

ESSENTIAL FLEET MANAGER Magazine

ISSUE 6 2022

In this issue: Expert Advice

- The future for Hydrogen powered fleets
- Changes to Driver Licences
- Distracted Driving
- The future of fleet is electric, the ICE Age is over is well and truly over
- The global pressures challenging the automotive industry and their impact on fleet operators



Essential Fleet Manager - Issue 6 (2022)

Welcome to issue 6 (2022) of Essential Fleet Manager Magazine, published for fleet professionals who work for organisations that operate within the Essential Services Sector.

The magazine is available as a 'free' digital edition or can be delivered in 'printed format' for a paid subscription. If you would like to feature your fleet operations in a future issue of Essential Fleet Manager - get in touch, we would love to work with you on highlighting your achievements.

For more information please email ${\bf production@essentialfleetgroup.co.uk}$

Regards, Debbie Cheadle - Editor



04 - 06	Transport Legal Update: Tim Ridyard, Partner Transport and Regulatory, Ashtons Legal. Possible changes to Driver Licencing - but would they be safe?
08 - 09	Tackling Driver Distraction Paul Ripley, CEO of Distraction999 offers his expert advice on driver safety
10 -12	The Future of Hydrogen powered fleets Essential Fleet Manager, speaks to Allan Rushforth CCO of First Hydrogen
14 - 15	EV Charging Innovation Showcase 13th October 2022 Discover the latest Electric Vehicle (EV) Charging Technologies ready to be rolled out
18 - 19	Making mobiliy easy Alphabet talks about working with believe housing
24 -25	Future fleets The future of fleet is electric , the ICE age is well and truley over - Simon King, Partner at edensevern
28 - 29	The global pressures challenging the automotive industry and their impact on fleet operators Essential Fleet Manager, speaks to Wolf-Dieter Hoppe, Partner, Arthur D. Little

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Possible changes to Driver Licencingbut would they be safe?

Yet more possible changes to driver licence entitlements are under consideration, following the changes in November 2021, from when, as you may recall, Category B licence holders (cars and light goods vehicles up to 3.5 tonnes) can tow trailers up to 3,500kgs.

Now, the Department for Transport (DfT) is seeking views, before 29 October 2022, on changing the rules to:

- allow drivers with a car Licence (Category B) to drive a Category C1 vehicle (max 7.5 tonnes goods vehicle)
- allow drivers with a car Licence (Category B) to drive a Category D1 vehicle (minibus licence).

Would this be safe?

The DfT appears to be alert to safety concerns: "Given there could be road safety impacts, we are seeking balanced views as to whether any changes to the....regime could be changed in a positive way to help industry but without detrimental impact on road safety."

C1 Goods Vehicle Licence

Drivers who passed their car test up to 1 January 1997 (typically older drivers) were automatically given the right

to drive a goods vehicle up to 7.5 tonnes, together with a trailer up to 750kg. This maximum 8.25 tonne entitlement has continued for those drivers ever since.

Drivers who passed their car test from 1st January 1997 had to take a separate test to get their C1 licence.

The Government seeks views about returning to the pre-1 January 1997 position, i.e. allowing all drivers the right to drive vehicles up to 8.25 tonnes (a goods vehicle between 3.5 and 7.5 tonnes with a trailer of 750kg maximum authorised mass).

Driver CPC: unless exempt for various reasons, a commercial driver driving in Cat C or Cat D classes (and all sub-categories) has to comply with the requirement to hold a Driver's Certificate of Professional Competence (DCPC). It is not suggested that this legal requirement would be removed. It is a requirement of the Vehicle Drivers (Certificates of Professional Competence) Regulations 2007. So, this would remain.



Road Safety

The reality is that in many consultation procedures, views are sought – but the intended changes happen regardless. Here, however, the Government does, in fact, emphasise that the possible changes are not 'a done deal' and that the issue of safety has to be considered, weighed against more drivers being able to drive larger vehicles (assisting with the driver shortage in this area.)

The DfT reports that: "C1 vehicles have a higher rate of accidents than other HGVs per billion vehicle kilometres".

In fact, in 2019, they accounted for 23% of accidents involving HGVs over 3.5 tonnes, at the same time representing 7% of the total distance travelled for goods vehicles over 3.5 tonnes. C1 accidents constituted 6% of all goods vehicle accidents. Interestingly, the number of C1 vehicles involved in accidents where a car or van was towing was more than double that of cars or vans under 3.5 tonnes.

What might be the advantages or disadvantages of removing the requirement for a C1 Test?

- Drivers could automatically drive goods vehicles up to 7.5 tonnes (plus small trailer) from 'day one' i.e. with little or no prior experience. The safety impact is unknown but possibly very concerning. 30% of candidates fail their Cat C1 test.
- Drivers involved in the commercial carriage of goods would still have to carry out DCPC – of course, there are many exemptions. This additional training might, in some ways, assist in mitigating safety fears, though it is not ongoing practical training.
- Making the obtaining of a C1 entitlement easier may meet an increasing need for current C1 Licence needs.
 Will this lead to a significant uptake in driving in C1 class?
- Operators may have very significant concerns when assessing the risk of permitting inexperienced drivers to drive up to 8.25 tonnes vehicle/trailer combinations. They may wish to engage in in-house training with consequential cost.
- Motor insurance: presumably, there would be significantly higher premiums, bearing in mind the value of vehicles and driver experience, and it is already the case that some insurers have minimum age and driving experience requirements.
- Authorities outside the UK might possibly recognise the driver's entitlement that will need to be addressed

D1 minibus entitlement

The DfT also seeks to address a shortage of bus and coach drivers, including home-to-school transport providers using minibuses.

The issues and overall picture mirror the C1 situation.

Similar to C1, the D1 entitlement was automatically granted to a driver if they passed their car Test (Category B) before 1 January 1997. It appears on the Licence as Code D1(101), meaning a minibus can be driven – but not for hire or reward. Automatic grant of this finished on 1 January 1997.

However, car licence holders can, in certain circumstances, drive a minibus, although they have not passed a D1 Driving Test: their licence must have been held for a minimum of two years; minibus maximum weight must not exceed 3.5 tonnes; the maximum is 16 passenger seats; no towing of a trailer; no driver payment; minibus can only be driven for a non-commercial body.

As with C1 above, the DfT notes that drivers could use D1 minibuses with little or no experience.

Like C1 Tests, about 30% of drivers fail the D1 Test. So, the DfT understands that: "There is a risk that removal of the test requirements may increase the accident rates".

Miscellaneous

Finally, views are sought by the DfT on further and more specific areas that would simplify and modernise licensing:

- Creation of a formalised instructor programme or training, how this could be made compulsory, to create a formal Register of Instructors and to publish pass rates for Instructors
- Permitting a person who has held an HGV (Category C)
 Licence for two years to drive PCVs for maintenance and repair purposes
- Reintroduction of the automatic granting of D1(E) entitlement when Category C1, C1(E) and D1 entitlements have been granted, to align with the equivalent existing granting of Category D when category C, C(E) and D entitlements have been granted, without having to pass a further specific Category D1 Tests
- Revoking all Category L Licences and Category L entitlements, as this is no longer an extant category and ensures that those driving electric vehicles follow the relevant test and training procedure for cars and larger vehicles
- Aligning Category F (agriculture and forestry tractors) and Category H (tracked vehicles) with haulage tractors require a Category C Licence, rather than a Category F Licence, for their use and to investigate whether some agricultural tractor tests need to be brought into line with modern practices.

Ashtons Legal advice and representation

If you require any advice with regard to Goods and Passenger Operator Licencing, including advice concerning DVSA Investigations, correspondence with the Office of The Traffic Commissioner or Traffic Commissioner Preliminary Hearing/Public Inquiry work, then please get in touch.

Contact: Tim Ridyard, Partner Transport and Regulatory T: 01284 732111 E: Tim.Ridyard@ashtonslegal.co.uk

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Category B Licence holders (for driving cars, vans and small goods vehicles etc up to 3.5 tonnes) have been permitted to drive alternatively-fuelled vehicles (AFVs) up to 4.25 tonnes, since 2018.

The requirements for drivers to be able to use Category B Licences for such AFVs are currently being reviewed by the Department for Transport who seek the views of business and individuals.

But, it is not envisaged the rules will become stricter. If anything, they may be eased.

Currently, a Category B licence can be used, if all the following conditions are complied with:

- AFV does not exceed 4.25 tonnes
- it is used for the carriage of goods,
- it is not driven outside Great Britain,
- no trailer is towed, and
- driver has completed a minimum of 5 hours' training.

The purpose of the 2018 rule change was to reduce emissions "combatting climate change and improving urban air quality". The problem identified was that AFVs were physically heavier than conventional

vehicles. If an operator of an AFV could only operate at max 3.5 tonnes, it meant they had a reduced payload, compared to a traditionally-fuelled vehicle. In turn, this meant employing drivers with a larger licence entitlement (C1 = up to 7.5 tonnes).

It is not suggested that the right for Category B Licence holders to drive these vehicles be removed. However, the Department for Transport (DfT) is seeking views on possible changes:

- should the training requirement be removed completely? This might assist in meeting driver demand for AFVs. Should the pool of eligible instructors be expanded?
- should any relevant training be through a voluntary accreditation scheme, such as the scheme suggested when Category B / BE towing allowances were changed in 2021?
- should the towing restriction be lifted? Should there be a towing allowance for AFVs up to 4,250 kgs, allowing a vehicle and trailer combination up to 7,000 kgs?
 - should Category B drivers be able to

- operate other AFVs beyond goods vans up to 4,250 kgs?
- should there be a change in the definition of fuels currently eligible for the derogation, to exclude some non-zero emission fuels, or should non-zero emission fuels be ineligible?

One background issue in all this is the question of consistency, safety and cohesive overall policy. Drivers who obtained their driver's licences before 1 January 1997 obtained not only their Category B Licences but automatically also Category C1 (7.5 tonnes) and C1E (with trailer). But, drivers who passed after that date do not have that entitlements and so cannot tow behind 4.25t AFVs. At the same time, those drivers now enjoy relaxed towing rules for conventional vehicles and the Department for Transport is also consulting on allowing Category B licence holders a Category C entitlement (reverting to the pre 1/1/97 position) meaning goods vehicles up to 7.5 tonnes with a 750kgs trailer could be driven. It will be necessary to emerge from all this in due course with a coherent and consistent policy across vehicles that AFVs and use conventional fuels.

Consulation link: www.gov.uk/government/consultations/driving-licence-flexibility-for-alternatively-fuelled-vehicles/changes-to-driving-licence-flexibility-for-alternatively-fuelled-vehicles#executive-summary





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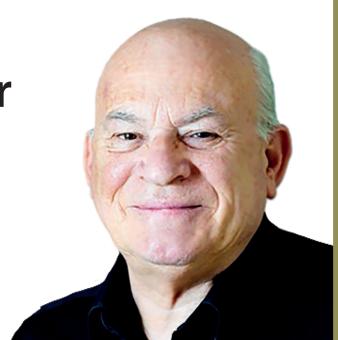
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Tackling **Driver Distraction**

with Paul Ripley
Founder, Distraction 999



In a recent report it has been stated that Driver Distraction, originating from inside or outside the vehicle, accounted for around 5% of road traffic incidents in the UK. Whilst this might not sound high, this percentage still equates to around 3000 incidents. Furthermore, with the correct driving mindset and awareness of the seriousness of certain behaviours, many of these incidents can be avoided. To discuss this issue, Essential Fleet Manager Magazine was delighted to talk with Paul Ripley, award winning consultant, driver trainer, adviser and journalist with over 40 years' industry experience, and a leading authority in Driver safety and behaviour.

Q: Using a hand-held mobile device whilst driving is highly distracting, dangerous, and simply illegal. When the offence is detected, the driver will be prosecuted irrespective of whether there been a resulting incident. Do you think using Hands Free devices are a better alternative?

Firstly, let me state that Hands Free is NOT Risk Free. One of the biggest myths is that hands-free calling is safe and permissible. It is lawful - until you are involved in a collision!

I strongly advise drivers not to engage with any activity that distracts them from the driving task – this could still lead to an offence of not being in "proper control of a vehicle" and may result in a prosecution for dangerous or careless driving.

Car infotainments are a serious cause for further distraction concern, as some are tricky to navigate as drivers may have to press touch the screen several times to find the correct solution. Each time, drivers have to take their eyes way from the road scene. Many distractions are caused when drivers eyes and concentration is taken away from the driving task which needs

He's an overview of the extended new laws when holding a mobile phone or similar device to:

- Illuminate the screen or unlock the device.
- Check the time or notifications.
- Make, receive or reject a telephone or internet call.
- Sending, receiving or uploading oral / written content, or a photo or video.
- Using the camera, video or sound recording functionality.
- Drafting any text message.

- Accessing stored data including documents, books, audio files, photos, videos, films, playlists, notes or messages.
- Accessing any application, any software programme or the internet
- You can be prosecuted if holding a phone when stopped at traffic light or in a traffic queue.

Q: How do you create a culture where drivers recognise the potential dangers of being distracted by mobile devices whilst driving and therefore adapt their behaviour?

I believe most drivers are fully aware of the dangers of using mobiles when driving but many are still prepared to risk getting caught or even cause a crash, to serve their phone addiction, although they would never confess to such a risk-taking approach to road safety. I am sure that most would never admit they were on their phone when involved in a crash! I feel that it may take many years before phone use when driving becomes as socially unacceptable as drink or drug driving is to society. Fleets may have to take a stance and ensure they "protect drivers from themselves" as well as their company's safety, legality and compliance and mitigate the risk by deploying software technology to effectively eliminate phone use when driving. Such products are the only way to improve the safety of their fleets and drives alike and increase legality and compliance with road traffic laws.

Q: Well managed fleet drivers are encouraged to carry out pre-use vehicle checks. Is there any advice you could suggest for the driver themselves to assess their own fitness to drive?

Many drivers feel they are professional drivers and make their own call on such things, but I wonder how many drivers would

convince themselves they are NOT fit to drive! Having said that, I used something called **AM I SAFE** ... where drivers ask themselves specific questions and should answer honestly for it to be useful and meaningful – here a driver can evaluate if they feel fit, healthy and **SAFETO DRIVE!**

A = Awareness - Anticipation - Alertness.

M = Medication – Mental Well Being - do you take prescribed (or other) medication that could mean you are NOT fit to drive?

I = Illness – Ignorant – do you feel ill? Are you ignoring any safe driving health issues?

S = Self-control – not losing your cool under pressure/ provocation and accepting that safety is always the prime requirement and tempering any emotional outbursts when driving. This aspect is critical for safety.

A = Alcohol – think about the Night Before and the Morning After indulging with alcohol use – are you fit to drive? Never risk it if you think you may still be intoxicated.

F = Fit to Drive – drivers asking themselves are they 'fit for purpose' behind the wheel?

E = Evaluation – self evaluation of a drivers fitness to drive (fatigue / drink and drug driving etc.

Decisions on the above are always in your hands.

Use the **STOP – REFRESH – GO** rule to ensure fatigue safety and don't ignore or brush off important safety self-evaluation.

Q: Modern vehicles are typically loaded with technology, roughly divided into Infotainment, Satellite Navigation and increasingly, Advanced Driver Assistance Systems (ADAS). Addressing ADAS in the next question, how can Infotainment and Satellite Navigation result in unsafe driver distraction and how can they be used safely?

Where possible set your immediate technology requirements up before you drive away. Infotainment systems can present a significant distraction especially if drivers are new to the systems when they may have to press/slide several times to get to the element that want to change or operate. If you need to take your eyes away from the road scene to change anything, wait till you are stationary before making changes ... if that's workable and possible. It's the same when making changes to Sat Nav on the move which should be avoided, especially if using a phone App Sat Nav which of course is illegal. Think ahead and do such things before you start driving. Attention to driving is the prime safety goal and any distraction away from this utopia, can be life changing and often, totally unnecessary.

