

# DELIVERING DECARBONISATION

A LOGISTICS MAGAZINE SUPPLEMENT

## ACADEMIC INSIGHTS

★ Interview with Julian Allen  
from the Centre for  
Sustainable Road Freight

## ELECTRIFYING LOGISTICS

★ Decarbonising van fleets

## THE £45 BILLION HOLE

★ Interview with Thomas Adcock  
from CBW

**LOGISTICS UK**

Autumn **2022**

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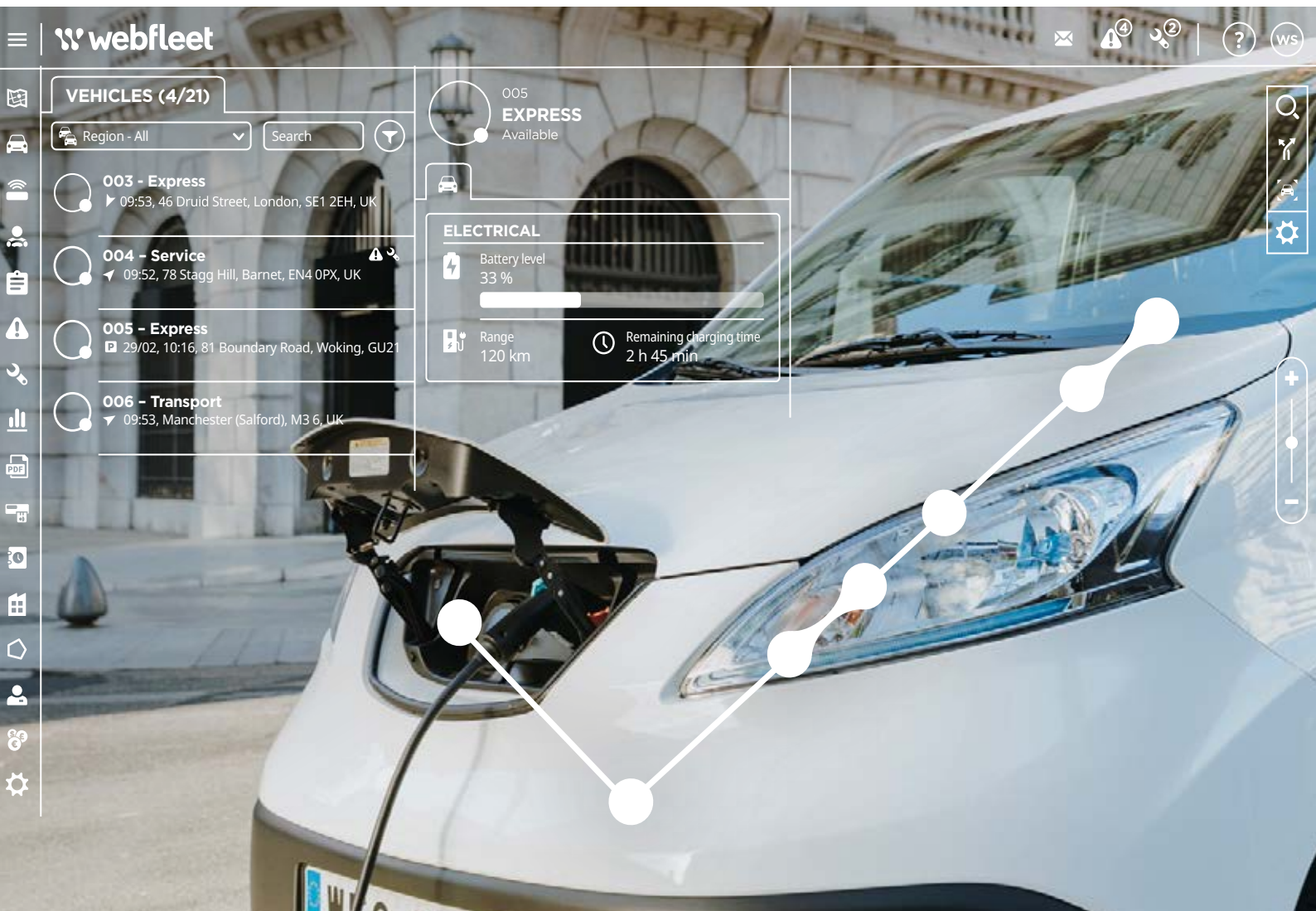




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# DELIVERING DECARBONISATION



**David Wells OBE**

Chief Executive, Logistics UK

## Welcome

The logistics sector currently stands at a pivotal point in its evolution. It has had to grapple with some seismic shocks over the past few years – Brexit, the COVID-19 pandemic, and an acute skills shortage to name but three. But arguably the most pressing and profound challenge of all is the need to decarbonise at pace. I believe it is only by collaborating across industry sectors, and by working with government and academia, that we can meet this challenge and achieve net zero.

When the government published its *Transport Decarbonisation Plan (TDP)* last summer, it heralded a revolution in the industry, outlining a strategy for decarbonisation that was as comprehensive as it was ambitious. Just a few months later, the UK hosted the 2021 United Nations Climate Change Conference in Glasgow, commonly known as COP26.

The direction of travel for our industry is clear, and one year on from the publication of the TDP there is an increasing sense of urgency in our sector. The deadlines for phasing out the sale of new fossil fuel commercial vehicles loom ever closer, with the nearest deadline – for petrol and diesel vans – being fewer than eight years away.

In May this year, Logistics UK published its own report – *Decarbonising Logistics* – in part to help inform our members' decision making when looking to decarbonise their operations. While significant progress has already been made, we in no way underestimate the mammoth scale of the challenge.

However, by engaging with government, industry and academia, the route to net zero is an objective that I believe is ultimately achievable.

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**Beverley Wise**

*Regional Director for Webfleet, UK and Ireland.*

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★ [www.webfleet.com](http://www.webfleet.com)



**Clare Bottle**

*Chief Executive of the UK Warehousing Association*

We all recognise the need to make logistics more sustainable, but it can be tempting to focus exclusively on decarbonising transport, because that's where the carbon footprint is heaviest. Warehousing is important too. Firstly, there is an obvious link between warehouse location, network design and transport mileage, so good planning policy is an essential part of going green. Secondly, operational investments can have a lasting impact, so initiatives such

as the electrification of MHE fleets and adoption of energy efficient lighting reduce the overall environmental impact of logistics. Additionally, as our new report shows, unless we install more solar panels on warehouse rooftops, the future power demands of both warehousing and transport will be put at risk.

★ [www.ukwa.org.uk](http://www.ukwa.org.uk)



**David Yorke**

*Market Development Manager, Ballard Europe*

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**David Almazán**

Bridgestone's Commercial  
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# Delivering Decarbonisation

**A thought leadership event for senior business leaders within the logistics industry.**

Bringing together some of the most knowledgeable and influential logistics professionals, Delivering Decarbonisation explores the roadmap to net zero and discusses plans, initiatives and projects currently in place to help businesses in progressing their decarbonisation journey

From energy networks to DNOs to depots, how can you futureproof your net zero strategy?

**Find out more: [www.logistics.org.uk/dd22](http://www.logistics.org.uk/dd22)**

**Date: Tuesday 22nd November**  
**Location: Congress Centre, London WC1B 3LS**

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# Decarbonising logistics

In July 2021, Logistics UK launched its *Route to Net Zero* member commitment as part of its wider campaign to promote the actions happening across the sector to decarbonise. As well as future opportunities, the *Route to Net Zero* campaign aims to highlight the barriers and challenges the logistics industry faces on its journey to net zero and influence government policies to support the sector. The launch coincided with the government's own *Transport Decarbonisation Plan* being published in the same month. Since then, the UK has hosted COP26, and technology continues to move at pace to find the right decarbonisation solutions for logistics operators. In this article, Logistics UK considers these developments and the findings from its latest report, *Decarbonising Logistics: The journey to net zero*.



