VALVE TIMING CLEARANCE D50
INTAKE BY C 31 STC
EXHAUST F.C. 31 STC
FAST COLD VALVE CLEARANCE D10
CYL NO. 1

SYMBOL D10
DRAWING NO. 75
PART C
DOWNEY ENGINE & TOOL CO. EAST HAVEN, CONN. U.S.A.



“Algorithms based on the foraging behaviour of ants have long been used to solve vehicle routing problems, but now we have found how to scale these up to city-size fleets operating over several weeks in much less time than before. It means much larger fleet optimisation problems can be tackled within reasonable timescales using software a user can put on their laptop.”

DR DARREN CHITTY



In a period characterised by rapid change and transformation, we have showcased some of the most interesting innovations that have occurred within the past year, from cutting edge route optimisation software through to new industry-standard safety ratings. All are worth finding out about, as they deliver a mix of exciting commercial, organisational and environmental benefits.

IMPROVING FLEET EFFICIENCY WITH AI INNOVATION

Dr Darren Chitty, Research Fellow in Machine Learning & Data Science at Aston University

Dr Chitty and his team have created new ‘fleet optimisation’ software which has the potential to significantly reduce travel time, fuel costs and CO₂ emissions, and even reduce the number of vehicles needed within a fleet.

The software is based on an algorithm derived from ant colony behaviour - how ants solve problems, share knowledge, and improve on existing behaviours in order to optimise their routes. This innovation can be scaled up to optimise the routes of commercial vehicles.

The technology has already been successfully tested on several large-scale fleet companies. For example, a company that operates within the Birmingham area performing external maintenance tasks at customers’ properties, observed savings of over 50% on the company’s original time spent on the road. This enabled the maintenance company to make significant savings in its fuel costs and boost profit margins whilst cutting vehicle emissions in half.

The technology can also be used to help determine optimal fleet size; the perfect number and mix of vehicles needed to fulfill all routes. This can help fleets to procure vehicles more smartly, and even reduce the number needed.

NEW INDUSTRY-RECOGNISED SAFETY RATINGS FOR COMMERCIAL VEHICLES

Matthew Avery, Head of Research at Thatcham Research

Thatcham and Euro NCAP launched the world's first commercial van safety ratings in 2020. This has big potential to improve safety and change mindsets within the industry.

Thatcham found that the commercial feet industry is very behind the curve when it comes to the fitting of Advanced Driver Assistance Systems (ADAS) technology, compared to cars; this technology has been proven to save lives.

Its new Commercial Van Safety Rating is designed to encourage the take-up of this technology within the industry and push manufacturers into action by increasing fleet operator knowledge and understanding. It rates 19 of the most popular vans with a clear 'star system' on the performance and fitment of emergency braking, speed limiter, and lane support systems, as well as seat belt reminder technology. New safety tests will be conducted annually.

The safety rating is already starting to prompt behaviour amongst manufacturers. The long-term aim is to change the mindsets of fleet operators so that they begin to recognise and champion safety. The safety rating also has potential to help reduce insurance premiums, as high-rated vans would be deemed lower 'risk' by insurers.

“We want to empower and encourage fleet managers to start demanding vehicles with improved safety technology. It's about changing mindsets so that safety is celebrated.”

MATTHEW AVERY, THATCHAM

HGV 'PLATOONING' TO DRIVE FUEL EFFICIENCY, PLUS THE LATEST BATTERY DEVELOPMENTS

Dr Anthony Velasquez, Head of Environment and Decarbonisation at TRL

Our final expert provides cutting edge insight into upcoming new technology developments, which have potential to make a significant impact on the industry.

Vehicle efficiency: there have been new advances in 'HGV platooning' technology – by driving vehicles closely together, it saves on drag and therefore fuel efficiency. Software is now available that can determine the optimal platoon strategy for a given route and set of vehicles, leading to potential for significant cost and CO2 savings.

Electric batteries: batteries that can successfully power 28 tonne HGVs, which will be commercially available very soon. These vehicles are more suitable for city-based routes at present, but represent a real breakthrough, nonetheless.

Hydrogen: battery developments are working at such a pace that Dr Velasquez is confident that hydrogen will firmly be a credible proposition within 5 years, although investment is required to ensure that infrastructure keeps pace.



“It really is a massive change. Hydrogen and powerful electric batteries were always ‘10 years way’, every year would still be the same! But now they are genuinely much closer.”

MATTHEW AVERY, THATCHAM

Research methodology

QUANTITATIVE SURVEY OF OPERATIONAL FLEET MANAGERS

Yonder, an independent market research agency, conducted a survey of 500 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.

QUALITATIVE INTERVIEWS WITH OPERATIONAL FLEET MANAGERS AND INDUSTRY EXPERTS

Yonder also conducted 8 one-hour depth interviews with fleet decision makers/managers from large enterprises and 4 with industry experts, achieving 12 interviews in total. Additionally, Yonder ran a 90-minute online video focus group with fleet decision makers/managers, involving 6 participants.

This qualitative stage preceded the quantitative survey - insights from the depth interviews and focus group were used to shape the topic areas and questions within the survey itself.

ABOUT YONDER

Yonder (formerly known as Populus) is a full-service research and strategy consultancy, with an Operations Team that has won the Market Research Society award for Best Data Solution in 2015, 2016 and 2017. Yonder also won the AURA Trusted Partner award in 2018, and has been nominated for multiple industry awards for their work in the B2B space.

They work with clients across a wide range of industry sectors both in the UK and Internationally. Yonder developed and runs the AA Motoring Panel, which is now the largest dedicated motoring opinion panel in Europe, and has extensive experience with different divisions across many large corporations. Yonder conducted the research for all Operational Fleet Insight reports, dating back to 2016.