Q: Do the audio/visual nature of many ADAS features, designed to enhance safety, in practice could create unintentional distractions of their own? For example, a warning that first distracts the driver audibly and then visually if they check the nature of the warning.

When and if this happens, drivers who take their fullest attention away from the driving task need to be aware of creating impending danger by doing this. However, these things just generally need a very quick glance and the driver should NEVER allow their eyes to dwell on what they see, too long.

What is happening on the road ahead is what every driver's main focus of attention should be at all times, without exception. So, a very quick glance as if you're checking your interior mirror for

rearward awareness, is what's needed here – where just a glance is fine to understand any visual or audible issue.

Q: As safety systems develop, is there a danger that drivers will pay less attention to maintaining good driving standards and behaviours and become more reliant on the technology? Is there a danger of deskilling drivers?

Yes, without doubt. Deskilling of drivers could become a cause for safety concern in the future as more autonomous technology is introduced. The less a driver has to do to remain safe, the less they will do. OEM's have made great strides in developing and adapting new technologies into their vehicles and most of these are safety critical and most welcome. However, as we know, a manufacturer may suggest that various levels of autonomy are available in certain situations. I would never allow myself to fully relax and become disengaged with the driving task. Based on the possibility that technology can fail, my advice is to remain fully aware, alert and awake and ready to take control of the vehicle should this ever be necessary.

Q: How important is it to continue the promotion of good driving behaviours, irrespective of the advancement of technology and should drivers be trained how to embrace technology safely, especially when drivers have passed their tests more than a decade ago? What is the best way forward?

It's a fact that many new vehicle manufacturers are fitting some highly effective safety features to their vehicles. The problem partially lay with dealerships, who often are not fully up to speed with any new technology fitted to a vehicle and leave the important 'hand over process' to customers experiencing the new tech themselves when driving, without mentioning what these are, how they work and what they mean to the end user.. the driver!

Extra training is available for any risk adverse fleets and they can use my services to hold workshops on new to market ADAS systems along with many lifesaving applications such as ABS and how this works properly and how to use it in an emergency – very few drivers are unaware of how to get the best out of such safety critical technology. Driver education is key here.

About Paul Ripley

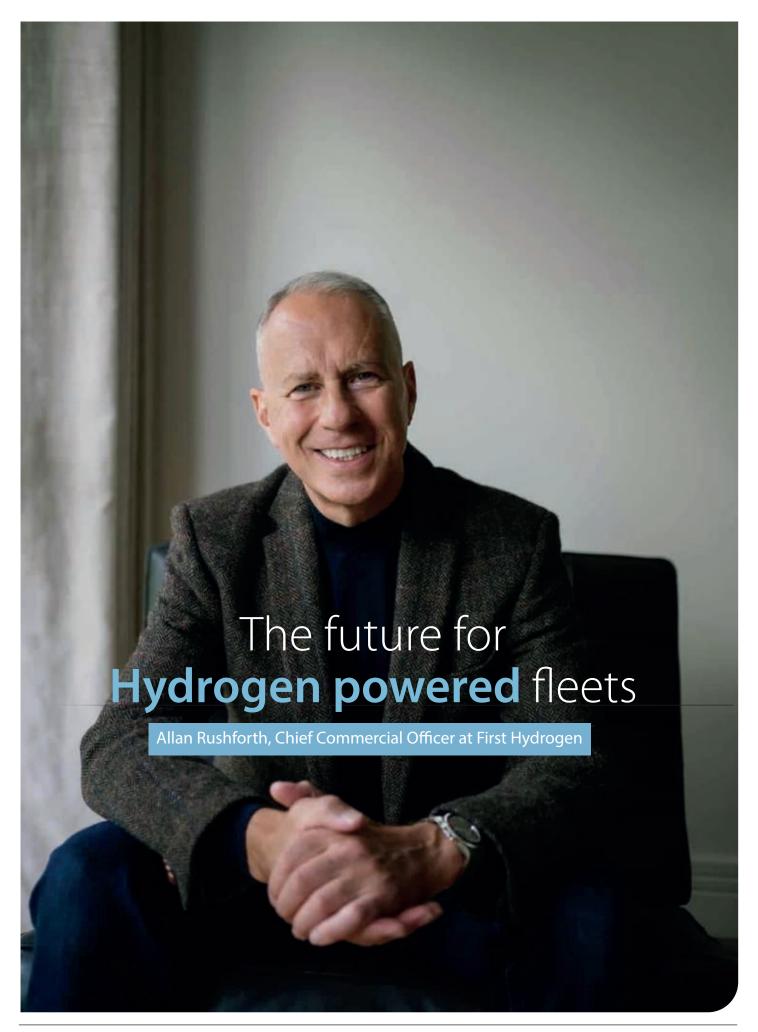
Paul Ripley is a prominent and experienced driver safety specialist and he is also the author of the acclaimed book **EXPERT DRIVING.**

Paul understands the attitudinal, behavioural and emotional aspects that are that are critical to developing safer driving performance.

In recognition of his unrivalled contributions to driver safety and road safety, Paul has also been awarded the Prince Michael Special Road Safety Award.

Utilising his unique experience and expertise, Paul works with companies to implement a variety of driver safety risk management solutions to lower loss ratio, operational costs, crash causation and frequency.

To find out more contact Paul, e: paul@distraction999.com or visit www.distraction999.com/





Essential Fleet Manager talks with Allan Rushforth, Chief Commercial Officer at First Hydrogen about his involvement with the launch of their Hydrogen powered fleet utility vehicle and the future use of Hydrogen within the fleet sector.

At a time when there is widespread awareness of the need to hugely reduce emissions from transport, there is also the commonly held view that this will be delivered wholly by the adoption of Battery Electric Cars and LCVs. Within a framework of targets such as Net Zero and the ban on the sale of new petrol and diesel only vehicles in just eight years' time, this may well be largely true for the short and medium terms, but with an additional awareness building of the environmental issues associated with BEVs, there is a growing focus on a longterm future involving Hydrogen Fuel Cell Electric Vehicles.

Hydrogen Fuel Cell technology has been around for – for most – a surprisingly considerable amount of time and with the first vehicle powered by a fuel cell being accepted as the General Motors Electrovan of 1966, it could be asked why it does not yet dominate the green transport argument and agenda. The truth lies in the complex nature of both developing the infrastructure and costs associated with producing Hydrogen gas so that it can be adopted at the huge scale needed to make the crucial difference.

Driving the future of Hydrogen Fuel Cell vehicle technology are several notable organisations including First Hydrogen, who along with partners are committing resources and industry leading expertise to the development Hydrogen Fuel Cell fleet vehicles and bringing them to market. On behalf of Essential Fleet Group I was delighted therefore to be able to speak with newly appointed Chief Commercial Officer Allan Rushforth, who arrives with a wealth of automotive experience gained over thirty-five years.

Q: How much awareness within fleet and the wider public is there of Hydrogen Fuel Cell technology, how it powers vehicles and of what the benefits are to the environment? What are the common misunderstandings?

There's growing awareness amongst businesses of Hydrogen Fuel Cell technology driven by vehicle emissions regulation and government policy relating to renewables. Most fleet managers don't need to be expert in either Battery Electric or Hydrogen Fuel Cell technology and are primarily focused on the benefits that these technologies can bring them when it comes to their company's environmental targets and the total cost of ownership of their fleet. What's also clear is that EVs. simply aren't cutting it when it comes to refueling times, range and vehicle payload in particular.

Q: What are the criticisms of the technology and how would you answer them?

Just as Battery Electric Vehicle technology has and will continue to improve, Hydrogen generation and Fuel Cell propulsion is rapidly developing. The costs for fuel cell systems and onboard hydrogen storage are coming down, the technology has matured over the last few years and a competitive supply base is growing at an enormous pace. Improvements in the energy efficiency of hydrogen production and provision of refueling infrastructure are about to reach an inflection point. This is particularly true in markets such as Germany, the Netherlands, Denmark and the UK that have invested heavily in renewable energy and have developed a green hydrogen strategy as a way of storing renewable energy and reducing CO2 emissions. As a result of government policy, we expect hydrogen prices to reduce by more than 60% by 2030 and refueling stations to increase 50x by 2035.

The fleet Utility Vehicle is a fantastic commitment by First Hydrogen, Ballard and ALV to delivering a realistic, practical and above all, truly sustainable option that meets the operational needs and long-term environmental commitments of fleets.

Q: Could you run through the vehicle specification, highlights and the target dates for both the prototype and expected market availability?

Our first technical demonstrator vehicles will be a core component of First Hydrogen's Hydrogen-as-a-Service (HaaS) offering and represent the first fuel cell 3.5-ton large panel vans to enter the UK market. They will be available to members of the UK Aggregate Hydrogen Freight Consortium (AHFC) from early next year, proving the range, increased payload and fast refuelling they require. The AHFC operators interested in trialling the vehicles include large fleets working in telecoms, express delivery, national utilities & infrastructure companies as well as a national UK supermarket chain and a national breakdown & recovery association. Data & insight from this program will help inform later trials of larger fleets as well as the configuration of our all new, next generation range of vehicles.

Q: We understand that there are planned innovations of the manufacturing process. Will these further reduce negative environmental impact?

There are many advantages that come from low carbon manufacturing and sustainable sourcing which are designed-in to the First Hydrogen model so as to minimize our environmental impact, something that's difficult to achieve for OEMs with legacy manufacturing facilities. New manufacturing facilities would typically generate their own electricity through solar roof panels and would deploy highly energy efficient manufacturing processes which eliminate waste wherever possible.

Stellantis has, as you know, already gone into production of their hydrogen fuel cell LCV prototype. Are you therefore already in a race to market?

First Hydrogen are hydrogen specialists. What really differentiates us from our competitors is our end-to-end pairing of green hydrogen production & supply to fleets ...cont'd on page 12

...cont'd from page 11

operating our Hydrogen Fuel Cell powered range of Light and Medium Commercial Vehicles. This proprietary coupling of green fuel and zero emission vehicles, providing Hydrogen-as-a Service (HaaS), gives us an environmental and commercial advantage over OEMs. That said, we welcome competition as it will help grow the total market, drive investment in the sector and bring attention to our technologies.

Q: How far do the partnerships with AVL and Ballard and the wider hydrogen technology expertise of First Hydrogen give you the market advantage?

First Hydrogen is pioneering a complete solution for our customers. That includes smart technology integration working with partners and industry leaders such as Ballard & AVL. However, it is First Hydrogen's proprietary offering of HaaS that will help drive down our customers' total cost of ownership (TCO) and bring them an environmental advantage over diesel and pure electric vehicles. Our aim is to create a compelling business proposition for our fleet customers that is greater than the sum of its parts.

Q: What will be the main challenges in your journey to bringing the Hydrogen Utility Vehicle to market?

First Hydrogen is early-to-market and has avoided the recent right-down in US tech stock valuations but that doesn't mean there won't be operational & commercial bumps in the road ahead. Liquidity is especially important for any manufacturing business, so it's important that we execute our strategy, begin producing green hydrogen and get vehicles on the road to sustain the confidence of our investors and customers as we navigate the developing market for hydrogen.

Q: How do you plan to meet those challenges?

We are already working with a group of 10 very large van fleet operators with whom we are about to begin a First Hydrogen vehicle evaluation program. I plan to lead this program personally, where we hope to learn from one another and have the group influence the development of our product and our business model.

Of course, part of the fun of operating in this space is that, to an extent, you can write the rules & help define what the sector looks like in the future. That said, business fundamentals are just that... fundamental! So, we'll be building great product, providing high quality service to our fleet customers and developing strong, supportive relationships with our investors and partners in Government, Local Authorities & Public Services, business and academia. And of course, we have to listen carefully to our partners and be prepared to flex our business model, to change and develop as the road ahead opens up.

Q: Are the EU and the UK Government aligned in their level of support for the development of Hydrogen Fuel Cell Vehicles and the complex infrastructure needed to make them a practical reality?

Governmental strategy and support for hydrogen tends to be a function of their environmental policy and investment in renewable energy. In addition to the UK government's initiative, there's alignment, particularly amongst north European markets, with regulatory & government support of €11 billion from Germany, and €7 billion from France. Germany, the Netherlands,

Belgium and Denmark already have sizeable refueling networks, with the UK playing catch-up. However, First Hydrogen's plans to develop its own hydrogen production & refueling at 4 different UK distribution hubs. These, along with our mobile refueling solution for large fleets of depot-based vehicles, are helping to complete the picture.

Q: Finally, do you see Hydrogen Fuel Cell vehicles becoming the norm in the long-term?

I see a mixed market for sustainable mobility in the future, with Fuel Cell Electric Vehicles having a greater presence in the commercial vehicle sector where range & payload are key. There's likely to be co-existence of technologies depending on their use case, with First Hydrogen providing its HaaS product where customers require zero emission vehicles with longer range, better payload and possibly auxiliary power e.g., refrigeration or emergency services, along with a more predictable TCO.

First Hydrogen trials with major fleet consortium

First Hydrogen is collaborating with the AHFC (the UK Aggregated Hydrogen Freight Consortium). The announcement coincides with confirmation that First Hydrogen's two demonstrator hydrogen-powered light commercial vehicles (LCV) are on schedule for testing and on-road commissioning starting now in the UK. The commissioning integrates First Hydrogen's two MAN eTGE vehicles with the First Hydrogen FCE1 fuel cell propulsion system. The vehicles are expected to be delivered in Q4 this year ready for potential customer real-world usage trials in early 2023

Managed by Element Energy, the AHFC is a partnership between leading hydrogen industry and mobility companies, including Air Products, Anglo American, Hyundai, Toyota and BOC. The consortium works together with large UK fleet operators to accelerate the commercial roll out of fuel cell vans and trucks and hydrogen refuelling infrastructure.

So far, 10 fleet operators have expressed interest in trialling First Hydrogen's vehicles in their real-world operations, to experience the range and operational flexibility benefits hydrogen offers. These fleets comprise major operators from industries, including telecoms, express delivery, national utilities and national infrastructure companies; a national UK supermarket chain; a national vehicle breakdown and recovery association; an ambulance fleet; and a national fleet leasing group. The fleet trials will operate across multiple UK locations from West London, Birmingham and Sheffield, to Tees Valley and Aberdeen.





Transport is currently the largest emitting sector of greenhouse gas emissions in the UK.

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From sourcing operational fleet and zero emission vehicles to traffic management, vehicle charging points and public transport, our frameworks support you to progress each stage of your carbon net zero (CNZ) journey.



Discover the latest Electric Vehicle (EV) Charging Technologies ready to be rolled out

On Thursday, 13th of October, the **EV Charging Innovation Showcase** will present the latest electric vehicle charging products and services with creative new designs and technology for low-cost, scalable charging solutions from 50 government-funded projects.

What's the EV Charging Innovation Showcase about?

The EV Charging Innovation Showcase will exhibit EV charging solutions developed with funding from the Office for Zero Emission Vehicles (OZEV) & Department for Business, Energy & Industrial Strategy (BEIS), and delivered through Innovate UK.

The free event is a must-attend for fleet operators to see the latest EV charging technologies that address the major barriers to on-road zero emission vehicle uptake.

Technologies cover all aspects of EV charging and range from fleet charging solutions like smart charging equipment, EV route optimisation tools and relocatable rapid charging hubs to energy solutions like local energy storage and V2X.

Why should I attend?

- Learn about future market opportunities in EV infrastructure for your organisation.
- See new EV charging products and services for congested urban areas, and public and private locations with energy constraints.
- Participate in an exhibition area with the opportunity to discuss your needs with innovative EV Charging technology developers.
- Listen to a series of short seminars focussing on the technological, operational and energy focussed solutions created to help accelerate the adoption of EVs by removing EV Charging barriers.