**Michelle Gardner**

Head of Public Policy,  
Logistics UK

## LOGISTICS UK MEMBERS PLEDGE TO DECARBONISE

Since the launch of the *Route to Net Zero* commitment, interest has been growing among members keen to pledge to decarbonise their operations as quickly and as effectively as possible to help speed up the UK's path to net zero by 2050. Members that have made the commitment now represent a vast array of companies involved in logistics across all modes and disciplines, including UPS, DHL UK, John Lewis Partnership, Wincanton, Scottish Water, and the Royal Borough of Greenwich, as the sector unites to drive forward the decarbonisation of the UK economy.

Logistics UK is delighted to see so many companies now focussed on the steps that need to be taken to reduce emissions in the short, medium and long term. The commitment and campaign aims to help support our wider membership on this journey; case studies from signatories help highlight learnings and things to consider for other businesses, while a *Route to Net Zero* information hub is now featured on the Logistics UK website, and a policy manifesto outlines what support is needed from government.

## ASSESSING PROGRESS AND THE CHALLENGE AHEAD

Logistics UK recognises the pathway to net zero is challenging for many of our members, as some of the technology solutions required are still being developed, there is uncertainty around how the supporting infrastructure required for all transport modes will be developed and the future of fiscal incentives to help with the investment needed by businesses. These challenges are all explored in Logistics UK's new report, *Decarbonising Logistics: The journey to net zero*.

The report assesses current progress by the sector against the UK government's policy framework and looks in detail at the government's policy direction, fiscal incentives, relevant technology and infrastructure developments, and test projects, in addition to the sector's progress to date in response. The report also highlights the priorities if the industry's decarbonisation journey is to be achieved and make net zero a reality.

## THE NEED FOR A REGULATORY REVIEW

There are many opportunities and challenges across the logistics sector to decarbonise and the route to achieving that target will vary across businesses depending on fleet



sizes, and the type of vehicles used. One key issue yet to be solved is that zero emission technologies for road vehicles – particularly battery electric – will be heavier than the current petrol or diesel vehicles operating on the UK's roads. This will challenge operators to lose payload – and therefore may require fleets to increase their number of vehicles – or result in increased regulatory requirements; this is likely to be of particular significance at the current 3.5 tonnes threshold. As a result, Logistics UK is urging government to explore appropriate regulatory thresholds for zero emission commercial vehicles, particularly as these vehicles increasingly become 'the norm'. However, this change will have to be balanced against road safety risks inherent with increases in gross vehicle weight, which existing regulatory thresholds are intended to mitigate; safety must remain a top priority for all road users.

#### **THE PATH TO DECARBONISING HGVs**

Owing to their size, HGVs are much more complicated to decarbonise, with cost-effective and commercially scalable alternative technologies still being sought. And while Logistics UK is pleased with government's £200 million investment to continue its zero-emission HGV trials – which will play a crucial role in identifying the right technological solutions to be used by industry – the correct supporting infrastructure, including cost-effective, nationwide refuelling networks and sufficient power supply must be in place for these vehicles to offer commercially viable alternatives to diesel HGVs.

High acquisition costs of alternatively fuelled vehicles remain a significant barrier for businesses, alongside refuelling and recharging infrastructure. Charge points

for plug-in vehicles are being rolled out rapidly but more focus is needed on the requirements for commercial vehicles. Logistics depots and sites require sufficient electricity capacity to achieve rapid fleet recharging, while employees who need to take their vehicles home must also not be forgotten.

While technology development continues for zero tailpipe emission HGVs, future proofing energy infrastructure for these vehicles will avoid additional costs and delays. Government must also fully incentivise the use of low carbon fuels – such as Hydrotreated Vegetable Oil (HVO) and biomethane – which offer significant emissions reductions immediately and are already being adopted by operators.

#### **MORE CLARITY, MORE QUICKLY**

The UK's legally binding target to achieve net zero by 2050 will drive unprecedented change in the logistics sector as it transitions away from fossil fuels. With a year now passed since the publication of the *Transport Decarbonisation Plan*, we welcome the focus from government on reducing transport emissions but the feedback from our members is there is still much work to be done.

While our industry is working hard to make significant changes to the way it operates, the scale of the task should not be underestimated, with businesses needing long-term policies and confidence to invest in lower emitting alternatives. Through our Regional Freight Councils, we continue to gather valuable feedback on what is happening on the ground from members, and we will continue to work with government to ensure solutions for the most efficient and effective transition to net zero are sought. ■

**FOR MORE  
INFORMATION**  
★ [www.logistics.org.uk/environment](http://www.logistics.org.uk/environment)



# The view from academia



**Julian Allen**

*University of Westminster  
and the Centre for  
Sustainable Road Freight*

**An academic researcher who has specialised in freight and logistics for more than 30 years, Julian Allen's route into the topic was almost accidental. Following a stint working at his local council, he returned to the University of Westminster, where his prize-winning dissertation on transport led to a month's work, which has somehow turned into more than three decades of research on the topic.**

## **JOINING THE CENTRE FOR SUSTAINABLE ROAD FREIGHT**

As well as working at the University of Westminster's Architecture and Cities faculty, Allen is also a senior researcher at the Centre for Sustainable Road Freight (SRF – <https://www.csrf.ac.uk>), a joint research centre between Westminster, Heriot-Watt and Cambridge Universities.

"I wasn't involved in the first Centre for Sustainable Road Freight project, but I've been involved in its second incarnation, since Maja [Piecnyk] joined from Heriot-Watt," Allen said, "My particular area is very much about freight operations and the efficiency of those operations."

In 2016, Maja Piecnyk joined the University of Westminster as a Professor of Logistics from Heriot-Watt University. When the SRF project got refunded for a second round in 2018, the University of Westminster became a full member. Each university has a specific role – Heriot-Watt is involved in the agent-based modelling, Cambridge is involved in the

vehicle engineering and Westminster is operational, interfacing with policy makers and producing policy briefings for industry and policy makers.

## **ACCESSING A DIFFERENT SET OF SKILLS AND EXPERTISE**

While Allen says that the work Westminster did was always quite applied, involving industrial partners, joining SRF has given him and his university colleagues access to a whole different group of people, including the vehicle engineering world, to which he was not previously close.

"We always had links with industry through the university and our research, but SRF has helped move us into a different world," he said.

## **FOCUS ON URBAN LOGISTICS**

One of Allen's major research interests is in urban freight transport. Does he think this area represents the low-hanging fruit for decarbonising logistics?



“If we look at areas where decarbonisation is taking place within road freight transport, then there’s much greater opportunity when you’re looking at shorter distances and smaller vehicles,” he said, “We can already go out and purchase electric vehicles at the lighter end of the fleet.”

There remain many challenges, however. For example, operators looking to recharge large fleets of EVs overnight within a depot environment may have to upgrade their energy supply depending on grid capacity. There is also a current shortage of public chargepoints for vans requiring a charge during the working day and those kept at home overnight where the driver has no off-street parking facility. In addition, some chargepoints are poorly designed and inaccessible to larger vans.

The urban area also has the congestion challenge, including the availability of the kerbside, which is becoming a more contested and competed for space.