What technologies and services are on offer for me?

- Fleet Charging solutions: Route & charging optimisation tools, increasing outlets per charger, relocatable rapid hubs, new wireless, autonomous and mobile charging technologies.
- Planning & business models: Charge point planning & optimisation solutions, new business models, and the chance to meet with investment funds.
- Improving user experience: Improving accessibility, roaming, reservations, payment systems, load balancing, sharing home chargers, and electric forecourts.
- Energy solutions: Enabling locations without sufficient grid capacity, grid boosting, local energy storage, and Vehicle to Grid.

How will the technologies and services improve my fleet's operations?

- Creative new designs and technology for low-cost, scalable charging solutions, spanning a variety of EV use cases have been developed by transport and energy stakeholders from across the value chain.
- New smart charging solutions, fleet management and route planning tools have been developed to suit a wide variety of commercial user profiles to minimise downtime and charging costs.
- Smart charging management software can address energy capacity limitations, whilst route optimization can minimize energy consumption and maximise carbon savings for EV fleets.
- Space-saving ideas can help with the physical constraints that many depots face when incorporating charging facilities.
- Wireless charging allows EV commercial and service vehicles in towns and cities to top up their batteries throughout the day without having to stop work to plug in and charge, minimising business disruption.

How do the projects enhance the ZEV user charging experience?

Charging reliability, accessibility and affordability are all key aspects for fleet adoption, and a successful charging business case.

These products can improve EV mobility significantly by making charging infrastructure easier to use for everyone, providing more reliable infrastructure and simplifying payment mechanisms.

Register for your free place, scan the QR code or visit:

https://ktn-uk.org/events/electric-vehicle-ev-charging-innovation-showcase/





Leeds Hospitals fleet goes green with new electric vehicles

Leeds Teaching Hospitals
NHS Trust is participating
in a year-long trial of
electric heavy goods
vehicles (HGVs). The
national Battery Electric
Truck Trial (BETT) is funded
by the Department for
Transport (DfT) and will see
the NHS get twenty new
HGVs, with four going to
the Trust.

The fully electric 19-tonne DAF LF will be used to deliver patient meals, pharmaceutical items and general supplies across its five hospitals. Electric vans, HGVs and cars with the Leeds Hospital logo on them

The heavy goods vehicles industry is looking at how it will meet the government's target to end the sale of non-zero emission heavy goods vehicles from 2035. It is hoped that the real-time data collected from the trial will inform future fleet buying decisions and increase the number of electric commercial transport vehicles.

The Trust's Transport Team has also worked closely with Leeds City Council to further expand the number of electric vehicles (EV) across its fleet. Seven small vans and one car have been loaned through the council's EV Trial Scheme, with



Estates, Security and Transport using them to reduce emissions and save fuel costs. An additional eight will be added when the EV charging infrastructure is in place later this year.

The Trust has set a target of net zero carbon emissions by 2040, and by increasing the number of electric vehicles, it will reduce high level emissions across its sites and local communities, in addition to saving £2,500 a

month in fuel costs.
Chris Ayres, Associate Director of Facilities Operations, said, "We are thrilled to be increasing the number of electric vehicles across our fleet and to be taking part in the HGV trial. Moving away from high level emission vehicles will help us meet our carbon emission targets, reduce costs and improve the air quality around our hospital sites and Leeds, which will benefit our patients, staff and the local community."

Volunteers get 'clutch' of new vehicles to respond to life-threatening emergencies

A campaign to recruit a record number of speciallytrained volunteers who work alongside London Ambulance Service (LAS) clinicians has received a boost with a £215,000 investment into four brand new emergency vehicles.

In line with the NHS Long Term plan, LAS is expanding the team of volunteer emergency responders – people who donate thousands of hours of their time every year attending 999 calls in uniform and blue-light response cars.

They are often the first crew to arrive on scene and begin lifesaving treatment before an ambulance arrives.

As part of that expansion, this week LAS unveiled four new Skoda Kodiags bought especially for this dedicated team of volunteers, bringing the total number of vehicles from eight to twelve.

Expanding our fleet of emergency responder vehicles will mean volunteers can book more shifts to operate around the capital.

The LAS volunteer emergency responder scheme has been running for over a decade and is one of the many ways in which volunteers support the NHS, from being hospital radio DJs to



those who befriend patients on wards

Samantha Palfreyman Jones, Head of First Responders at LAS, said:

"It's a real privilege to lead our team of volunteer emergency responders. We have people from every walk of life, from pilots to software engineers who, once they've completed their training bring their skills – from problem-solving to their ability to think under pressure – to help Londoners when they need it the most

"We are in the process of increasing the number of emergency responders, so expanding the number of ambulance cars available to them means more opportunities for volunteers to book onto a shift. This means – working alongside our paid staff – we can further improve the care we provide to Londoners."

In 2021, our emergency responders served over a thousand shifts, attending 8,219 emergency 999 calls and gifting 25,649 hours of their time to the Service

ULEMCo customer sees **CO**₂ **emission saving** record for dual-fuel **Hydrogen powered sweeper**

ULEMCo has demonstrated impressive real-world reductions in CO2 emissions through the deployment of road sweepers for Aberdeen City Council.

Applied to the whole fleet of sweepers, this would lead to almost 30 tonnes of CO2 being eliminated from the operation, contributing to cleaner air for the city, and taking another significant step towards net zero.

The optimised sweeper with hydrogen dualfuel operation for both the powertrain and the "donkey" engine was announced in 2020, and has shown daily diesel displacement rates nearing 50% – believed to be a record for the technology. Since the start of this year, the vehicle has been running on the streets of Aberdeen, saving the annual equivalent of approximately 3 tonnes of CO2 emissions.

The sweeper has been converted by ULEMCo to run on dual-fuel, which allows a controlled quantity of hydrogen to be burned directly in the engine in combination with the diesel. This leads to exhaust emission reductions that relate directly to the proportion of the displaced diesel – typically between 20-40% depending on the duty cycle. However, in this case, the duty cycle, engine types and operation are delivering as much as 50% of the energy from hydrogen. In a year, each

sweeper would use 700kg of hydrogen, so the nine-strong fleet would use 6.3 tonnes of hydrogen with the kind of regular supplies the Council is accessing at the Aberdeen Hydrogen hub. 30 tonnes of CO2 is sufficient to offset the carbon foot print of three people for a year in the UK. Extrapolating that to all of the 333 UK councils would suggest that a saving of 10,000 tonnes is possible if an average of just ten vehicles were converted at each.

ULEMCo believes that this application – and others like it such as refuse collection vehicles, gritters and other specialist equipment – are ideally suited to the use of hydrogen today. Their duty cycles take them back to base daily, enabling consolidation of scaled demand for hydrogen and the related refuelling infrastructure. This provides the base load for the development of competitive hydrogen supplies, and cracks the 'chicken and the egg' conundrum dissuading some operators from making the transition to alternative fuels.

With a fleet of over a hundred utility vehicles now converted by ULEMCo and working in real-world environments across the UK, this is arguably the most innovative yet practical approach to decarbonising the cleaning of Britain's roads.

I would say to local authorities that are thinking about moving to hydrogen technology, that it not only helps you with the economic targets that you may have, but it will certainly help with the environmental targets that each and every local authority in Scotland has set themselves.

Councillor Jenny Laing, Leader of Aberdeen City Council

Given the need to start acting on climate change right away, it's a case of the best being the enemy of the good. A lot of attention and public funding support is focussed on looking for zero-emission solutions, but we cannot afford to wait for these to be commercially available, we must start transitioning to carbon-free energy using the full toolkit to achieve CO2 reduction immediately.

Amanda Lyne, Managing Director of ULEMCo



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Making mobility easy

Putting customers at the heart of everything you do is a crucial part of forging long-lasting partnerships. As experts in business mobility, we understand the needs of both private and public sector organisations evolve over time. Our belief is there's no one-size-fits all approach; every business is unique and we take the time to understand our customers' individual needs. By combining tailored solutions and award-winning customer service, we're committed to helping our customers get the very best out of their fleets, no matter what their requirements or how often they change.



Rachel Cox, Director of Property Repairs at believe housing, says:

"Our aim has always been to put tenants at the heart of everything we do, making them part of the journey to better housing services, homes and communities. Making sure the vehicles were fit for purpose and were a safe and comfortable working environment was at the forefront of our minds. That meant consulting members of each trade, so the racking suited the materials and tools they use, to having air conditioning and DAB radio in the vehicles. The move to a sole provider and new funding model will reduce operational costs by about 30 per cent over the next five years, and as a not-for-profit all the money we save will go back into providing affordable housing in the region and a wide range of support services for customers."

Alphabet has recently been working with one the largest housing associations in the North East, believe housing, to transition them to a new, fully-maintained fleet.

Responsible for managing over 18,000 homes, believe housing is dedicated to providing an affordable housing service that fits local needs, and keeping their employees on the move is key. As sole supplier for its fleet of 163 LCVs and two company cars, Alphabet has already been able to reduce both operational costs and administration time for believe housing by providing a comprehensive range of solutions, including contract hire and maintenance, accident management, driver risk management, as well as ongoing consultancy and support.

Alphabet's short-term rental offering has also given believe housing the opportunity to build additional flexibility into its operation. The housing association has been able to access rental vehicles to support ad-hoc vehicle requests at very short notice, helping prevent downtime and backlogs whilst transitioning to its new fleet.

Staying on top of fleet management is a continuous task. Collaboration and regular communication to bring together multiple departments and stakeholders has been instrumental in ensuring vehicles

ALPHABET



are delivered on time and to exact specifications. Vehicle collections and deliveries were seamlessly coordinated by Alphabet, allowing believe housing to save on administration time and focus on driving change for its tenants and communities.

A sharper focus

We immerse ourselves in our customers' industry and business in order to offer the most appropriate solutions for their needs. Conversion choice and

design was a key priority for believe housing and we were able to draw on our network of specialist conversion partners, working closely with internal racking partner Modul-System and vehicle branding partner Mediafleet, to create a bespoke, yet simple design that met believe housing's requirements, while further driving down costs for the business. Mediafleet prepared a unique and striking reflective livery for the vehicles, matching believe housing's brand colours perfectly and extending visibility into the night.

The housing association was also looking to build on its wider environmental targets and green credentials by moving 10% of its fleet to electric vehicles within the first year of the contract, believe housing has initially ordered 11 eLCVs (Vauxhall Vivaros) and two electric company cars (Nissan Leaf) and we are looking forward to making sustainable mobility both easy and convenient as the business continues to expand this part of its fleet in the future.

Dermot Kehoe, Corporate Sales Manager at Alphabet (GB) says:

"With a substantial fleet based on a flexi-lease model, we were keen to get the process of moving to contract hire vehicles underway as soon as possible, so believe housing could start benefitting from significant cost reductions. And by advising them to order LCVs prior to full specifications being agreed, we were also able to help them avoid three price increases on the main models they selected, creating further cost savings for the housing association. We are looking forward to identifying more efficiencies, as we continue to build our partnership and help believe housing drive their organisation forward."

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Colchester BC unveils new fleet of electric vehicles

Colchester Borough Council has unveiled a new fleet of six electric vehicles, as part of its commitment to have a fully carbon neutral fleet by 2030.

The Toyota Proace City Electric vans, which produce no harmful Nitrous Oxide and zero CO2 emissions whilst operating, will be deployed around the borough by the council's Street Care & Safety and Pest Control teams.

The new vehicles will take to the roads this month – all fully liveried to showcase the services the council provides.

With zero exhaust emissions, the switch to EV vehicles is a positive step for the council as it continues to extend and expand its commitment to tackling the Climate Emergency.

Cllr Martin Goss, Portfolio Holder for Neighbourhood Services and Waste, said: "It's great to know that our Neighbourhood teams will not only benefit from reliable and efficient vehicles but that our communities will, too, from quieter engines and significantly reduced air pollution.

"As our current vehicles reach the end of their life, we will replace



Pictured: Cllr Martin Goss with some of the new electric vans.

them with more eco-friendly ones. We hope that leading by example will convince others to follow, helping us make Colchester's air even cleaner."

The council's aim to transition to a fully EV fleet is detailed in its Carbon Management Plan to 2030. Developed in partnership with the Carbon Trust and the Energy Savings Trust, the plan sets out the council's journey to becoming net zero carbon for its operations.

This project is just one of several measures being developed by the council in response to the climate emergency. Find out more about what the council is doing to combat the climate emergency.

New Fire Engines for Cleveland Fire Authority

Cleveland Fire Authority's £1.89 million investment into Cleveland Fire Brigade's fleet and equipment will benefit and enhance the service's emergency response to the communities of Hartlepool, Stockton, Middlesbrough, and Redcar & Cleveland through improvement of technology, modern equipment, and the safety of firefighters.

Cleveland Fire Brigade is committed to providing the best possible vehicles and equipment to enable firefighters to respond effectively and efficiently to emergency incidents across the Teesside area. The seven new appliances will be placed at Hartlepool, Stockton, Middlesbrough, Grangetown and Billingham Community Fire Stations.



The new engines will replace existing and outdated vehicles to maintain our life-saving emergency response capability at 21 frontline fire engines. The fire engines will all be fitted with CCTV cameras to record and capture evidence of the rising tide of anti-social behaviour attacks on firefighters.

Chief Fire Officer Ian Hayton said: "I am delighted to announce the additions of the seven new fire engines to Cleveland Fire

Brigade's fleet. It gives me great pride to be investing in the very latest fire and rescue service technology and equipment".

"The new engines will ensure the safety of our crews and the local communities we serve is our upmost priority, which is why this investment shows our commitment to having the very best equipment and setting the highest standards in keeping our communities safe".

Barhale meets sustainability targets with addition of **LEVC VN5**

Supporting civil engineering specialist Barhale on its sustainability journey, Europcar Mobility Group UK is providing the business with electric vans on long term rental. Following a trial of smaller commercial vehicles, the Citroen e-Berlingo and the Renault Kangoo ZE, Barhale has now added four London Electric Vehicle Company (LEVC) VN5 vans to its fleet in partnership with Europcar.

One of the largest civil engineering and infrastructure specialists in the UK, Barhale has 40 years' experience working across the water, transport, built environment and energy sectors throughout the UK. Operating as a tier 1 partner for blue chip, regulated and private clients, the company employs a direct workforce of over 800 employees nationwide.

"We are always keen to incorporate low and no emissions vehicles into our fleet," commented Nathan Phipps, Fleet Manager at Barhale. "Working on a diverse range of projects, including with a variety of utility companies across the UK, using more sustainable vehicles helps us to meet our own objectives as well as those of our clients. And working with Europear gives us the flexibility to select the right vehicles for each contract, including low and zero



emission models."

Europcar's long-term commercial vehicle solution also means that the new vehicles can be appropriately equipped for Barhale's needs. The latest LEVC VN5s added to the Barhale fleet have been wrapped in Barhale branding as well as Chapter 8 livery on the back. They also feature Geotab telematics and SureCam camera systems, for driver safety.

Keith Shorter, Europear Mobility Group UK Vans & Trucks Director added: "This latest project with Barhale is the perfect example of how we are working closely with our clients to support their own sustainability goals, reducing emissions and running costs. With a wide range of electric vehicles available, and a focus on actively increasing the share of green vehicles in our fleet, Europear is helping businesses of all sizes meet their environmental targets in the best way to suit their requirements and those of their customers."



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CNG Fuels opens its tenth **biomethane refuelling station** as demand for low-carbon fuel skyrockets by 100% across the UK

CNG Fuels, Europe's leading supplier of renewable biomethane for transport, has announces the opening of its tenth low-carbon HGV refuelling station in Castleford, as demand for the fuel takes off, with the number of bio-CNG powered trucks on the road doubling in the last year alone.

The new station means that CNG Fuels can now refuel 5000 HGVs across the UK daily, saving up to 1,600 tonnes of CO2 every day, or 584,000 tonnes of CO2 annually when compared to diesel – equivalent to powering over 113,000 homes for an entire year.

HGVs account for 4.2% of UK carbon emissions, putting the sector at the core of the UK's goal of achieving net zero by 2050. Last year, the UK government set out plans to ban the sale of new petrol and diesel HGV from 2040[i], heightening the urgency for fleets across the country to find alternative solutions to petrol and diesel HGVs.

Renewable biomethane – derived from food waste and manure by CNG Fuels – is the lowest carbon, most cost-effective alternative fuel to diesel available to HGVs today, cutting emissions by over 90% whilst providing up to a 40% lifetime fuel cost saving.

The new station in Castleford is the company's 10th operational site, extending the range of low-carbon deliveries into North East England. The site can refuel up to 500 HGVs per day, cutting 67,500 tonnes of greenhouse gas emissions annually when fully utilised – equivalent to the annual emissions of over 40,000 cars.[ii] Most of the UK is already within a 300-mile round trip of a CNG Fuels renewable biomethane refuelling station and the site will put Leeds, Hull, and Wakefield within its range, serving local and passing fleets using the M1, A1 and M18.

Located in the Normanton Industrial Estate, CNG Fuels' newest station will give multiple existing CNG Fuels customers,

including major household brands and new local fleet operators, access to low carbon biomethane.

Philip Fjeld, CEO of CNG Fuels, said: "Fleet operators around the world are urgently seeking ways to cut emissions from their fleets. In the UK, fleet operators can do so today by adopting biomethane. Our fast-growing network of refuelling infrastructure has made biomethane more accessible than ever before, and fleets – ranging from local hauliers through to major household brands – are dramatically cutting emissions every day. Our newest station in Castleford is building on our existing network, enabling low carbon deliveries all the way from Inverness to Cornwall."

Demand for the fuel from fleet operators is growing at around 100% per annum, and CNG Fuels forecasts the demand to continue to accelerate, with around 10% of the UK's high-mileage HGV fleet expected to run on Bio-CNG by 2025. CNG Fuels has seen rapid growth in demand since the start of 2022 as the



benefits of Bio-CNG begins to reach the mass market. Orders for 6x2 lveco trials – one of the latest CNG-ready HGVs to be launched to the market – have reached an all-time high as the market moves away from early adopting large fleets, to fleets of all sizes.

The Castleford station joins nine other refuelling stations operated by CNG Fuels across the UK, including the world's largest public access biomethane refuelling station in Avonmouth near Bristol. The company plans to have 20 large public access stations in operation by the end of 2023, with sites in Newton Aycliffe and Corby entering the construction phase at the end of July 2022.

Last year the company announced plans to host hydrogen fuel trials across its sites to ensure stations are ready to support a multi-fuel future as different technologies develop and become commercially viable. The first hydrogen trails are due to begin this year and by 2025, CNG Fuels plans to allocate 100 acres of its land to public access hydrogen refuelling.

CNG Fuels was recently announced as the winner of the British Renewable Energy Award for Low Carbon Transport by the REA (The Association for Renewable Energy & Clean Technology), a recognition of the company's role in enabling fleets across the UK to drastically reduce emissions from road transport.

Royal Mail takes delivery of **2,000** new **electric vans**



Peugeot is providing Royal Mail with an additional 2,000 new electric vans to expand its growing fleet of electric vehicles. The order of new PEUGEOT e-Expert and PEUGEOT e-Partner vans will join circa 28,000 PEUGEOT vehicles already in use by the national delivery service.

The manufacturer has been providing Royal Mail with vehicles since 2009. With the addition of 1,000 new e-Partner and 1,000 e-Expert vans Royal Mail continues to work towards its aim of having 5,500 electric vehicles on its fleet by Spring 2023.

Seventy of Royal Mail's delivery offices have made the transition to electrification so far, with many of the vehicles used to deliver parcels and packages to customers in cities which operate with low emission zones such as London Bristol Glasgow Cambridge and Oxford

Royal Mail's commitment to reduce emissions throughout its operations comes hand in hand with PEUGEOT's electrification strategy, which aims to provide customers with an electrified variant of each model in its range by 2024.

Julie David, Managing Director, Peugeot UK, said: "I am incredibly pleased that we can continue to support Royal Mail with models from our award-winning electric van range, including the PEUGEOT e-Partner, which is set to be produced right here in the UK at our Ellesmere Port plant from early next year. The PEUGEOT e-Partner and e-Expert make no compromise on useful volume or practicality compared with the diesel versions. With every van in our range already benefitting from an electric version and every car offering an electrified variant by 2024, we look forward to continuing our support of the Royal Mail and its ambition for a greener future."

The e-Partner and e-Expert have both received extensive praise from drivers and industry experts. The e-Partner is powered by a 50kWh battery providing a range of up to 171 miles (WLTP). The van offers a load volume of 4.4m3 (matching its diesel equivalent) and a payload of up to 800kg. Customers can choose from two body styles (Standard and Long) and from Panel Van (up to 3 seats) and Crew Var (up to 5 seats) configurations.

Available with either a 50kWh or 75kWh battery, the e-Expert offers up to 143 and 205 miles of range respectively (WLTP), while customers also have a choice of two lengths (Standard and Long). With a payload of up to 1226kg and a 6.6m3 load volume, the e-Expert is a highly practical medium van.

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The future of fleet is **electric**, the **ICE Age** is well and truly over



By: Simon King
Partner | edenseven ltd

Battery Electric Vehicle (BEV) Company Cars are significantly cheaper than their Internal Combustion Engine (ICE) alternatives for businesses when assessed on a Total Cost of Ownership (TCO) basis, in fact in the last fleet I analysed the saving to the organisation for company cars was 26%. Recent Research from Transport & Environment also showed a significant saving for electric vans and this is again backed up by my practical experience.

However, the electrification of fleets is not progressing anywhere near as fast as one might expect given the savings on offer. Based on the July 2022 YTD data from the SMMT only 14% of new car registrations were BEV, meaning even if every BEV sold this year went to a fleet then only 30% were BEV (which clearly must be an over estimate). We also know that only 5% of new LCV registrations were BEV.

Why is this? Well clearly challenges with supply chain is part of the reason, but given fleets know somewhere between 3 and 7 years in advance when their vehicles will need replacing this can't be the only reason, unless there are some serious planning gaps which I doubt.

So there seem to be two likely explanations. Firstly, a lack of understanding or buy-in of the benefits of switching to BEV. Unfortunately, I see evidence of this every day. Either fleet teams believing they won't get support to transition quickly or at all, or in some instances senior executives who simply won't change their perspective despite the obvious savings and success where transitions have happened. This reinforces the importance of focusing on driver awareness and behaviour, which includes fleet teams and senior execs. Secondly, the world of electric fleet is no longer really about vehicles which is where most fleet professionals have previously been most expert. Now it is far more important to focus on infrastructure, in my experience this is well over half of the challenge – my simple summary is that 60% of the challenge is infrastructure, 30% driver awareness and behaviour and 10% vehicles.

Why is infrastructure so important? Well in the ICE world this was basically taken care of by the oil majors and a fuel card. Whereas for BEV solutions are required for home, work

and public charging as well as payment solutions for all of these, effective management information and reporting, back-office systems and links into wider business energy sourcing and optimisation strategies. HR, Procurement, Facilities, Finance, Legal and Operations are all likely to be critical stakeholders.

So what is the current state of infrastructure? Well the good news is that businesses can put much of the infrastructure in themselves, either at employee's homes or company owned and operated sites. There is also an everincreasing rapid charging network, especially around the SRN (strategic road network) although given accessibility and cost this will normally be for top up charging. Typically 80-90% of journey days on a typically car or LCV fleet will be achievable on a single charge, so as long as the day starts with a fully charged battery that is sufficient. Therefore organisations should prioritise identifying an infrastructure partner who can provide charging, payment and back office solutions across home, workplace and public. Doing so will mean a significant proportion of the fleet can be rapidly switched to electric realising the associated company and employee savings.

The bad news is that where home or workplace charging is not possible, for example home based commercial vehicles where no home charger can be installed, there remain significant challenges. Possible solutions include on-street charging, where the AFP are consolidating anonymised data to influence local authorities and the charge point providers, and the provision of charging at sites which are not used overnight in areas where charging is required. This could include local authority owned sites such as libraries and leisure centres, as well as offices, retail sites and public car parks.

With the new building regulations requiring charging infrastructure (or at least cable runs) to be installed in new builds and major refurbishments the opportunity for social value provision and revenue generation for owners of these sites is significant. Out-of-hours charging can meet some of the costs of the infrastructure, provide a much-needed service to the community and support in-hours charging for

clients, employees and service users.

When it comes to home installs the only significant challenge is employee willingness to get an install completed, providing personal use of the electric vehicle wherever possible is one simple way to overcome this as it will save the employee significant amounts in fuel as well as hopefully reducing the number of vehicles they need to own and therefore having a wider sustainability benefit. Making sure the infrastructure solution selected has a payment solution for home charging, or as a fall back that a third-party solution is implemented, is crucial to avoid cash flow impacts and reliance on the AER.

Workplace challenges broadly fall into two buckets, landlord approval and capacity limits. On landlord approval ideally legislation should make this permitted development but until this happens early requests and pressure at a senior level to make rapid decisions or escalate is the best approach.

Capacity limits can often be resolved by dynamic load balancing solutions, including links into journey planning where available. On-site generation is also a way of increasing available capacity as well as improving sustainability credentials and typically reducing costs.

Public charging solutions are multi-faceted and could be an article all of their own, but in summary getting home and workplace sorted, ensuring an integrated payment solution is in place and then providing one or more fall back payment methods (whether 'fuel' cards or locked down company payment cards) is a sensible approach to take.

Overall, the crucial thing to remember is that fleet is no longer about the vehicles, but an integrated energy system which happens to have vehicles attached to it. So focus on your infrastructure and it will make the wider transition easier and more successful.



About Simon King

Simon is a Partner at edenseven, a sustainability consultancy focused on solutions which deliver business performance. He is an experienced Sustainability and Green Fleet senior leader, most recently he repositioned the UK's leading Facilities Management company as an ESG high-performer. This included launching Plan Zero, a commitment to net zero by 2025 of which a 35% carbon reduction in the first two years has already been achieved, primarily through the rollout of the largest pure electric fleet in the UK with over 2,200 electric vehicles on the road. As a result, Simon was included in Top 10 most influential people in Green Fleet 2022, the highest ranked fleet leader in the list.

Simon led all aspects of Mitie's fleet electrification from business case, board sign off, vehicle assessment, infrastructure requirements, solution development and driver awareness & behaviour. He also worked with senior clients to explain how fleet electrification could be part of their own journey to net zero. Overall Plan Zero has saved over 350,000 tonnes of carbon for clients.

Previously Simon was a Global Chief Procurement Officer, having worked for Tata Group (TGB), Coca-Cola and Dairy Crest. He lives in the New Forest on the south coast of the UK with his wife. He has two adult children, a Cocker Spaniel called Teddy, and is a keen sailor.

For more information visit: www.edenseven.co.uk

Octopus Energy and National Grid ESO demonstrate future role for Electric Vehicles in first for Great Britain

Tests show that consumers with V2G could play an active part in the future, balancing the grid for the first time



Claire Miller, Director of Technology and Innovation at Octopus Electric Vehicles

Octopus Energy Group and National Grid ESO have announced the first successful integration of vehicle-togrid technology, using a test environment of the Balancing Mechanism, the primary tool used by National Grid ESO to balance Great Britain's electricity system in real-time.

This is the first time that vehicleto-grid technology has been demonstrated in Great Britain to show that electric vehicles can receive a direct signal from the ESO to support system balancing. It marks a major turning point in electricity supply and means that in the future, consumers could play a direct role in balancing the national transmission system through their electric vehicles. In a series of initial tests run in August 2022, Octopus charged and discharged the batteries of up to 20 electric cars from participating customers at times of grid imbalance*.

These tests have demonstrated the potential benefit of vehicleto-grid charging – an hour of a million EVs exporting to the grid could generate the same amount of power as 5,500 onshore wind turbines

Separate analysis from Octopus Energy's electric vehicles arm shows that if the trial results were extrapolated across a whole year, the EVs could realise a profit of around £62 million p/a**, whilst also saving non-participating customers money through grid balancing cost reductions.

It doesn't just benefit the system either. Further Octopus analysis shows customers could realise a potential saving of up to £840 per year***, compared to unscheduled charging on a flat rate tariff - putting money back in people's pockets at times of record high energy costs.

Several large car brands
- including Hyundai and
Volkswagen - have committed to
include V2G technology in their
new EVs, further emphasising the
potential of the technology.

When a service is up and running, consumers could save cash off their energy bills as the BM incentivises the use of their car battery as a balancing device, contributing to reduced balancing costs across the network, which will help to reduce bills for all energy consumers.

Octopus Energy Group's Kraken platform works in the background to match this customer schedule with grid signals to provide flexibility as a service and seamless charging to customers. And if those signals occur outside the tariff windows - which typically are between 23:30-05:30 for import and 16:00-19:00 for

export - customers will still benefit from the lowest import and highest export prices thanks to Kraken's flexibility and customer first approach.

Claire Miller, Director of Technology and Innovation at Octopus Electric Vehicles, comments: "This is a real 'line in the sand' moment for V2G tech. We have shown that this technology is capable of helping to balance our future, green grid, to the benefit of people and the planet.

"We've proved what is possible with the technology and cars that are currently on the market, and this is only going to grow. Soon we will have millions of electric cars sitting on driveways capable of storing and exporting green energy back to the grid when it needs it most - and once the vehicle to grid proposition is ready to be launched, these cars will help to support our renewables expansion and taking us a huge step closer to net zero."

Jake Rigg, Corporate Affairs
Director, National Grid ESO,
comments: "Vehicle-to-grid
technology opens the door for
everyone to engage in our electricity
system, in a way that we can all
benefit from.

"The next steps for us are to take these learnings and work with industry on how we develop and deploy a balancing mechanism service for V2G.

"The trial findings will also influence future innovation projects, including the CrowdFlex project we are currently developing with industry, to establish additional routes for consumer engagement in electricity networks."





www.myessentialfleet.co.uk Essential Fleet Manager **27**



The global pressures challenging the automotive industry and their impact on fleet operators

with Wolf-Dieter Hoppe, Partner, Arthur D. Little

The phrase "a perfect storm" has been used repeatedly to describe the current crisis affecting the automotive industry worldwide. Many of the global issues affecting supply chains and, consequently manufacturing schedules, are familiar to most, such as Brexit, Covid and conflict, but in order to drive solutions, there needs to be a deep understanding of those issues and their current and potential impact by politicians and industry. Only then can solutions be developed, whether they are to fix broken, established systems or to develop strategy when there is more permanent change.

With origins over 135 years ago in Boston, USA, Arthur D. Little has grown to be a global authority and consultancy advising industry, commerce and governments on technology, strategy, and opportunities derived from a multi-disciplinary approach to driving a better future. Essential Fleet Manager has been speaking with Wolf-Dieter Hoppe, Partner and Automotive Suppliers Global Lead at Arthur D. Little, about the huge challenges currently faced by the automotive sector and how they are affecting supply to fleets and consequently, the disruption to the delivery of essential services.

Q: Could you summarise the events that have most affected the automotive industry supply issues?