### TRANSPORT DECARBONISATION PLAN

One year on from the publication of the government’s Transport Decarbonisation Plan, how much progress does Allen think has been made towards some of the targets, most notably the target to end the sale of new petrol and diesel vans by 2030?

“Obviously now the target’s been put in place, more vehicles are coming on stream that an operator could consider and purchase,” he said.

But in terms of the support that the industry needs, he thinks that has been less well thought through.

“Some of the work we’ve been doing recently is looking particularly at small and medium sized operators and the challenges that they face,” Allen said, “And I don’t think that’s a topic that the policy makers have got to grips with very well.”

While policy makers have been having discussions with representatives of larger operators, the plight of smaller operators, with their wafer-thin margins and sparse capital resources, has not been well addressed, Allen believes.

On infrastructure, even larger operators with sizeable depots may face challenges switching to electric vans, a process that can be problematic and hugely expensive.

For all the talk of electrifying vans, Allen said that only 1% of the UK’s current van parc is fuelled by electricity.

“We’ve got four million vans and roughly 1% have managed to make the switch to date, so there’s a huge challenge to meet there,” he said, “Obviously, it’s ending the sale of new vehicles so people could continue to operate fossil fuel vans for some time.”

### POWERING THE NEXT GENERATION OF TRUCKS

The government has set an ambitious target to phase out non zero-emission trucks up to 26 tonnes by 2035 and those over 26 tonnes by 2040. How realistic does Allen think that target is?

“At the moment we’re still in a discussion about the most suitable fuel source for HGVs and the availability of the technology, so depending on who you speak to we’re

still discussing should it be hydrogen, should it be large batteries, should it be an electric overhead catenary with a hybrid on board?”

If Allen had to choose one of those possible future fuel sources, which would he pick? Surprisingly he opts for the electric road system of overhead catenaries, often seen as something of an outlier in the debate on zero emission technologies.

This is a technology that would require a considerable level of political will and support from government, however. Professor David Cebon, the Director of SRF, is a major proponent of this approach, mainly owing to its energy efficiency.

“Compare the energy efficiency of [the overhead catenary system] approach with batteries, which would have to be very large and heavy, and hugely expensive, or with hydrogen where the cost of making green hydrogen at scale is substantial,” Allen argued, “In terms of energy efficiency, the best outcome would be to use an overhead catenary system, but it obviously does have these infrastructure challenges. It would need DfT to get behind that and decide that it was the way forward.”

Siemens have been trialling the overhead catenary system over several kilometres of highway in Germany and there have been similar trials in Scandinavia.

“All of these technologies have got their challenges and difficulties so none of them are easy,” Allen said, “So I think in terms of the longer heavy vehicles there’s no straightforward solution, it’s much more complicated than

### JULIAN ALLEN

Julian Allen’s research has varied over time, although always focusing on logistics. He started off in the early 1990s on a two-year project on biomass fuels and the logistics and transportation of them. He then became involved in EU projects on vehicle telematics, vans and servicing activity, which he said often got overlooked in the freight discussion at the time. Following the public’s widespread adoption of the internet in the late 1990s, he began to start researching the growing trend of online shopping.

When the Mayor of London’s office was established in 2000, the University of Westminster helped Transport for London (TfL) establish a freight unit. Helping TfL understand the topic better, the university set up a data and knowledge data centre with them, producing an annual freight data report. Westminster also helped TfL with various policy initiatives, including work on urban consolidation, the Olympics and the Low Emission Zone.

Between 2016 and 2019, the university got involved in a project that was also funded by the Engineering Physical Research Council, called Freight Traffic Control 2050 ([www.ftc2050.com](http://www.ftc2050.com)), which was all about parcel operations in urban areas and how the parcel sector could meet the 2050 decarbonisation challenge.

vans operating over short distances, but in terms of energy efficiency and cost, that overhead system looks viable.”

One of the big challenges the overhead catenary system faces will be securing the necessary planning and infrastructure expenditure to get it put in place in the first instance. It is a debate that looks set to run for some time as DfT has commissioned some feasibility studies that are nearing completion. The plan is to move forwards to actual demonstration trials, where DfT will look at all three options and watch them functioning in a real-world setting.

“After that, they’re going to have to make a decision on the future,” Allen said, “because until they do most of the manufacturers and operators are not really going to scale up any kind of operation.”

### THE TROUBLE WITH HYDROGEN

At the moment there is a consortium that is supporting the transition of vehicles to hydrogen, with plans for 10 to 15 fuelling stations.

“For it to be viable across the country you probably need several hundred fuelling stations but most wouldn’t want to make that investment until they knew that that was the chosen technology,” Allen said, “Until somebody in the system, presumably the policy makers, take certain decisions there’s going to be a holding back of capital investment and infrastructure development.”

But is it government’s job to pick winners, or should they remain technology agnostic? Many in government and industry believe that these decisions are best left to the market.

“To an extent, but if you leave that to the market it’s not clear that you’ll get a definite outcome by the timescale required,” Allen said.

While he argues that the electric catenary system is more energy efficient than hydrogen and much lower cost than battery electric, he does concede that it has one major drawback – the necessity to secure the political will and support.

“For the electric catenary system it would definitely need someone to make a decision, ie government, to order that this infrastructure work was necessary and would be supported, so it’s got that as its major barrier.”

### HYBRID POTENTIAL

This summer Tevva, a relatively new entrant to vehicle manufacturing, launched its battery electric truck with a hydrogen range extender. Does Allen think this type of hybrid zero emission technology will have a part to play in the drive to develop zero emission HGVs?

“A lot of it will depend on the type of operation,” he said, “I did some work not that long ago looking at the construction sector. When you start looking at quarries and quite remote locations then clearly they are a different sort of challenge to HGVs that just go up and down the motorway network. For those you’re clearly going to have to have something like hydrogen or some sort of hybrid that could take you off the networks for

substantial distances. I think they’re all going to have a part to play in some way.”

However, when you look at all road freight, about three quarters of the energy is taking place on those long-distance HGV movements, the vast majority of which take place on the motorway network.

“That’s the main target and focus of the decarbonisation challenge,” Allen said, “and then it’s trying to come up with solutions to all the other operations that operate away from or off that network.”

### THE ROAD TO NET ZERO

The government has set a goal to reach net zero by 2050, and transport has a large role to play in meeting that target. From what Allen knows, does he think this is achievable for the freight transport sector?

“A lot of what we’ve had so far is target setting, much less in terms of the mechanisms that are going to help to get us there,” he said.

While it’s one thing to set a target, it’s another to put in place measures to facilitate and support that. Allen remains optimistic that there will be progress, however.

“Even with those targets, clearly we’re going to move more towards a decarbonised freight world, but the speed at which we move I think is going to be very related to the extent to which policymakers would work with industry to try to put in place solutions that are affordable that work for different types of operation.”

The solution, he argues, is for more dialogue and joint working between the public and private sectors, including operators, vehicle manufacturers and other stakeholders.

“Decarbonisation is underway and will continue to happen,” he concluded. “I think meeting that target is very dependent on the extent to which these different stakeholders work together and the extent to which measures are put in place by government to help and support it.” ■

### FOR MORE INFORMATION

★ [www.csr.ac.uk](http://www.csr.ac.uk)

# Fleet goals in focus

**Beverley Wise, Regional Director for Webfleet UK and Ireland, explains why a fleet's investment in telematics means an investment in a safer, greener and more profitable future.**



**Beverley Wise**

*Regional Director for  
Webfleet, UK and Ireland*

In the world of fleet transport, safety, sustainability, business performance and data insights can be likened to four peas in a 'mutually beneficial' pod – they have a symbiotic relationship.