There are several: it actually started back in 2019. Cryptocurrency mining had caused shortages of graphic cards, and the US government imposed sanctions on microelectronics, which led to the first bulk orders in the market. In 2020 a series of incidents, the largest of which was COVID-19, caused reduction in demand from OFMs, COVID-19 also led to closures. in chip foundries, and chip production was cut down significantly. When clients started to order more vehicles again in mid-2020, the remaining chip volumes were already allocated to other electronics companies. In 2021, power blackouts in the US damaged fabs (advanced electronics factories) in Texas, and there was a fire at the Renesas fab in Japan. These incidents all contributed to supply disruptions. At the end of 2021, so-called zero-COVID lockdowns were imposed in China, where many microprocessors are produced. So your "perfect storm" image is quite right: we saw a significant increase in microchip demand, vehicle manufacturers with very limited buying

power in the chip market, and a series of supply shortages.

Q: If the most significant factor has been semiconductor shortages even prior to the fire at the Renesas factory, how have these other events increased the difficulties?

Indeed, the situation has become much more complex now. We need to be aware of three things that are increasing the difficulties:

- i) Firstly, we have seen an explosion in demand for chips from consumer and home-office products. This has led to a massive demand shift in the semiconductor sector. Production volumes for semiconductors were reallocated relatively early when the crisis started, and not all vehicle manufacturers have recovered from this disruption.
- ii) Secondly, we can observe a real increase in electronic vehicles. As a result, there is more demand for semiconductors from the automotive industry compared to, say, two years ago. This effect will likely compound the situation.
- **iii)** Lastly, we still have a very unstable geopolitical situation. There is no end

to the war in Ukraine in sight, and the conflict around Taiwan is adding a risk that cannot be calculated. The world's highest production capacity for super-advanced chips is located in Taiwan – any disruption here would have a huge effect on all global markets!

Q: Which of these problems can be fixed, with time, and which will be with us for the longer term?

From a more technical perspective of demand-supply, many of our contacts in the automotive industry expect the situation to get better during 2023. These expectations are driven by many plans and activities from large players to increase semiconductor production capacity. However, a big part of the global capacity increase is for semicon technologies that are not relevant for cars – plus, the increase in electric vehicle production adds to the demand from OEMs. Therefore, we may expect shortages to affect global production, lead times and deliveries well into 2024. The geopolitical situation, of course, cannot be predicted.

Q: Many of our readers are working towards demanding Net Zero



commitments. These can only be achieved by adopting new, low or zero emission vehicles into their fleets. What is the potential disruption to these plans caused by supply chain issues?

First of all, it is important to note that the current increase in EVs is significant - and EVs are not only produced by Tesla. For example, Volkswagen Group's quarterly deliveries (both hybrids and battery electric) are expected to hit 300,000 in Q3. They will likely be on par with Tesla's by the end of the year, according to forecasts. Stellantis, Daimler, Toyota, BMW and others are already selling beyond 100,000 units per quarter with significant ramp-up. Many OEMs seem to be prioritizing EVs in their production. In general, availability of internal combustion engine vehicles with modern combustion technology is likely to be more affected than that of battery electric vehicles – which will impact CO2 reduction commitments. Hybrid vehicles, loved in many countries due to their "combination of both worlds" with an ICE engine plus electric motor, are also affected. Those hybrids have been significant in keeping fleet managers on track with their Net Zero roadmaps.

Q: With many essential services fleets being based in the majority around vans, is there an additional problem with manufacturers - where brands cover car and LCV ranges - diverting limited stocks of semiconductors to car manufacturing, further suppressing van supplies?

In Europe, regulation changed from "TEMP" to 6D ISC-FCM in 2021, and in preparation, various OEMs did not plan production of some van models before the second half of the year. This caused problems aside from COVID-19 and the chip crisis throughout 2021 and into 2022. COVID-19 had a push effect on the light commercial vehicles (LCV) market. There has been increased demand caused, for example, by online sales deliveries. The chip crisis, therefore, has had a massive effect on deliveries in the LCV market. In addition, prices have gone up for both new vehicles and used LCVs. LCVs have much lower electrification shares compared to passenger cars. Nine out of 10 vans in Europe are delivered with a classic diesel engine. An important factor here is that many brands have modularized vehicle concepts: engines and electronics architecture elements

shared across passenger cars and vans. Therefore, in the event of resource fluctuations, manufacturers may be tempted to allocate those resources to production of higher-margin, upper-class passenger cars.

Q: How would you advise a fleet manager to mitigate the impact of vehicle supply issues in the short to medium term? Is there a suggested mix of short-term tactical solutions and longer-term strategic planning?

We can structure mitigation activities in three key areas: sourcing, maintenance and re-marketing of vehicles. The sourcing side addresses the supply issue. Fleet managers should consider prolonging the holding period (further) if possible. They may pool demands cross-company while moving to more standardized models to increase their purchasing power. They could also adapt policies towards electric and less CO2. In addition, the reduction of vehicle options and the broadening of the scope of allowed brands helps. And finally - a simple solution is to just order standard configurations earlier with betteranticipated demand.

However, fleet managers also need to address the bottom-line effects of longer holding periods. Optimization of preventive maintenance routines may help to reduce operating cost perhaps now is the time to embrace the potential benefits of fleet management solutions. Observing used car prices and strategically improving marketing of used vehicles can also address the total cost of the fleet

For many of our clients, now is also the time to redefine their overall mobility concepts, shifting strategically from vehicles to other modes of mobility. While this is not for all users and use cases, it may be helpful in a larger organization in the context of their CO2 reduction programs.

Q: Increased levels of technology in both cars and vans have raised the minimum level of expectation of fleets that provide and underpin essential services, as they often contribute to firm commitments to increasing driver wellbeing, health and safety. Does the fact that some manufacturers have lowered specifications on vehicles to meet orders therefore mean that supply to these fleets will be further disrupted?

There have been reports of manufacturers building vehicles without components, which may have caused a safety risk, but we do not see this a systematic observation. Many OEMs had – and still have – limitations on specific options, such as an engine control unit, charging control, and infotainment module availability. For these kinds of components, disruptions apply.

Q: This relates to the last question, but there is now a situation where manufacturers have experienced great pressure on profits. The retail market for vehicles is both more flexible in terms of customer requirements and, at the end of the day, more profitable. Will manufacturers concentrate efforts to fulfil retail demand again at the expense of fleets?

We have a different view on the profit side. During recent months, many manufacturers' profits have been very high. OEMs have been able to massively reduce discounts, and transaction prices have gone up. For fleets, this is a dilemma: they are fighting for increasing volumes (and to further grow their share of the units produced versus those for retail customers). An OEM also wants to allocate its sales to where the margin is. Fleets will not be able to stay outside the general price trend if they want to secure their volumes.

Q: Has the "perfect storm" been created by an overdependence on global supply chains? Is there an option to seek wider distribution of manufacturing centres for components such as semiconductors and automotive batteries?

The chip crisis has revealed a fundamental misunderstanding among many OEMs, in that they tried to treat their semiconductor suppliers as regular suppliers. This perception has clearly changed. New types of partnerships between manufacturers, suppliers and semicon producers will be established. In addition, many supply chains for

components other than semiconductors have been optimized on a single-source basis for a long time. The current situation, explicitly including the geopolitical observations discussed earlier, has led to a paradigm change. Many of our clients are checking or redefining their strategies for all their sourcing categories. Alternative sourcing channels (second source) are being built up as well.

Supplier Insight: CheckedSafe Vehicle compliance for all fleets

As a fleet or transport manager you have a requirement both legally and financially to ensure that you are operating a safe, efficient and compliant fleet. Although operating a pure LCV fleet does not require an operators licence, the same principles should be applied to your vans to ensure you are meeting your duty of care requirements. Ensuring your vehicles are compliant and importantly 'safe to drive' is essential.

Within the Public Sector, Housing and Utilities sector many van fleets are managed remotely, as drivers may not return to base overnight. Micro-managing these vehicles is almost impossible for a fleet or transport manager, so there is a heavy reliance on drivers to make sure their vehicles are properly checked before use each day.

A real innovator in the area of vehicle compliance software is the award winning CheckedSafe, founded in 2014 by Gary Hawthorne and business partner Darran Harris.

As a company they have developed products that provide assistance to fleet operators not only to help with operator licence compliance but that make the management of remote van fleets safer, more efficient and easier.

To find out more, Essential Fleet Manager spoke with Gary Hawthorne, Director and Co-Founder on how the CheckedSafe APP works and how, with ease, drivers can safely and comprehensively carry out pre-vehicle usage checks.

Gary, with his background in the transport industry, developed the product after identifying issues with other applications. With his business partner Darran a litigation solicitor, he focused heavily on developing a fit for purpose APP that not only helped with compliance but was also specifically designed for the effective management of work-related road safety.

Q: Above, we mentioned how the need for remote management of van fleets that do not return to base over night can be problematic, how can the CheckedSafe App assist with this?

CheckedSafe replaces the paper-based daily vehicle check by allowing drivers to complete a daily vehicle check via an App on their smart phone. The App is compatible with both Android and Apple devices and it improves the overall efficiency of the check process. Therefore, no matter where the vehicle or driver is located the APP gives the driver remote functionality.

Q: You mentioned the App works on most mobile devices, how about connectivity?

With vehicle checks being a vital part of any operation,

ensuring reliability is key for CheckedSafe, we use Amazon servers, with eight back ups via AWS.

The system has also been designed so that it will still function offline, not just in case of server problems, but because we know that sometimes drivers will not have internet access. Drivers can still do their checks, and the APP will synchronise as soon as internet access becomes available.

Q: Although all drivers should take the pre-use check very seriously, is the system open to abuse, could the driver for example just carry out a tick box exercise whilst using the APP without actually walking around the vehicle?

The system monitors the driver's behaviour and location to make sure that checks are being carried out, with minimum times for each check.

The APP also tracks the movement of the phone or tablet being used around the vehicle to ensure the driver doesn't just tick the boxes away from the vehicle - this minimises the chances of a false check being submitted.

This is one of the unique benefits of our system.

Q: How easy is the CheckedSafe APP to use, do drivers or operatives need to be 'tech savvy' to be able to use it?

The app is very user-friendly, with all checks separated into clear categories.

Pre-built templates within the APP can be tailored to meet individual requirements and we will always go to visit a company implementing our system to make sure we offer training and assistance where required.

Drivers can also take photos or make voice recordings to help submit information.

For operators large and small, compliance should never be a chore but is often seen as an administrative burden. A system such as CheckedSafe helps reduce that burden as it is extremely easy to use and streamlines the checking and follow up processes.

Q: How does the fleet or transport manager access the information provided by the driver via the APP?

Once a driver has submitted their check results, they are sent in real time via email and are viewable on the CheckedSafe Workforce Management (CWM) suite. The fleet or transport manager can then access the information and interpret the data - any issues with the vehicle that need attention can then be scheduled for maintenance if required.

Making this process digital ensures any defects are found and the driver can get a quick determination from the office or depot as to whether the vehicle is safe to use on the road or not.

Q: How can the data sent from the APP be interpreted to help with vehicle fleet management?

Comprehensive reporting allows the fleet or transport manager to view details relating to checks and their outcomes, including historical checks.

The system provides full visibility as to the status of each vehicle, its servicing and maintenance requirements and provides an end-to-end compliance audit trail.

The data provided by the system should be interpreted and acted upon. Identifying minor defects early, can save the need for more serious and costly repairs at a later date.

All reports can be viewed online or downloaded for further analysis meaning our system simplifies and digitises fleet management.

Q: Another problem all drivers may face is 'on-the-road' incident that may involve damage to a vehicle, how does the CheckedSafe App assist with this?

Within the APP we include what we call a 'bump card' which gives prompts on what information to collect in the event of an accident. The back office can then see that data in seconds, as the driver can submit a report straight away.

The first hour is known as the 'golden hour' for insurers and CheckedSafe can help drivers record details while they're still fresh. This sweet spot for information can dramatically reduce the cost of any 3rd party claim.



We did a study with a HGV operator in Manchester and found it had significantly reduced payouts on claims as a result.

We're starting to see the insurance companies take note now and we are partners with the likes of QBE and RSA to name but two.

Q: How does the CheckedSafe system help with legal compliance?

The CheckedSafe system offers organisations a complete solution, enabling them to manage and protect their workforce and comply with legal compliance requirements, whilst reducing cost and liability. CheckedSafe can provide organisations with a fully integrated solution - so you can be completely paperless. By using our system properly you will have a legally defensible product.

Q: We have covered how CheckedSafe assists van fleets and many of those features will be applied when managing compliance in larger fleets subject to requirements under the O licence. How does the CheckedSafe system help with gaining DVSA Earned Recognition status or any other valuable accreditations?

The DVSA recognise operators who show high standards of compliance. Our system is fully DVSA-compliant, allowing your drivers to prove their vehicle's compliance at the touch of a button

Operators can use our system to compile and submit vehicle compliance reports directly to the DVSA with ease, and by submitting regular reports, vehicles will be less likely to be pulled over for roadside inspections.

CheckedSafe features include:

- Unlimited daily checks with all of the various controls that we have. We can also update the checks to give you Covid-19 checks for such things as sanitising vehicles etc.
- Bespoke templates for any piece of kit including plant equipment.
- Full maintenance solution. This allows scheduling your PMI's. Brake Roller Tests, LOLER check etc. The system provides the ability to either do the check digitally or if you prefer use manual PMI sheets and upload them to our system and we will digitise them so you can be totally paperless.
- Unlimited document storage either

for vehicles/assets or users.

- Unlimited users.
- Full message service (back office to App users- useful for things like briefings and toolbox talks etc). This has proved very popular during the lock-down period as it allows you to communicate with all of your staff.
- Documents-to-App service whereby the customer can push documents to the user via the App. Useful for certifications, dig-tickets, access documents. Covid-19 briefings etc
- Reminder service for things like servicing, maintenance, MOT's Insurance etc. This will provide a weekly-to-do list to allow you to keep on top of the whole compliance provisions for the business.
- Trend reports to show things like :

- Most common defect.
- Drivers not reporting defects.
- Drivers with repeat defects for the same issues.
- Time taken from defect being reported to repair/rectification
- Full cloud based solution so you can operate the system from anywhere as long as you have an internet connection.
- We are a full accredited and validated DVSA IT ER Systems Provider.
- We are endorsed by the Fork Lift Truck Association and Border Force Agency.
- All our software belongs to us and we do not need to licence parts of it from others.

Eight years ago, CheckedSafe was an idea, that today, has flourished into a fully successful business. Gary and Darran are passionate about what they do and provide a skill set that boasts professionalism and expertise.

If you would like to find out any further information, please visit: www.checkedsafe.com T: 01282 908429 | info@checkedsafe.com

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FLUIDS, FUEL AND OIL

Check that:

- the brake fluid, engine coolant, engine oil, power steering fluid, wind screen washer fluid and water levels are correct
- · the fuel filler cap is securely fitted
- there are no brake fluid, power steering fluid and water leaks by looking for puddles on the ground - if leaks are detected, trace the cause

With the engine on, check underneath the van for any fuel and oil leaks - look for puddles on the ground.

BRAKES

Check that the:

- foot or service brake works correctly and doesn't have any excessive travel
- hand or parking brake works correctly and doesn't have any excessive travel

BATTERY

Check that the:

- battery is held securely in place by the correct means and not cables
- battery is not leaking

SEATS AND SEAT BELTS

Check that the:

seats are secure

seat belts operate correctly and are free from cuts and damage

WASHERS AND WIPERS

Check that:

- wipers move continually when switched on
- wiper blades aren't so deteriorated that they don't clear the windscreen effectively when used with washers
- · washers point at the windscreen and are operational
- washer fluid is topped up

HORN AND STEERING

Check that the:

- horn control is easily accessible from driver's seat
- · horn works when its control is operated
- steering has no excessive play

LIGHTS

Check that:

- all lights and indicators work correctly
- all lenses are present, clean and are the right colour
- stop lamps come on when the service brake is applied and go out when released
- marker lights are present and work
- all dashboard warning lamps work correctly, including:
 - automatic braking system (ABS)

- airbags supplemental restraint system (SRS)
- electronic positioning system (EPS)
- full beam headlamp warning lamp
- · parking brake warning lamp

EXHAUST

Check that the exhaust doesn't emit excessive amounts of smoke.

Check that:

- any load is adequately secured
- the van doors have an effective locking device

TYRES AND WHEELS

Check as much of your tyres and wheels as you can see. There must be:

- a minimum tread depth of 1.6mm
- sufficient inflation of each tyre
- no deep cuts in the sidewall
- no cord visible anywhere on the tyre
- no missing or insecure wheel-nuts

You can get 3 penalty points on your licence for each tyre that isn't safe and legal.

MIRRORS AND GLASS

Check that:

- all mirrors that should be there are properly aligned and secure
- your view of the road in all directions isn't obscured by damaged or discoloured glass, or obstructions

LOAD

Check that:

- · any load is adequately secured
- the van doors have an effective locking device

BODYWORK AND DOORS

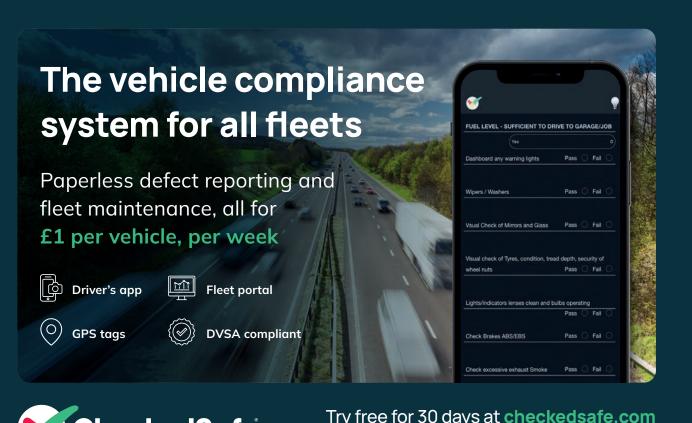
Check that:

- · all doors shut properly and are secure when closed
- there isn't any damage or sharp edges
- · no body panels are loose or in danger of falling off

TOW BARS AND TAIL LIFTS

Check that the:

- tow bar is secure and any trailer is correctly and securely attached, with all electrical connections working correctly
- tail lift is secure and free from damage, functions correctly and the electrics are working correctly





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Looking for ways to save on fuel costs is a top priority for public sector organisations and for those who operate within the Utility sector and tacking idling is a way to achieve this.

For a fleet or transport manager idling can have a significant impact not only on your vehicle's fuel economy, but also for the wider environment that your vehicles operate in.

It shouldn't be forgotten that there is a tremendous focus on public health and the impact of roadside emissions and tackling the issue should be part of any organisation's corporate social responsibility policy.

If a driver is running a vehicle's engine when the vehicle isn't moving it is termed as "Idling", it is a common occurrence especially when a driver is stopped at a red light or stuck in traffic. Fleet vehicles may feature "stop/start", but on many older or commercial vehicles this may not be available. It

is difficult to plan to reduce idling at traffic lights except to say that where possible, journeys should be planned to avoid the busiest periods when congestion will maximise time spent at junctions and road crossings.

The amount of fuel a vehicle consumes while idling obviously varies as it depends on factors such as the vehicles weight, engine size, and the type of fuel it takes, but the rate at which fuel prices have been rising is hard to comprehend and this means fleet operating costs are soaring.

Reducing the amount of time your vehicles spend idling also has the added bonus of helping to reduce engine wear-and-tear over time, resulting in lower maintenance costs.

To reduce the impact of harmful pollutants, there are laws to discourage drivers from idling, for example stationary idling is an offence under Section 42 of the Road Traffic Act 1988.

The act enforces Rule 123 of the

Highway Code, which states: "You must not leave a vehicle's engine running unnecessarily while that vehicle is stationary on a public road."

Fleet Managers must be fully aware of the detail of the legislation and at the same time ensure that drivers are also aware and following the rules.

Idling can be tackled by implementing technology such as GPS fleet tracking software. By using the data obtained, fleet or transport managers can identify drivers that need to change their driving behaviours. By encouraging better driving practice, tangible fuel savings can be enjoyed across your fleet.

Engine idling has tremendous negative impact on the environment and should be tackled as a priority. At the end of the day, if unnecessary idling is eradicated, costs are reduced, public health is improved and corporate image is protected.



Construction and Highway sectors putting the 'Business' into Driving for Better Business

The construction and highways sectors are collectively saving hundreds of thousands off their bottom line, simply by adopting a systematic approach to fleet and risk management with the help of the free, governmentbacked Driving for Better Business programme.

The scheme has engaged with thousands of businesses, which collectively employ millions of staff, in its mission to improve the levels of compliance for those who drive or ride for work by demonstrating the significant benefits of managing workrelated road risk more effectively.

Organisations in construction and road maintenance report 12 common measurable business benefits:

- Collisions/at-fault incident claims car/van
- Collisions/at-fault incident claims HGV
- Reduced speeding penalties?
- Lower
- cost of maintenance
- Fleet utilisation
- Reduced fuel consumption
- Idlina
- Insurance premiums
- **Emissions**
- Insurance claims
- **Public complaints**

Some of their stories are shared – including the challenges they faced, how they met those challenges, and the benefits they've seen as a result of engaging with the free Driving for Better Business programme – on the DfBB website:

Highlights include:

Balfour Beatty, which manages the road risk of around 12,000 drivers. Over the last 6 years the construction

company reported their crash frequency rate fall by 63% – equivalent to £570,000 of annual benefits.

- Amey, responsible for 11,000 drivers, reported at-fault incidents down 38% over 12 months from 1380 in 2016 to 89 in 2018
- **Tarmac,** part of the CRH group, saw a decrease in speeding of 10% across all geographical areas (25% in the North and Scotland) and its insurance claims drop by 48%. A continued focus on risk management has seen insurance claims fall consistently year on year, from 589 in 2016/17 to 255 in 2019/20 – a reduction in claims of nearly 50%
- Carnell, specialists in road maintenance, has some 280 operatives, 200 vehicles covering 4 million miles a year. It reports a reduction in annual insurance claims costs from £130,000 to £46,000 and the number of driver interventions – such as post-crash interviews and further training – down a staggering 85% over a 3-year period, significantly reducing the demands on admin and management time
- WJ, the UK's leading road marking reported all insurance claims down 15%; own fault claims down 20%; fuel use down 3.6%
- Infrastructure specialists The Costain Group plc recognises the importance of managing Occupational Road Risk relating to its employees and the safety of all other road users, as seriously as any other business-related activity. Through its engagement with the Driving for Better Business scheme, it reports collisions down 17%; collision costs down 18%; fleet insurance premiums down 9%
- Clancy Docwra is one of the largest privately-owned construction firms in the UK reported a saving of £65,000 on fuel, congestion charge fines down 76% and traffic offences down 59%

Others with case studies on the website include Colas, Skanska, Ringway, Toppesfield and Wilson & Scott.



For further information and to access a full range of in-depth quides, case studies and operational advice, visit: www.drivingforbetterbusiness.com/business-benefits/

www.myessentialfleet.co.uk

EV charging on UK motorways triples in one year as GRIDSERVE upgrades entire network

The number of charging sessions on the UK's biggest motorway electric vehicle (EV) charging network, the GRIDSERVE Electric Highway, has tripled since June 2021, with a quadrupling of energy supplied.

One year since GRIDSERVE acquired the network from Ecotricity the average charge time on the network also has also decreased in-line with faster, and more reliable charging.

The GRIDSERVE Electric Highway is now estimated to be one of the most highly utilised charging networks in the UK, now charging more than 100,000 EVs every month with net zero energy.

Over the past year, GRIDSERVE has embarked on a multimillion-pound programme to materially improve dependability, ease of use, and availability of chargers. The company has upgraded over 160 charging locations with new chargers, delivering an additional 7 High Power Electric Super Hubs across the motorway network – each featuring a bank of 6 to 12 x 350kW-capable chargers. Dozens of new sites are also already under development and in construction.

Reliability and consistently reported as a number one priority for EV drivers has significantly improved under GRIDSERVE, now standing at up to 99% uptime,

Accessibility has also improved, with contactless payment – previously unavailable at all legacy chargers – now ubiquitous across the network, making it easier than ever to charge and go. Each Electric Super Hub also includes at least one extra-wide accessible charging bay for every 6 EV charging spaces, and across the network, all 3 connection types (CCS, CHAdeMO, and Type 2 for AC) are available, catering for every type of EV.

The rapid and far-reaching rollout has given huge numbers of drivers the confidence to know that they can depend on GRIDSERVE to provide a net zero carbon charge at motorway service areas as they embark on long distance journeys across the UK.



The GRIDSERVE Electric Highway network is now integrated with dozens of maps, apps and navigation platforms, showing real time availability of chargers and supporting journey planning across the UK.

Toddington Harper, Founder and CEO of GRIDSERVE, said: "Only one year ago, we acquired the GRIDSERVE Electric Highway with the aim of making EV driving an enjoyable, ultra-convenient and stress-free experience throughout the UK. From day one, we have been focussed on delivering the best possible charging experience for drivers, and the response has been staggering with more people than ever charging at motorway service stations. I'm proud to say that in just one year, GRIDSERVE has made reliable EV travel across Great Britain possible – from Land's End to John o' Groats, and Pembrokeshire to Dover.

"Whilst we have materially improved EV charging across the UK, we have only touched the surface in terms of delivering the full extent of our plans, and it remains our mission to continually improve our network to provide increasingly large numbers of EV drivers with the confidence that they can set off on any length of journey, to anywhere in the country, driving any type of EV, and have a better experience than making the same trip in a petrol or diesel vehicle."



Solar farm will generate and store green energy to power electric fleet

Exeter's solar farm and battery storage facility is nearing completion and will soon be powering the city's electric fleet of vehicles and recycling centre with green energy. The project is another big step towards Exeter ambition to become a Net Zero Carbon City by 2030.

The Water Lane Solar Park at Marsh Barton features 3,700 solar panels which will create more than 1MW of clean, renewable energy.

Funded by the European Regional Development Fund, the facility, built on an inactive landfill site, includes a substantial battery storage capacity to provide flexibility between peak generation and peak usage.

It will feed the power generated directly into the Council's nearby Materials Reclamation Facility, and will charge the Council's entire fleet of electric vehicles, including its three newly-operational electric refuse vehicles.

It is expected that energy from the solar farm will be used to charge the Council's electric fleet of vehicles for the first time by the end of next month.

Cllr Duncan Wood, Lead Councillor for Climate Change, said the ability to generate green energy at a time of rapidly rising fuel costs was hugely important for the city.

He said: "This is an amazing site – it's not just generating green energy but using new storage technology to meet the needs of our fleet and powering the recycling processes at the Material Reclamation Facility. We will be able guarantee that our electric vehicles going around Exeter are running on green electricity.

"That's really important to us. It's something we started creating quite a few years ago. We have been using solar panels across our buildings, like the huge array at the Matford Livestock Centre.

"Here we've got 3,700 solar panels 1MW battery storage, and that's important because we need to keep the power supply to charge our vehicles and to run the recycling centre. That needs to be constant so we need the battery back-up.

"When it's not that sunny the panels are still charging, but obviously the consistency of supply to charge up those large refuse trucks is important. We have also got a lot of electric vans and cars that the Council runs, and we want to ensure that they are charged on green energy."

He added: "We are expecting that it will be operational next month. This is definitely a large step towards being net carbon neutral by 2030. The important thing is to cut down our emissions - that has to happen across the whole city.

"What we are in control of is the emissions that we generate. We want to lead and support and encourage the partners and residents of Exeter to cut down on their emissions, but what we really have control of is what we do as a Council, and this is a prime example of what we are doing to cut down on our emissions."

Cllr Wood praised the Council's Net Zero team for their work on the project and other measures which have cut energy use and emissions over recent years.

He said: "Taking on the climate change portfolio has been an incredible learning experience for me. I thought I knew about environmental issues, but I've got a lot to learn.

"What's really great stepping into this role is seeing the work that the team has already done to make the city council Net Zero by 2030. An awful lot work has been done in all sorts of areas, and this solar farm is a significant step forward in terms of energy independence - generating power in a sustainable, green way and using it to reduce our emissions as a council."

The solar farm is just one of a number of ambitious low carbon initiatives that the City Council is involved in to increase its use of renewable energy for day to day operations.

The Council plans to include battery storage systems at other sites where there are existing roof top arrays.

It already has a Photo Voltaic (PV) estate of more than 2MW, including a 1.5MW solar installation at the Livestock Centre, which produces enough renewable energy every year to power 180 homes.

The Council's total energy consumption has fallen over the last decade, resulting in a reduction in carbon emissions.

Switching to an electric fleet of vehicles is also saving emissions.

The recent replacement of three of the 15 diesel refuse vehicles with fully electric ones is saving 10,500 litres of diesel per year for each vehicle - a total of 31,500 litres per annum. That's more than a quarter of a million litres of diesel over their eight year lifespan.

The aim is to replace all diesel refuse vehicles with electric ones within the next six years, saving 157,500 litres of diesel per year.

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Mincrete's on track for further success with more Mercedes-Benz Arocs

Increased demand for concrete arising from development of the HS2 high-speed rail link through Staffordshire and Cheshire prompted ready-mix specialist Mincrete to invest in another couple of Mercedes-Benz truck mixers.

The subject of Mercedes-Benz Finance contract hire agreements, the operator's latest 8x4 Arocs are now being inspected and maintained at the Stoke-on-Trent branch of supplying Dealer eStar Truck & Van.

Mincrete was established in 1985 as a mini-mix business in Burslem, one of the six Potteries towns that form part of the city of Stoke. It opened a second plant, in Sandbach, in 2014, and another in Stafford a couple of years later. In addition to ready-mix concrete, the company provides floor screeds, bulk concrete and innovative low-carbon concrete.

Four years ago Mincrete was running a fleet in which Mercedes-Benz had long featured prominently, but that also included a number of vehicles by another manufacturer. Having been bought outright, all of these trucks were serviced by an independent provider.

However, following his appointment in 2018 Transport Manager Paul Mullington initiated a comprehensive fleet review, as a result of which Mincrete adopted a new acquisition and maintenance model. "We concluded that it would be better, and more cost-effective, to go the contract maintenance route with a single manufacturer," he explained.

The Arocs represented the backbone of the Mincrete fleet at the time, and even more so today. Purpose-designed for construction-related applications, this muscular chassis offers the rugged build quality and high ground clearance that make it ideally suited to operation on rough sites.

"The Arocs does the job admirably," confirmed Mr Mullington. "The truck is reliable, fuel-efficient and popular with our

drivers, who are familiar with and know how to get the best out of it, thanks not least to the training we give them. Against this backdrop, and given the relative proximity of its Dealer's workshop, Mercedes-Benz was the obvious candidate with which to partner."

So out, at the earliest opportunities, have gone any mixers that did not wear three-pointed stars, while Mercedes-Benz Trucks' official representative in Stoke has delivered on commitments to keep its customer's fleet on the road and earning.

Today, Mincrete operates 15 Mercedes-Benz trucks – most are eight-wheeled mixers, although the line-up includes six- and four-wheeled versions too, as well as an 18-tonne concrete pump. Its two remaining vehicles, and the only ones still based on chassis by another manufacturer, are both volumetric batch mixers

The new trucks have ClassicSpace M-cabs and, as 3243 variants, 10.7-litre in-line six-cylinder engines that produce 315 kW (428 hp) and drive through 12-speed Mercedes PowerShift 3 automated manual transmissions with crawl functions and manoeuvring modes for easy low-speed operation.