Bridgestone and Webfleet's *Keener to be Greener* study recently found that sustainability was considered the top business priority by fleet decision-makers, cited by 45% of those surveyed. Digitisation, driver safety and cost reduction trailed in its wake on the priority league table.

In truth, however, these business objectives should not be viewed as mutually exclusive.

Safer fleet motoring calls for smoother driving inputs, heightened anticipation of traffic conditions and effective vehicle maintenance. And these elements are equally important for reducing fuel consumption and associated carbon emissions.

Similarly, by transitioning to electric vehicles (EVs), fleets are not only decarbonising, they're helping raise the safety bar. EVs are believed to promote more cautious driving habits, while the weight and location of EV batteries means a low centre of gravity that benefits handling. EV batteries themselves, housed in tough casings, are also considered to pose less of a fire risk than traditional fuel tank systems.

Moreover, inertia on risk and sustainability, caused by concerns over the bottom-line impact of implementing technology and initiatives, can prove short sighted.

Greener driving translates to savings on fuel and SMR, while investments in EVs mean significantly lower whole-life running costs.

## **ACTION STATIONS: DATA SIGNPOSTS THE ROAD TO SUCCESS**

Data insights are the catalyst for safer, greener and more cost-effective fleet operations.

Advanced fleet management solutions, such as Webfleet, can deliver a range of real time performance intelligence, from data on speeding and idling to harsh steering or braking. Furthermore, they can empower drivers to make changes to their driving style by providing in-vehicle coaching.

A fleet's carbon footprint can be monitored with information available for every vehicle and journey, while dedicated EV management tools now offer insights to ease the electric

transition and support the ongoing operation of electric fleets – minimising cost and optimising performance.

Using EV solutions, fleet managers can access information on real time battery levels, remaining driving ranges and energy usage, alongside insights into charging processes and vehicle charge levels.

The value of connected EV insights to help inform and educate was recently highlighted by our own participation in the 2022 GB EV Rally. Webfleet performance and energy consumption data enabled our team's drivers – tackling the journey from John O'Groats to Land's End in a Nissan e-NV200 – to achieve an impressive 3.9 mile per kWh and a 160-mile range on the motorways en route.

As we look to the future, actionable data from solutions such as Webfleet that educates and informs will be increasingly upheld as sacrosanct by fleets, helping deliver on their most pressing strategic goals.

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# The £45 billion hole



**Thomas Adcock**

Head of Tax, Carter Backer Winter LLP

**As the sale of new petrol and diesel cars and vans is to be phased out in 2030, what will the implications be for the Treasury's coffers in terms of dwindling Fuel Duty and VAT receipts?**

According to Thomas Adcock, Head of Tax at Carter Backer Winter LLP (CBW), a top 60 firm of accountants, tax and business advisors based in the City of London, government will have to consider some radical solutions. So how much does he think the Treasury will lose?

"It loses £45 billion a year," he said, "But that's on old numbers."

Since the cost of fuel started to rocket in the wake of the Russian invasion of Ukraine earlier this year, this number has increased considerably.

"From a tax perspective that leaves a huge hole," Adcock said.

It is still marginally cheaper to tax electric or hybrid vehicles, and Adcock argues that they still carry a raft of benefits, although these are dwindling for company cars. Zero emission vehicles attract the most favourable tax treatment.

## PLUGGING THE PROJECTED DEFICIT

How will government manage to recoup the lost tax take as more vehicles move to zero emissions? Government has floated a number of ideas, Adcock said, chief among them a form of road charging, where motorists pay to drive on particular roads at particular times of day. However, he believes that asking motorists to accept the equivalent of a 'black box' in their car is likely to meet considerable resistance.

Road charging has been widely discussed in government circles for a long time, according to Adcock. "Initially it was aimed at reducing congestion and improving the environment," he said, "So they were looking from a green agenda perspective."

Now the government is looking at it as a financial imperative. Adcock believes it is unlikely that electricity will be taxed more, owing to its multiplicity of domestic and business uses.

"You're not going to pay more to keep your fridge on just because someone drives an electric vehicle. That isn't going to happen," he said, "They need to come up with a different strategy and road pricing is one of them."

Toll roads may be difficult to introduce from a political perspective, and installing cameras and barriers, not to mention policing the system, will be expensive.



### SYNTHETIC SOLUTIONS

A much easier alternative, Adcock believes, is synthetic fuels. “These are coming and may solve the problem, because they will bridge the gap. It will make sure that you’ve still got the same amount of tax take on fuel, if it’s priced in the same way.”

Stefan Domenicali, the current CEO of Formula One Group, persuaded Volkswagen Group to join Formula One on the basis that it will switch to synthetic fuels from 2026 with new engine dynamics.

“The whole point of Formula One is to weaponise development and that’s what they’re trying to achieve,” Adcock said, “The reality is that not everyone in the world will drive electric cars. They’re too expensive. So if we want a more global solution, synthetic fuels may be a part of it.”

Synthetic fuels may well postpone the demise of the internal combustion engine, but many commentators argue that they are just a bridging tool, similar to biofuels, before zero emission solutions become economically viable.

Given the scarcity of the rare minerals needed to make electric batteries, however, Adcock believes that synthetic fuels represent a solution that could last a very long time.

### TAXING ROAD MILES

Other potential solutions to the £45 billion hole in government finances would be to massively inflate road tax

### THOMAS ADCOCK – A TAXING CAREER

Thomas Adcock has spent his entire professional career in tax. Following graduation he joined HM Revenue & Customs as a corporate tax inspector, investigating companies and their directors when it was suspected they had done something wrong.

After four years, he was recruited by a small firm called Blackstone Franks where he worked with Robert Maas, a renowned tax author, speaker and commentator who also has the distinction of winning the lifetime achievement for taxation from LexisNexis, twice.

Maas’ view was that Adcock should not restrict himself to corporate tax, but to learn all aspects of taxation so that he could offer a more rounded service to the firm’s clients.

“I foolishly, perhaps, accepted the challenge, and worked very hard to try to pick up as much as I could from him and from others,” Adcock said.

Blackstone Franks then merged with Carter Backer Winter LLP (CBW) about nine years ago, and an original tax team of four has now grown to 20.

So what does Adcock’s role entail? “I advise clients from all over the world, so that’s private individuals, trusts, corporate structures, whoever you can think of, on how to navigate the UK tax system,” he said simply.

to run into the thousands or to increase licensing costs, so that motorists would have to pay a certain amount to drive on British roads at certain times of the day.

“I suspect road charging will be the answer,” Adcock said, “But it penalises people that use motorways as much as it does people who do local journeys. That just won’t work, the system will crash. So that is a challenge, the government is going to have to come up with a solution.”

**INCENTIVES AND INFRASTRUCTURE**

The problem, Adcock believes, is that government has incentivised electric vehicles to such an extent, that until recently the tax position was rated at the 0% band.

Now, however, government support appears to be tapering off. It recently announced that it would be ending the plug-in grant for cars, although not for vans. Similarly, the Electric Vehicle Homecharge Scheme used to support up to 75% of the cost of installing a chargepoint at your home. Now, unless you live in a rental or leasehold property, you have to pay for the full installation.

“That’s the direction of travel we’re seeing from government,” Adcock said, “They’ve incentivised early adopters but now they’re seeing electric vehicles go past diesel sales.”