"We also specified the same engine for the three 32-tonne mixers we acquired in 2019," reported Paul Mullington. "I believe it is better suited to the hilly terrain in this area, and when driven correctly more economical than the 400 hp alternative."

As with their predecessors, Mincrete's latest mixers are fitted with distinctive, pink-painted 8m3 drums by Liebherr. eStar Truck & Van has also taken an order for another couple of identical vehicles, which are due for delivery next spring.

Mr Mullington continued: "Although our own focus is on housing developments, work on the stretch of HS2 from Birmingham to Crewe means there is a lot of demand for concrete mixers in this part of the country right now, so we're extremely busy."



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www.myessentialfleet.co.uk Essential Fleet Manager **139**

IMI predicts a 160,000 shortfall of workers in the UK automotive sector in the next decade



Steve Nash, CEO of the IMI

The latest Automotive Sector **Employment report from** the IMI outlines that the culmination of the electric vehicle (EV) revolution, the pandemic, decreased immigration and fewer people of working age, are fuelling an escalating skills crisis. It predicts 160,000 vacancies in the sector will need filling by 2031.

Despite forecasting a 2% decrease in the number of jobs available in the automotive industry by 2031, the report highlights that rising employment replacement demand - due to retirement, migration and occupational mobility – will significantly contribute to the expected and unprecedented number of available vacancies. The role most in demand will be the vehicle technician, which will account for 16% of vacancies.

Steve Nash, CEO of the IMI said, "The industry faces its biggest skills challenge of the last two decades. We have been lobbying government, the automotive industry and the education sector for a long time to invest in addressing the shortage in qualified EV technicians, and the majority have stepped up to the challenge. But our latest report worryingly reveals that the UK's lack of EV skills are just the tip of the iceberg.

"An aging population is a significant contributor to the dilemma. Many of our older workers are set to retire over the coming years and fewer younger workers are joining the labour force. Without doubt, more needs to be done to attract young blood into the UK's automotive sector."

The IMI's Diversity Task Force conducted a 'Perception of the Automotive Sector's urvey to understand career misgivings and motivators about the industry. The survey was completed by over 1,600 school-aged children and young people from schools and colleges across the UK and 448 youth influencers, including career professionals. Whilst over half of 16-18 year old survey respondents said they had a clear career plan, those in Key Stage 3 and 4 said they are particularly concerned about making the world a better place with comments made about improving the environment, better safety in the automotive sector and on vehicles, and a desire to help people. However, just 16% said they had considered the automotive sector as an option.

Over and above common misconceptions about the industry, a lack of understanding about the range of roles, qualifications needed and salary expectations was a key factor. Influencer respondents reported that a lack of local placements meant they were unable to satisfy young people open to pursuing a career in the automotive sector.

VWFS Fleet calls for certainty over **Benefit in Kind** rates as businesses say it will impact **EV** uptake

Research from Volkswagen Financial Services (VWFS Fleet) shows the impact of uncertain Benefit in Kind (BiK) rates on the uptake of electric vehicles. 83% of fleet operators said the uncertainty beyond 2025 could impact their uptake of electric cars.

provide clarity on BiK rates after 2025. With several changes over the past few years, drivers are unable to calculate the total cost of ownership of a company car with total certainty as the rates may well

fleet operators, 97% agreed that there needed to be greater visibility beyond 2025. 86% said they might consider shorter lease or rental terms for electric vehicles due to the uncertainty.

Over the past three years alone, BiK tax 2020/21 for electric vehicles (EVs). The rate was then raised to 1% in 2021/22, then climbed again to 2% in the current tax year (2022/23). The rate is frozen at 2% until 2025.

The original cut to 0% and low rates over the past couple of years have been a huge incentive for company car drivers is to hit the Government target of 2030 to stop the sale of internal combustion

2025 poses a threat to EV uptake, particularly concerning as the 2030 ban on new petrol and diesel cars looms. Drivers taking on an electric company car

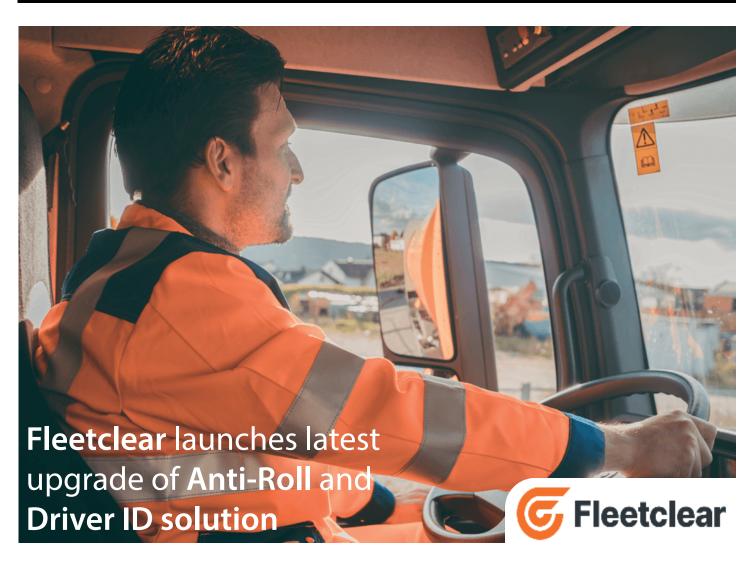
know how much their car will cost them in the final years of their lease.

at VWFS Fleet, said: "The lack of clarity over BiK rates is clearly a significant issue for company car drivers and fleet operators.

"If you're looking to take on an EV as a tax you'll be paying on it in 2025, and this worry will only increase as we get closer climate with the cost of living crisis being a

"With the plug-in grant for cars abruptly ending in June this year, and the £350 home charger grant also being withdrawn to transition to electric are being removed, so the sooner we get clarity on BiK rates, the better."

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UK fleet technology & software solutions company Fleetclear has launched the latest version of its industry leading anti-roll away and driver ID solution for commercial vehicles.

Designed to safeguard assets with authorised vehicle operation and protection from roll-aways, the Fleetclear system features a specially designed, robust CANBUS safety control unit, which automatically locks the park brake as the driver exits the cab. The vehicle remains immobilised until an authorised driver has been identified using either RFID or a covert actuator.

Chris Waller, Technical Director, Fleetclear: "Our comprehensive solution requires minimal maintenance and prevents against post installation tampering".

The safety unit incorporates fail-safe and internal monitoring systems to protect against component failure,

sabotage, and other external influences. Fault conditions and disconnected components are immediately reported to the driver via an audible warning message, and the system includes a daily test mode, so the driver can quickly test each major component before starting a journey.

Chris added: "We provide these proactive monitoring features to assure fleet managers that the system will leave the depot in full working condition each day."

The Fleetclear system includes customisable audible warning messages for the driver and a secondary external speaker alert for vehicle operators and the public. An onboard data recorder logs over 50 different event types including critical CANBUS data from the vehicle for up to three years.

Testament to Fleetclear's commitment to best practice and the highest safety standards, the company runs its own training academy and recently sent

a team of engineers to undertake a specialist brake training course at WABCO.

Chris explains why: "Our system is integrating with vehicle braking systems and it's crucial that our engineers have a full understanding of how the two systems interact. Ongoing development and training of our team is part and parcel of our culture to ensure that our engineers are fully prepared and up to speed with the latest technological developments."

Thanks to Fleetclear's new easy-to-use web-based software platform, Fleetclear Connect, the deployment of anti-roll away technology can be reviewed alongside critical vehicle data and a synchronised integrated video solution. An end to end solution for fleet managers, Fleetclear Connect represents the very latest in fleet safety technology, consolidating tracking, telematics, driver safety, compliance, monitoring and operational safety with live video, enabling advanced data analysis and processing.

For more information visit: https://fleetclear.com/

www.myessentialfleet.co.uk Essential Fleet Manager **41**



Did you Know?

- Driving without the correct entitlement to drive may result in a driver being issued with 3-6 penalty points and a fine of up to £1,000.
- Penalty points are not displayed on the driving licence photocard.
- Drivers who accrue 12 penalty points or more on their licence within 3 years will be disqualified from driving for 6 months. However this can be longer if they have had a previous disqualification within 3 years.
- Drivers can have their licence revoked (withdrawn), if they build up 6 or more penalty points within 2 years of passing their driving test.



Driving licence categories explain what vehicles a driver can drive. Each category of vehicle is represented by a letter or a letter and a number. In total, there are 26 driving licence categories. They can be found on the back of the driving licence.

Driving licence information/restriction codes, also found on the back of the driving licence specify what conditions must be met to drive a vehicle. There are around 50 driving licence codes

Best practice tips

- Always keep your driving licence safe and whenever possible, carry it with you when driving.
- Know your driving licence number.
- Know what categories of vehicles you are entitled to drive.
- Know what endorsements and penalty points are on your driving licence.
- Drivers with a photocard driving licence can view their driving licence record and details of penalty points and the time remaining until they expire, online at www.gov.uk at any time.



If a driver passed their test before the 1st of January 1997, they are usually permitted to drive a vehicle and trailer combination up to 8,250kg Maximum authorised mass (MAM).



If a driver passed their driving test on or after 1 January 1997, they are permitted to tow trailers up to 3,500kg MAM.





For more information and to download the latest Van Driver Toolkit guides visit https://vandrivertoolkit.co.uk/

42 ☐ Essential Fleet Manager www.myessentialfleet.co.uk



Townstar Nissan's all new compact van

The successor to Nissan's hugely successful e-NV200, Townstar is primed to future-proof business operations and accelerate the transition towards electrification. Key to its appeal, however, will be the fact that it offers two highly advanced powertrain solutions – one petrol and one fully electric, in combination with the latest driving technologies.

For customers looking towards zero emission motoring, the short-wheelbase Townstar is equipped with a 45kWh battery, with a range of up to 183 miles WLTP combined or up to 269 miles in city cycle.

Alternatively, a refined 1.3-litre TCe petrol unit is also available and is fully compliant with the latest Euro 6d-Full emissions regulations, delivering 130HP of power and 240Nm of torque, offering power and efficiency in equal measure.

Townstar brings a suite of 20+ technologies to the compact van segment and will feature a broad range of safety technologies and advanced driver assistance features such as Intelligent Emergency Braking, Hands-Free Parking, Intelligent Cruise Control and Around View Monitor (AVM), exclusive to Nissan, putting it at the forefront of its category.

The exciting line-up comprises four generously-specified trim levels: Visia – well equipped and ready to work; Acenta – featuring enhanced facilities to accommodate most professional needs; Tekna, incorporating additional driver convenience and exterior styling; and Tekna+, combining the very latest technology with enhanced driver assistance

When it comes to carrying capabilities, Townstar provides a generous payload of up to 600kg (SWB) or 800kg (LWB). In addition, the maximum braked towing capacity is 1,500kg.

Allan Newman, LCV product manager at Nissan GB, said: "We're delighted to be providing more information about all-new Townstar as its arrival in the UK approaches. Offering two efficient powertrain solutions, practical design and unique Nissan technologies, it is comprehensively equipped to meet customers' ever-changing needs.

"With tougher emissions standards, urban access restrictions, and ever-increasing demand for last-mile delivery, businesses

large and small need to find effective and sustainable solutions to remain competitive and optimise their operations. We're confident Townstar will meet their every need."

Electric versions of the all-new Townstar will come with an 11kW (Visia grade) or 22kW AC (Acenta grade on) onboard charging system which will be class-leading in its segment. As with its e-NV200 predecessor, there will also be a DC rapid charging connector standard from Acenta grade, which can recharge the battery from 0% to 80% in a little over 40 minutes.

Furthermore, this will all be accompanied by a pan-European five-year or 100,000-mile warranty, in addition to the eight-year or 100,000 miles battery warranty for the EV version. This includes bumper-to-bumper protection, genuine parts and accessories and roadside assistance – providing comprehensive cover for extra peace of mind.

The official start of sales will be 1st October for the petrol version and 1st December for the EV version, and preorders will open from 22nd August.

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The Dacia Duster Commercial has been enhanced to appeal to hardworking businesses that require a quality, robust vehicle that offers outstanding value.

This Commercial model is based on a factory conversion of the Duster SUV and has an added tough, hard-wearing flat load area, which offers 1,623 litres of space and up to 503kg payload capacity. It is powered by a range of efficient petrol and diesel engines, with outputs from 90hp to 150hp. A six-speed manual transmission is fitted as standard, while Dacia's six-speed dual-clutch EDC transmission is available exclusively with the TCe 150 engine. The petrol range includes the turbocharged threecylinder 1.0-litre TCe 90, delivering 90hp and 160Nm of torque at 2,750rpm, with combined cycle economy of up to 45.6mpg (WLTP). The Blue dCi 115 4x2 offers impressive fuel economy of

57.6mpg (WLTP) and low CO2 emissions of just 127g/km, while the 4x4 version emits 139g/km and achieves a creditable 53.3mpg (WLTP) on the combined cycle. All are compliant with the latest Euro 6D-Full emissions regulations and are equipped with Stop & Start – which automatically turns the engine off at a standstill to reduce emissions and boost fuel economy – as standard.

For the more adventurous tradesperson, or utility company that needs to access remote areas, a four-wheel-drive model offers genuine go-anywhere capability. The Duster Commercial is a natural fit for hard-working trades. The absence of a load sill makes accessing the space easy and, with a bay length of 1,792mm, even the longest loads can be accommodated with ease. A generous load width of 1,247mm and a floor-to-ceiling height on the 4x2 models of 917mm means bulky items can be easily transported too.

It's practicality, is backed up by its 210mm of ground clearance and 450mm wading depth.

The New Duster Commercial is available in two well-equipped, simple-to-understand specifications.

For simplicity, two trim levels are available, Essential and Expression which bring the same generous equipment to the Duster Commercial as the Duster SUV. As standard, the Duster Commercial Essential features Dacia's distinctive Y-shaped LED daytime running lights, body-coloured bumpers, black roof bars with 'Duster' inscription, 16-inch steel wheels, air conditioning, electric front windows, cruise control with speed limiter, sevenfunction on-board computer, height- and reach-adjustable steering wheel with backlit controls, DAB radio with Bluetooth connectivity and a USB connection. Moving up to the Expression specification adds 16-inch alloy wheels, body-colour

44 ■ Essential Fleet Manager www.myessentialfleet.co.uk



door handles, front fog lights, heated and electrically adjustable door mirrors, rearview camera with parking sensors, hill descent control, and a centre differential lock on 4x4 models.

The interior, meanwhile, gains upgraded upholstery, black door sill protection strips, leather steering wheel, centre console with driver's armrest, height-

adjustable driver's seat with lumbar adjustment, and Dacia's Media Display infotainment system with 8-inch touchscreen, smartphone replication with both Android Auto® and Apple CarPlay®, and two USB ports.

Both Essential and Expression models are offered with a spare wheel as an available option (4x2 versions only), while metallic

paint in one of four colours – Pearl Black, Arizona Orange, Slate Grey and Iron Blue – can be specified across the range. For those with an adventurous spirit, the new Dusty Grey colour is also available alongside the Urban Grey.

The latest version of the Dacia Duster Commercial is available to order with first deliveries due in the last guarter of 2022.



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The new MAXUS electric pick-up was introduced to industry at the 2022 CV Show to much fanfare and, as the UK's first all-electric pick-up, it's unsurprising that demand for the T90EV is off to a strong start with more than 1000 orders already placed.

Perfect for both on and off-road driving, the MAXUS T90EV is equipped with a high-level spec, a quoted range of 220 miles (WLTP range combined) and a payload of 1 tonne.

The sporty exterior is complemented by a modern interior with a 10.25-inch digital touch screen instrument cluster providing a minimalist look. The T90EV is roomy thanks to a neat dashboard design and floor console, making more room for both occupants and storage.