**CLEAN AIR ZONES**

Within cities, Adcock believes that Clean Air Zones (CAZs), Ultra Low Emission Zones (ULEZs) and Zero Emission Zones (ZEVs) will proliferate and introduce progressively stricter emission criteria in order to charge more and more vehicles.

At the moment, for example, the cars he owns meet the conditions for the London ULEZ, so he will not have to pay it, but he foresees that changing in the near future as an ever growing number of vehicles fall into the net.

Now that the Mayor of London is consulting to expand the ULEZ to cover the whole of Greater London by the summer of 2023, Adcock believes that it is here for the medium to long term.

“I can’t see it going anywhere because it collects a lot of cash, presumably because people won’t or can’t change their vehicles. And a lot of people can’t and that’s a horrible situation.”

However, this type of charge will only impact on motorists that journey into city centres.

“It’s a Birmingham, London, Manchester thing, it’s not going to affect you if you live in Norfolk. Tax always aims to be fair. It isn’t, it’s not even close. But it does have this pretence to try to be fair.”

**ROAD CHARGING**

Road charging will work, Adcock believes, if people are charged the same for similar sorts of journeys. It may even be that those using the road network at peak times are charged more, much like rail commuters are currently. How that would impact on van or HGV drivers remains unclear, however.

Monitoring is another consideration. While people are used to seeing CCTV cameras in cities, it would not be practical or desirable to install them on every country road.

“Are you really going to put cameras all along country roads? That seems a bit silly and as for the black box idea, I think people are fairly uncomfortable that Big Brother will know exactly where they are at all times. So that may well not work.”

Adcock does not believe that any government minister currently has a solution for how it will raise the £45 billion a year, and suspects that they may be gambling on the fact that they will not be in office by the time it presents itself as a problem.

“The alternative is that you don’t look at taxing people to use the roads at all,” he said, “You look at alternative ways to raise the £45 billion by increasing Income Tax and reducing benefits.”

**MAKING THE TRANSITION**

In terms of the tax implications, what would Adcock’s advice be to logistics operators planning to transition to electric vehicles?

“Do it immediately,” he said, “The benefits are massive. The cost of running a fleet of EVs is nominal compared to the cost of running a diesel fleet. And even if fuel comes down to £1.30 a litre it doesn’t matter. The cost of an EV at the moment is so cheap. So for today and the next five years, I don’t think it will change. I think that’s going to be the answer for that period of time.”

Given the accelerated pace of development, however, Adcock cautions that electric vans bought now may not retain their value in four or five years’ time as well as petrol or diesel vans, as the second hand market for EVs is still in its infancy.

It may be better, he argued, to accept high-mileage electric vans as wasted assets after five years, and advertise them as such in your company’s accounts.

“I’d also get the orders in early, as early as you possibly can because that’s one of the biggest issues that people are facing,” he said, “I can’t see the government changing cap allowances on EVs any time soon. I think we’re still going to get loads of lease buying.”

**THE IMPORTANCE OF GOOD GOVERNANCE**

On a wider point, Adcock said that there was an increasing emphasis being placed on a company’s ESG – environmental, social and corporate governance.

“If you look at the environment and your customers and suppliers, I think there may be some changes to the way we approach things,” he said, “so the fact that you are a full EV business as a logistics company, I think that could have some real positive benefits down the road.”

Even if the government does not reward you for going green, your customers or suppliers might. ■

**FOR MORE INFORMATION**  
★ [www.cbw.co.uk/services/tax/](http://www.cbw.co.uk/services/tax/)

# Fuel cell power for sustainable trucks

**As GHG emissions from essential trucking applications like freight and logistics increase at a faster rate than any other sector, market-ready solutions for zero-emission trucks are now a key priority. For fleet operators looking to decarbonise operations, the power and range of fuel cells is becoming an increasingly attractive option.**

A fuel cell truck is an electric truck incorporating both a fuel cell system and batteries, working seamlessly together to provide efficient zero-emission power. They offer the functional advantages of legacy diesel, while also delivering the benefits of electrification – including, importantly, zero tailpipe emissions. Fuel cell electric (FCE) trucks have the potential to provide a full-service solution, delivering electric powertrains and hydrogen fuel cells with lower life-time costs for the operator without compromising on performance and payload.

FCE trucks using hydrogen from renewable sources can successfully meet the demanding decarbonisation and performance requirements for heavy-duty vehicles. FCE trucks possess the power to maintain speed on challenging routes, offer extended range and fast refuelling; and have high energy density to maximise freight capacity – ensuring high truck utilisation with scalable infrastructure.

Proving itself in more than 2,200 FCE trucks deployed in China, Europe and North America, Ballard's proven technology is already powering multiple delivery truck fleets, as well as mining, refuse collection and hybrid trucks. In heavy-duty motive applications, Ballard's proton exchange membrane (PEM) fuel cell technology and products have now powered FCEVs for a cumulative total of more than 100 million kilometres on roads around the globe.

Addressing the specific power requirements of heavy-duty and long-haul trucks, Ballard has partnered with MAHLE, a leading automotive Tier 1, to develop a new fuel cell engine platform that is optimised for vehicle performance.

The new platform is the foundation for fuel cell systems with extended power outputs from 180kW to 360kW – targeting 19-tonne trucks and heavier models – serving the needs of long-haul freight trucks that require more power and longer range. The Ballard and MAHLE partnership is a development programme that will continue to refine fuel cell engines over a multi-year timeframe – ensuring that

the green alternative fuel will be the lowest total cost of ownership (TCO) solution for heavy-duty trucks within the next decade.

The platform's first 120kW concept fuel cell engine will be showcased in German zero-emission commercial vehicle OEM Quantron AG's new 44t fuel cell truck, which will premiere at IAA Transportation 2022 in Hanover in September. Featuring a range up to 700km, Quantron's first heavy-duty truck will be available from the second half of 2023.

As part of the partnership, Ballard will integrate high power fuel cell engines into Quantron's electric drivetrain and vehicles, initially focusing on a 7.5t delivery truck, 44t heavy-duty truck and a refuse collection truck.



**David Yorke**

Market Development  
Manager, Ballard Europe

**FOR MORE  
INFORMATION**  
★ [www.ballard.com](http://www.ballard.com)



# Fuelling change



**Martin Flach**

Independent Automotive  
Consultant

## ADVICE

★ More from martin.  
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Last year, I wrote a piece for *Logistics Magazine's Decarbonising Transport* supplement about the alternatives available to operators wanting to run cleaner vehicles. Since then, we have had COP26 and numerous government announcements all promising that by 2050 the UK will be carbon net zero. Cars sold after 2030 will have to be zero emission and looking at the latest SMMT registrations, this year over 20% of vehicles are either battery electric or plug in hybrid. Light commercial vehicles are following with just over 5% being electric. The rapid acceptance of the market to EVs suggests that these market segments are on track for 2030.

### HGV OPERATORS MUST PLAN FOR THE FUTURE

For trucks, we now have the government announcement that non zero emission vehicles up to 26t will not be permitted to be sold after 2035 and heavier vehicle after 2040. Between now and then most fleets will have gone through three or four complete replacement cycles so vehicles purchased over the next few years will be long gone. The question for most operators will be: how do I plan for the future? Will battery electric or overhead catenary electric or hydrogen fuel cell be the best technology for me?

### ONE SIZE NO LONGER FITS ALL

Distribution vehicles running in city centres will need to become zero tailpipe emissions to address air quality issues whilst vehicles doing long distance on motorways or predominantly operating in rural areas need to be working towards net zero carbon. This implies that the one size fits all approach we have enjoyed for many years with diesel cannot be the way forward.