Standard kit includes a reversing camera, LED daytime running lights, 17-inch alloy wheels and a bed-mounted roll bar. Optional extras include all-terrain tyres, a roller top or mountain top and front bumper winch for off-roading.

T90EV at a glance

- Battery pack capacity: 88.55kWh
- WLTP Range Combined: 220 miles
- 150 kW motor
- Pickup 3,300kg RWD
- Body size: 5,365 x 1,900 x 1,809mm

- Cargo box: 1,485 x 1,510 x 530mm
- Wheelbase: 3155mm
- CVW without Passengers and Driver: 2300kg
- · Payload: 1000kg
- GTW: 4050kg
- Towing Capacity (braked trailer): 1500kg
- Max ground clearance: 19cm (unladen to bottom of diff)
- Wading depth: 550mm
- Reversing camera and rain sensing windscreen wipers
- Halogen headlight with automatic induction and LED daytime running light
- 17"alloy wheels
- Stainless steel sports bar and outside rope hook

Charging

- Charging Plug Type 2: 11kW
- Charging Plug CCS: 80kW
- Charging Time (DC 20-80%) min -25°C: 45min
- Charging Lead Type 2: 5m

The new MAXUS electric pick-up is the EV version of the MAXUS T90 - deliveries will start in O1 2023.



Head-up displays have for some time enabled drivers to stay focussed on the way ahead. But now Ford engineers are trialling new headlight technology that could help ensure those behind the wheel literally keep their eyes on the road. 1

The new technology can project directions, speed limits or weather information onto the road so the driver's gaze can remain fixed on the way ahead.

Night-time can be riskier for driving. In the UK, 40 per cent of collisions happen in darkness, even though there are far fewer people driving than in the daytime. 2 This risk is increased whenever a driver takes their eyes off the road. A vehicle travelling at 90 km/h covers 25 metres per second, meaning even a short glance at the navigation on the in-car screen can result in "driving blind" for ten metres or more. On an unlit road, this could potentially mean missing an important sign or a bend in the road.

Projecting information onto the road using high-resolution headlights could benefit other road users too. For example, a crosswalk could be projected onto the road, both for the view of the driver and the pedestrian, in situations where the existing road markings are faded or unclear. Other possibilities include showing a path for the driver to follow to ensure cyclists are passed at a safe distance.

The technology could provide the driver with information about changes in weather, such as snow falling, fog, slippery conditions, or an icy road ahead. Connecting the headlight to the navigation system could display upcoming turns, while the width of the vehicle could be projected onto the road, helping the the driver to judge whether the vehicle will fit through a gap or into a parking space.

Endeavouring to make night-driving more comfortable is part of Ford's commitment to developing technologies that serve and inspire the way people live and work, to make life easier,

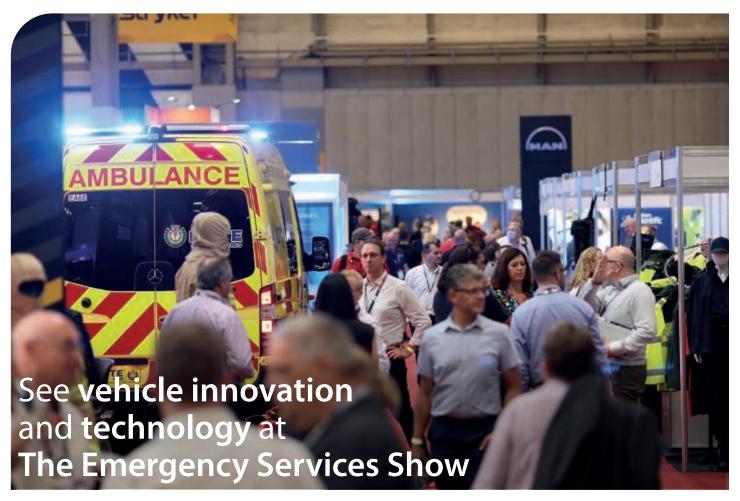
"What started as playing around with a projector light and a blank wall could take lighting technologies to a whole new level. There's the potential now to do so much more than simply illuminate the road ahead, to help reduce the stress involved in driving at night. The driver could get essential information without ever needing to take their eyes off the road."

Lars Junker, features and software, Advanced Driver Assistance Systems, Ford of Europe

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¹ Projecting images onto the road may be subject to different legal regulations in different markets. This vehicle feature is being developed for trial purposes only and is being tested in controlled environments.

² Road Safety Factsheet. https://www.rospa.com/media/documents/road-safety/factsheets/driving-at-night-factsheet.pdf



The Emergency Services Show returns to the NEC, Birmingham on 21 and 22 September 2022, showcasing how technology and innovation are transforming emergency response for all blue light services and first responders. Vehicle and vehicle equipment suppliers are prominent among more than 450 organisations exhibiting at the UK's largest emergency services event.

The show is the perfect place to research the latest innovations, products and services for anyone responsible for specifying and procuring vehicles and fleet equipment for the emergency services and allied organisations. On show will be the latest in electric, hybrid and decarbonised vehicles for emergency service applications, as well as smart and connected vehicles that serve as communications hubs and mobile incident command units.

The Emerging Technologies and Vehicle Innovation Theatre will also showcase how the emergency services can manage and leverage communications, data and technology more efficiently

and effectively.

Leading vehicle suppliers at the show include Ford Motor Company, Venari, Mercedes Benz Trucks, Saab, Volvo Trucks and Yamaha Motor Europe as well as a wide range of chassis manufacturers and specialist vehicle converters including Cartwright Vehicle Conversions and Wilker UK Ltd. Isuzu will be displaying their new pick-up, the All-New Isuzu D-Max.

Emergency One, Rosenbauer, Terberg and Volvo Trucks are among manufacturers bringing their latest fire appliances to the show. Angloco will demonstrate its ladder and other fire fighting vehicles in the Outside Area. Emergency One will be showing its new E1 EV0 fire appliance for the Scottish Fire and Rescue Service. The zero-emission electric vehicle has the same capability and equipment as a diesel model and is the first to feature an innovative all-electric rear drive axle installation. It has a range of approximately 220 miles with an 80% charge, while the optional onboard smart charger provides resilience at protracted incidents.

Among the many ambulance suppliers

exhibiting this year are Ford, Venari, Blue Light Services, MAN Truck and Bus, VCS, WAS UK and Wilker UK. Alfa Dropbox will showcase its ground-level loading ambulances.

Emergency and rescue vehicles of virtually every other type, including search and rescue appliances, fleet cars, motorbikes, boats and UAVs or drones will all be on display.

The show also features providers of all types of in and on-vehicle ancillary equipment and systems including lightbars; vehicle livery; battery management; driver training and more. Standby RSG will display their lighting, hazard warning systems products and solutions and VUE will be showcasing its fleet risk management solutions - CCTV and telematics hardware and easy-to-use software systems.

The Extrication and Trauma Challenges return as interactive experience for participants. Hosted by West Midlands Fire Service, the challenges showcase the latest technology and equipment in action, live streamed to large screens within the exhibition hall.

September 21-22, NEC, Birmingham

https://www.emergencyuk.com/



A headline speaker has been confirmed for the opening keynote of the Masterclass Theatre on the second day of this year's Euro Bus Expo, which is taking place at the NEC, Birmingham on 1-3 November.

Baroness Vere, Parliamentary Under Secretary of State for the Department of Transport, will open the second day of sessions in the Masterclass Theatre. The presentation will cover a whistle-stop tour of the government's priorities for the bus and coach industry. Attendees will have the unique opportunity to submit questions for consideration on the day.

Says event director Helen Conway: "We're delighted that Baroness Vere will be speaking at Euro Bus Expo. As the premier exhibition for the industry, there's no better place to witness the sector's scale, innovation, professionalism, and excellence.

"This commitment from the transport minister demonstrates the importance of the sector on the government agenda. No doubt visitors will have questions to put forward. We encourage those to be sent in advance to eurobusxpo@ divcom.co.uk."

One of many Masterclass

Theatre highlights

The keynote address will be one of many highlights of the free-to-attend trade show. The Masterclass Theatre will host other presentations, panel talks, and interactive roundtable discussions. These sessions will allow attendees to ask questions, voice opinions, and get up-to-date news from industry leaders. Decarbonisation will be a big theme this year. There will be presentations on the goals, challenges, and solutions the industry faces on its journey to net zero – with an additional focus on what all of this means for small and

medium operators. Visitors will get a better understanding of the future landscape and how to ready their businesses.

Elsewhere in the show, the Zero Emission Zone will make its Euro Bus Expo debut. The Zone will highlight the latest vehicles designed to decarbonise passenger travel, with demonstrations taking place from several leading manufacturers.

Attendees can also discover new ways to move their businesses forward with the latest products, services, and vehicles on offer from hundreds of exhibiting brands.

November 1-3, NEC, Birmingham

For further information and to register to attend, visit eurobusxpo.com

VisionTrack teams up with UK's biggest road safety event

VisionTrack, the leading AI video telematics and connected fleet data specialist, has been confirmed as co-headline sponsor for Road Safety Week 2022.

This latest development extends the company's longstanding partnership with event organisers Brake, the road safety charity, and is part of its commitment to making the road network a safer place for all.

"We are proud to be sponsoring Road Safety Week 2022. The theme of this year's event is very much aligned with our own vision to create a world where all road-users are kept safe from harm," explains Simon Marsh, CEO of VisionTrack. "This is a great opportunity to

promote important road safety messages, so we are looking forward to working closely with the Brake team to help make a real difference."

Road Safety Week 2022 runs from 14-20 November and is the UK's biggest road safety event. Every year, thousands of schools, organisations and communities get involved, bringing them together to shout out for everyone's right to make safe and healthy journeys. For 2022, the focus will be SAFE ROADS FOR ALL, which will raise awareness of key areas of road safety, including safe roads, vehicles and speeds; the new hierarchy of road users; and the importance of inclusivity.

Mary Williams, CEO at Brake commented: "Brake is delighted to welcome VisionTrack as co-headline sponsor. The company is already a long-time supporter of our Fleet Champions Awards, and we're thrilled they are joining our other key partners DHL and Arval to raise awareness of road safety and ensure Road Safety Week continues to be a huge success."



"Our aim is to use the event to raise awareness of road safety within our workforce, customers, partners, and the communities we operate in, so we can help reduce unnecessary deaths and injuries. Over the coming weeks we will be engaging with these important stakeholders to get them involved, as well as organising our own fundraising initiatives," concludes Marsh.

Be the first to know what's happening and how you can get involved by signing up here: www.brake.org.uk/road-safety-week

Coming soon to a screen car near you...

A staggering 95% of motorists express concerns about a new rule which allows drivers of autonomous vehicles to watch a movie when the vehicle is in self-drive mode

Venson says fleet managers need to be prepared for an autonomous future Self-driving vehicles could be on Britain's roads as soon as next year, after the Government announced plans to allow cars, coaches and lorries with self-driving features to be used legally on motorways.

By 2025, pilots of autonomous vehicles will even be allowed to check emails or watch TV whilst behind the wheel, a

move unanimously condemned by UK's motorists according to the latest survey conducted by Venson Automotive Solutions.

Although the Government's full legal framework for 'self-driving' vehicles won't be in place for another three years, Venson is encouraging fleet managers and business owners to consider education and driver training to ensure employees fully understand how to utilise and maximise the functions and benefits of autonomous vehicles. They also need to be reviewing company car and commercial vehicle fleet policies to avoid misunderstandings relating to liability and responsibility.

Venson's research revealed motorists are generally sceptical about the safety of self-driving technology, particularly the risks associated with distracting the vehicle's pilot. Only 5% believed it to be perfectly acceptable for the pilot to be able to watch a film whilst on the road, just 2% thought it was 'okay' to review and use social media, and 9% agreed with viewing content that is not related to driving.

Alison Bell, Operations Director for Venson Automotive Solutions,

comments, "Whilst fully self-drive vehicles are not yet legal in the UK, some vehicles do have semi-autonomy with advanced driver assistance (ADS) technology. By law, drivers of these vehicles must be in control at all times, so it is vital they fully understand the functionality of the technology and what the vehicle is capable of doing before they take to the road.

"For businesses with company car and van fleets, as well as those allowing employees to use private cars for business use, it is imperative they ensure they update their HR and fleet policies to address rapidly changing laws. For example, drink driving after the staff Christmas party will be for most businesses a disciplinary offence but where will the self-drive laws stand on this in the future?

"Whilst it is hoped autonomous vehicle technology will improve road safety and business efficiencies, there is still a long way to go before its impact will be truly understood. Whatever the future holds, self-drive cars are a growing and changing sector, so it's imperative fleet managers and business owners are on top of the latest developments and adapt policies accordingly."

50 ■ Essential Fleet Manager www.myessentialfleet.co.uk



July **LCV market down** despite increasing demand for **electric vehicles**

The UK's new light commercial vehicle (LCV) market declined for the seventh consecutive month in July, down -20.7% to 18,722 units, according to the latest figures published today by the Society of Motor Manufacturers and Traders (SMMT).

The decline, despite strong order books, is the result of ongoing global supply shortages caused by the Covid-19 pandemic, with last month's registrations total some -23.9% below the pre-pandemic five-year average for July.

July saw a fall in registrations across all LCV segments, with some 14,782 new vans weighing above 2.5 tonnes up to 3.5 tonnes registered in the month, -11.2% below 2021. The number of lighter vans weighing less than or equal to 2.0 tonnes dropped by -20.3%, while those weighing more than 2.0 tonnes to 2.5 tonnes declined by -49.8%.

As industry investment in battery electric vans (BEVs) continues, with one in three models on the market now available with a plug, demand continues to increase with 765 BEVs registered in July, up 21.2%, and a continuation of increased uptake seen in the first six months of 2022, as van buyers take advantage of new electric models that offer longer ranges, efficiency savings and fast charge times. As a result, there have been 8,865 BEVs registered in the year to date, an increase of 55.7%. This still represents only

one in 18 of all vans registered so far in 2022 but is up from one in 37 a year ago.

With total registration volumes remaining weak, the industry outlook has been downgraded from 328,000 to 307,000 new registrations for the year, a decline of -6.5% on the previous outlook published in April. As a result, the market is now expected to finish -13.7% down on 2021, which saw uptake almost reach pre-pandemic levels.4 With the semiconductor shortage expected to begin to ease during 2023, volumes for that year are anticipated to reach 357,000 units, a 16.4% rise. BEVs are still expected to account for 6.4% of registrations this year, while 2023's outlook has been revised downwards slightly, from 9.6% to 9.2%.

The shortage of dedicated electric charge points for this sector remains a critical obstacle to the achievement of ambitious timescales for the decarbonisation of the commercial vehicle fleet. Petrol and diesel vans have the same end of sale date as cars in 2030, yet new electric LCV registrations are currently at levels seen in the new car market in 2020, with a majority of van buyers citing charging infrastructure as their major concern over whether an EV can meet their professional and daily needs.5 As energy costs and inflation impact business and consumer confidence, it is crucial that barriers to infrastructure access are immediately addressed.

The LCV market is struggling to recover post-Covid as global supply chain shortages and economic headwinds make the business environment even more challenging for both manufacturers and operators. In these circumstances, the continued growth in electric van uptake is admirable as the industry strives to deliver its Net Zero commitments. Given the importance of the commercial vehicle sector to Britain's economy, its environmental ambitions and the need to keep society on the move, the next Prime Minister must look to restore economic confidence and support the sector's transition to zero emission mobility.

Mike Hawes, SMMT Chief Executive

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TYRE SAFETY CHECKS: What's stopping you?



Remember to ACT on tyre safety



Check the air pressure on all your tyres.



Check for cracks and any bulges.



Check tread depths using the 20p test.

Check your tyres at least once a month and before a long journey