So, what can a responsible fleet do in the short to medium term?

### URBAN LOGISTICS

If you are running a distribution operation in the urban environment, the picture has improved slightly over the last year with more Battery Electric Light Commercial Vehicles (LCVs) available from Original Equipment Manufacturers (OEMs). Prices are still high, government subsidy is still low, and the business case for using them is still frequently negative. The issue being that distribution vehicles often don't use enough fuel for the operating costs to balance out the additional capital costs. The current volatility of fuel and electricity prices is not helping either. In London, the Congestion

Charge exemption is a great help and increasingly there will be zero emission zones where an EV is the only effective option.

### FEW OPTIONS AVAILABLE FOR MEDIUM TRUCKS

The OEMs seem very slow off the mark with medium truck EVs with only the Fuso eCanter being available. Products are available from Electra and Tevva based on glider chassis from OEMs. There are also two new entrants to the market with Arrival and Volta both promising much to come. Tevva is also offering a hydrogen fuel cell range extender version.

### ECONOMICS FOR HEAVIER TRUCKS HARD TO JUSTIFY

For heavy trucks the picture is a little better with Renault/Volvo, DAF, Scania and Mercedes having products running with operators and MAN, Iveco/Nikola being available soon. These all benefit from the GVW derogation that enables up to one tonne additional GVW at 18 and 26 tonnes although this doesn't apply to 44t artics. The economics of these vehicles are difficult to justify with high capital cost and government subsidy totally inadequate for this sector of the market.

Those operators running longer distances will find the challenges greater. There is a lot of hype but, as yet, virtually no products available to purchase.

### HERE AND NOW TECHNOLOGY

The only "here and now" technology that can replace diesel is natural gas. Despite products being available from Iveco, Scania and Volvo that are proving to be not only better for the environment but also better for the bottom line, take up is still very modest. This is partly due to the limited number of gas filling stations leading to nervousness for fleets but more due to the inherent conservatism of the industry in general. Nobody has been fired for buying diesel vehicles, so why change and take risk?

### TRANSITIONAL TECHNOLOGIES

Both diesel and natural gas vehicles can significantly reduce carbon emissions by using biofuels. Biomethane is widely available from most suppliers. For biodiesel, Euro VI engines generally require second generation fuels such as Hydrotreated Vegetable Oil (HVO) or gas-





to-liquids (GTL) where availability is limited, and price can be an issue.

In the *Transport Decarbonisation Plan*, the Department for Transport (DfT) is backing electric and hydrogen for freight transport. Today there is no mainstream product available to purchase with either of these technologies for long distance work.

### CHALLENGES AND SOLUTIONS

With 13 years for new vehicles up to 26t and 18 years for new vehicles over 26t to become zero emission, I am sure that the OEMs will be able to create technical solutions to the challenges. The real challenges in my mind are around the commercial viability of zero emission vehicles in an industry noted for low margins. This could lead to a massive boom in diesel vehicle sales in the run up to phase outs and diesel operators being able to undercut those running zero emission vehicles.

### INFRASTRUCTURE INSIGHTS

The other main challenge will be the infrastructure for recharging EVs. Today public recharging points are useless for 3.5t vans as the size of the parking bar is too small and frequently they are designed for a front charging location. Consequently the cables are not long enough to reach the side of the van! Just imagine trying to use one of these with a 26t rigid yet alone an artic!

The other issue I foresee for infrastructure will be finding companies wanting to build infrastructure for electric or hydrogen in the more remote parts of the country. The potential use will be low and the return on the investment will be poor. This could lead to a potential for the take up of zero emission vehicles being at one pace in the centre of the country and much slower elsewhere.

Last year, I concluded that I am optimistic that battery electric solutions are available for the distribution market and we just need improvements to their commercial viability. For long distance, we still have a lack of viable solutions and for now operators can only look to biofuels to improve their carbon footprint. Hopefully next time I review the situation there will be more positive news. ■

### MARTIN FLACH

An electrical and electronic engineering graduate, Martin Flach has held a number of positions within the commercial vehicle industry. His career began with Ford Motor Company (Truck Division). Following the merger of Iveco and Ford (Truck Division) he joined Iveco Ford Truck in 1986 and remained with Iveco after the formation of Iveco Ltd in 2003.

Following more than 40 years in the commercial vehicle business, Flach retired from his role as Alternative Fuels Director Iveco a few years ago and is now working as a consultant to like-minded companies in the alternative fuels sector.



# Multimodal matters



**Alexandra Herdman**

Public Policy Manager,  
Logistics UK

**Modal shift has a critical role to play in decarbonising logistics. While road movements will always be required, modal shift can play an important role when considering net zero targets.**



## RAIL

Rail freight contributes to the UK economy in a safe, efficient and environmentally friendly way. Alleviating congestion on our roads, rail takes 2.9 million lorry journeys off the road each year, an average of 8,000 per day. One freight train can do the job of 76 HGVs, reducing emissions and congestion and improving air quality across the UK.

As the newly created Great British Railways (GBR) consults on a rail freight growth target, the focus is very much on increasing freight across the network. The current modal share for rail averages 9.8%. Scotland already has a freight growth target of 7.5% by 2024.

Particularly beneficial for heavy aggregates, one freight train can transport enough materials to build 30 houses.

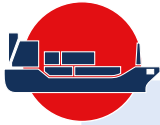
To support rail freight growth, line improvements such as those on the Transpennine Mainline and HS2 will release capacity and allow more freight trains onto the network.

To increase decarbonisation, electrification of the network is required. Electrification of the rail network is ongoing; to meet the 2050 net zero target, Network Rail will have to electrify the network at an estimate of at least 450km per year.

Research into alternative technologies for heavy freight trains, such as hydrogen, is underway. Access to the rail network is important for the rail freight industry as it will enable more deliveries to take place by rail and improve efficiency overall.

★ [www.logistics.org.uk/rail](http://www.logistics.org.uk/rail)





## WATER

Ninety per cent of goods coming into the UK arrive by sea and 15% of domestic freight is moved by water.

Although difficult to decarbonise, shipping offers a lower emission freight option. A commercial water vessel can carry up to 1,500 tonnes of goods, which is equivalent to 75 HGVs. A barge fully loaded with aggregate can replace the job of 17 HGVs, and waterborne freight on the River Thames reduces HGV journeys in the capital by around 200,000 per year.

Port and intermodal connectivity is key when considering decarbonisation. The International Maritime Organization (IMO) (the UN agency for maritime) has adopted mandatory measures to reduce emissions of greenhouse gases from international shipping by 50% by 2050.

With excellent maritime facilities nationwide, ensuring ports and wharves have good road and rail connections can support environmental goals and regional development. With more effective government support to promote modal shift, and policy frameworks that protect and expand our inland waterway freight infrastructure, these water-based modes could grow even further and reduce pressure on our congested roads, working towards decarbonising the logistics sector. Unfortunately, domestic water freight has declined in recent years.

Maritime 2050, the government's strategy to reduce emissions from the maritime sector, plans for zero emission vessels to be ubiquitous by 2050.



★ [www.logistics.org.uk/water](http://www.logistics.org.uk/water)



## AIR

Air freight accounts for 40% of UK imports and exports by value, is an enabler for global Britain and is vital to the economy. Air freight is key for time-sensitive express deliveries for higher-value products such as electronics, machine parts and pharmaceuticals. Pre-pandemic, 70% of air freight was moved in the bellyhold of passenger aircraft. This dipped during the pandemic, but is rising again with passenger numbers.

Aviation is incredibly energy intensive, and therefore hard to decarbonise, but with innovation and new technologies, there is scope for significant emissions savings. As airlines upgrade their fleets, new planes are much more fuel efficient, which could reduce emissions by 37% by 2050. The use of biofuels is on the increase and a mandate on sustainable aviation fuel (SAF) production is expected in 2025. Use of SAF, which is a drop in fuel, is estimated to reduce emissions by as much as 70%. Ground operations are moving towards becoming carbon neutral and a consultation on setting a target to decarbonise emissions from airport operations by 2040 is due shortly.

★ [www.logistics.org.uk/air](http://www.logistics.org.uk/air)



The UK government has put innovation, research and development high on its agenda, with several funds such as Green Aviation, and the Future Flight Challenge, to develop greener and more sustainable ways to fly, as well as funds to develop SAF.

The industry is constantly addressing environmental concerns and using innovative solutions to decrease waiting times for planes through digital platforms, making operations more efficient.

Air emissions at a global level are governed through the UN agency for aviation, the International Civil Aviation Organization (ICAO), which has developed the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to achieve its aim of carbon neutral growth.

# A brighter future for warehousing

**The warehousing sector will play a major role in the UK's drive towards net zero emissions by 2050. A new report from the UK Warehousing Association (UKWA) on Solar PV is set to top the green agenda for warehousing, says CEO Clare Bottle.**

Conversations about Green Logistics are often limited to decarbonising road transport, but whilst that's hugely important, there is much more to it. Lighting and temperature control remain relevant and there are lots more ways to make our supply chains increasingly environmentally friendly.

The built environment is a critical source of carbon emissions, so warehouse developers are progressively striving to achieve BREEAM ratings of Excellent or even Outstanding. For new buildings, this has become the norm, which is important because today's structures will still be operational in 2050, when a legally binding commitment requires the UK to negate all its carbon emissions and reach net zero.

But what about the thousands of existing warehouse facilities?

About 10% of all warehousing is chilled or frozen – this is the most energy intensive part of the sector. Our friends at the Cold Chain Federation recommend maximising efficiency by deploying optimal refrigeration equipment, reducing heat gains and using sensors for sophisticated monitoring and control.

Many warehouses have already adopted much more efficient forms of lighting, including using natural light where it's available, modern LED lights and even sensors which reduce lux levels or turn lights off, according to what is needed. Carbon savings of up to 90% can be achieved with the latest technologies and UKWA has several Associate Members who can provide expert guidance and more, to help businesses improve their warehouse lighting.

Another factor is the operational move towards automation, which has seen an increase in battery-charged robots as well as companies switching to battery-operated counter-balance trucks, driving up demand for a green electricity supply as well as more charging points.

Warehouses will need sufficient energy supply to keep the wheels of transport turning too and renewables are certain to be part of the solution.

UKWA's newly formed Advisory Board on Energy and Net Zero is leading on 'going green' and we have commissioned a ground-breaking new study on barriers to adoption of solar photovoltaic panels on warehouse rooftops – currently thought to cover a mere 5% of buildings – and we will be taking our policy messages to the heart of government with a House of Lords reception in October 2022.

There are further exciting developments to come from UKWA too. It would be wrong to overlook the opportunity to decarbonise your warehouse, there's a revolution coming and we are at the heart of it.

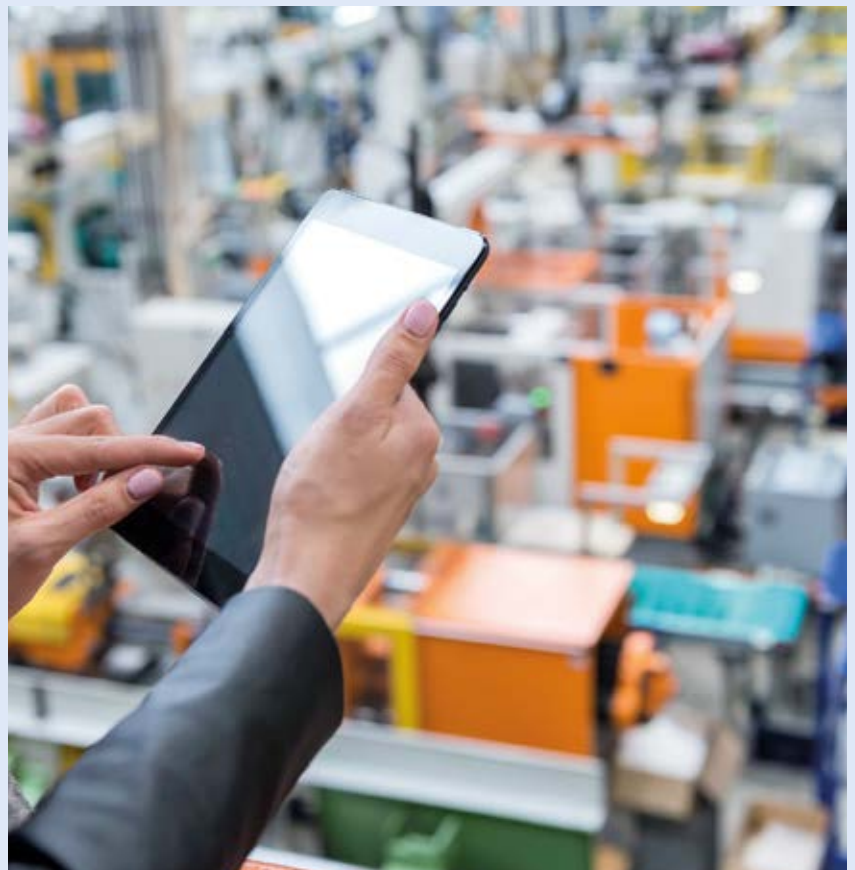


**Clare Bottle**

*Chief Executive of the UK Warehousing Association*

**FOR MORE INFORMATION**

★ [www.ukwa.org.uk](http://www.ukwa.org.uk)





# Do you operate warehousing?

Decarbonisation isn't just about transport. It's about warehousing too.

At the UK Warehousing Association, we provide members with expert advice and practical support to improve sustainability and save on energy consumption.

- Smart auto-controlled LED lighting
- Electrification of MHE
- Renewable energy solutions
- Robotics & automation

To control costs and reduce carbon in your warehouse, join us and enjoy a wide range of benefits, including access to our ground-breaking research into solar PV for warehouses, best practice guides and thought leadership from our UK Energy & Net Zero Advisory Board.

**Keen to go green?  
Join UKWA now.**



[WWW.UKWA.ORG.UK](http://WWW.UKWA.ORG.UK)

**UKWA**  
The Voice of The UK Logistics Industry

# Urban air quality



A number of UK cities have implemented Clean Air Zones (CAZs) and Low Emission Zones (LEZs) with several more to follow over the coming months and years. The aim of these schemes is to improve air quality and achieve legally-binding targets. Logistics UK's position is to ensure that they are introduced in a consistent way to avoid a patchwork of different regulations and that support is provided for those who have the least means to replace vehicles, such as small businesses and operators of high-value, low mileage specialist vehicles.

## SPEEDING UP URBAN FLEET REPLACEMENT

The introduction of CAZs has the effect of speeding up the fleet replacement cycle of operators that make frequent deliveries to the cities where the zones are being implemented. Euro VI HGVs already made up nearly two-thirds of the UK fleet by the end of 2021, and it is predicted that by the end of this year, Euro VI vehicles will account for 72% of the total number of vehicles, and that number is predicted to rise to 78% by the end of 2022, reaching 80.2% by the end of 2023 and 88.4% by the end of 2024.

## ENVIRONMENTAL IMPROVEMENTS TO SLOW

These predictions are likely to change as there are some mitigating factors such as uncertain economic conditions following the COVID-19 pandemic and Brexit, along with the global shortage of semiconductors which are needed for a wide range of manufactured goods including vehicle production.

However, the environmental improvements driven by Clean Air Zones will begin to slow as the fleet moves to lower-emission vehicles. This would suggest that local authorities may need to consider additional – and potentially more punitive – policies to continue driving emissions reductions.

## MITIGATION MEASURES

For that reason, Logistics UK is calling for a raft of mitigation measures, such as tackling congestion by reviewing road layouts and traffic signals, improved traffic management, retiming deliveries outside of peak hours by relaxing delivery curfews, and supporting businesses in their switch from fossil-fuelled vehicles through a comprehensive and equitable charging and refuelling network.

CAZs are now in place in Bath, Birmingham and Portsmouth with Bradford and Bristol's schemes going live in the autumn and several more cities are planning to implement their zones in the coming months and years.

## GOVERNMENT FRAMEWORK

The Department for Environment, Food and Rural Affairs (Defra) has set up a framework for CAZs in England:

<b>Class A</b>	Buses, coaches, taxis and PHVs
<b>Class B</b>	Buses, coaches, taxis, PHVs and HGVs
<b>Class C</b>	Buses, coaches, taxis, PHVs, HGVs and vans
<b>Class D</b>	Buses, coaches, taxis, PHVs, HGVs, vans and cars

### CAPITAL PLANS

Transport for London (TfL) tightened up the London-wide LEZ to Euro VI for HGVs in March 2021 and in October 2021 the Central London Ultra Low Emission Zone (ULEZ) was expanded out to (but not including) the North and South Circulars for all vehicles on 25 October 2021. TfL is proposing to expand the ULEZ out to the whole of Greater London in August 2023. London is also considering the future of road pricing in the capital with the aim of replacing all current schemes, including the LEZ, ULEZ and the Congestion Charge with a single road user charge by the end of the decade. Logistics UK is calling for any local road user charging scheme to recognise the essential need for freight and to dovetail into any national road user charging scheme that may be developed.

### INDICATIVE TIMESCALES

Other cities have given indicative timescales to introduce their CAZs but these are yet to be confirmed by government. These include Tyneside, where Newcastle and Gateshead councils have put forward plans to government to launch a CAZ later this year. They are proposing to initially issue warning letters to non-compliant vehicles entering the zone and provide details about financial support packages. Charges would be introduced in January 2023 for HGVs, buses and taxis, whereas non-compliant vans would be given until July 2023. This is in response to the challenges in the automotive supply chain and the fact that the introduction date for Euro 6 in new vans was more than two and a half years later than for HGVs.

Greater Manchester's scheme is currently under review, having originally planned to be introduced in May 2022. They submitted a new business case to the government in July 2022 proposing an investment-led, non-charging approach.

In England, non-compliant vehicles can still access the zones by paying a daily charge. The charges vary from £8 to £12.50 for vans and cars to £50 to £100 for HGVs. Fleets can check the compliance status of vehicles on the government's checking service (<https://www.gov.uk/clean-air-zones>). To check the status or pay charges for a number of vehicles, fleets will need to set up an account which they can do via the same link.

### SINGLE CHARGE PORTAL FOR ENGLAND

Through our continuing engagement with the government's Joint Air Quality Unit (JAQU), Logistics UK has campaigned for a single charging portal for all CAZs in England, to avoid the need for operators to register their fleet with each city individually. However, the system does not have the autopay functionality that businesses will be familiar

with for existing schemes such as London's ULEZ or the Dartford Crossing charge (Dart Charge). Instead, fleet operators need to manually report each non-compliant vehicle's entry into a CAZ to avoid being fined. Logistics UK has voiced concerns to ministers, that this lack of autopay functionality will result in increased bureaucracy for industry. We continue to campaign for a single, integrated payment portal, with an autopay facility, for all government charges, so an operator need only register a vehicle once for all charging schemes.

### SCOTLAND TAKES A DIFFERENT APPROACH

Whilst non-compliant vehicles in England can pay a daily charge to access CAZs, the Scottish Government has taken a different approach with its LEZs. Diesel vehicles which do not meet the Euro VI/6 standard and pre-Euro 4 petrol vehicles are banned from accessing Scottish LEZs. However, the Scottish framework requires cities to implement grace periods to phase compliance which has to last at least a year from the scheme's introduction. Glasgow, Edinburgh, Dundee and Aberdeen's schemes are all in operation, with enforcement starting in June 2023 in Glasgow and a year later for the other three cities.

The Scottish Government has also taken a different approach to Penalty Charge Notices (PCNs). Operators of non-compliant vehicles detected in a Scottish LEZ will face an initial PCN charge of £60, reduced by 50% if it is paid within 14 days; a surcharge will apply where a subsequent breach of the rules is detected within 90 days. PCNs will be capped at £480 for cars and light goods vehicles and £960 for buses and HGVs. If the driver of the vehicle doesn't breach the rules within the 90 days, the surcharge rate is reset to the initial charge of £60.

### ZERO EMISSION ZONES

Some cities such as Oxford have gone beyond Euro VI/6 and set up Zero Emission Zones (ZEZ). Logistics UK believes that it is simply too soon to introduce such schemes and instead the focus should be on supporting and enabling the uptake of zero-tailpipe emission vehicles, for example by ensuring charging and refuelling infrastructure is in place. Oxford's ZEZ pilot was introduced in February 2022 and charges vehicles which are not zero-emission for using key city centre streets during the day, with the level of the charge dependent on how polluting the vehicle is. A larger zone covering most of Oxford city centre is proposed, subject to further public consultation, for 2023.

### FAST-CHANGING PICTURE

The implementation plans for CAZs in the UK are a fast-changing picture. While some zones face delays, or long consultation periods, others are nearing a decision point. To capture this changing landscape, each month Logistics UK updates its members-only CAZ briefing document ([www.logistics.org.uk/cazbriefingnote](http://www.logistics.org.uk/cazbriefingnote)), which covers both its position on urban air quality restrictions and up-to-date information on all the zones in development. ■



**Natalie Chapman**

Head of Policy – South,  
Logistics UK

### FOR MORE INFORMATION

★ [www.logistics.org.uk/urban](http://www.logistics.org.uk/urban)



# Environmental Champion of the Year

“Evri has put together a practical plan that offers environmental benefits today and opportunities to build upon these in the future.”

## Judges' comment

**Evri, formerly Hermes, is the UK's leading consumer delivery specialist handling more than 245 million parcels each year. Evri provides a range of flexible and affordable delivery options to home, work, neighbour, safe place or ParcelShop that are convenient for the consumer and fit within their increasingly busy lifestyles.**

**Within the UK, Evri operates a network of over 10,000 couriers and over 4,500 ParcelShops. Evri works with a wide range of leading high street, catalogue and online retailers in the UK including Next Directory, ASOS, Tesco, John Lewis, Debenhams and Arcadia Group.**

Recognising the impact of its supply chain on the environment, sustainability is at the forefront of Evri's operating model. To improve environmental performance, the company added more CNG (Compressed Natural Gas) vehicles to its fleet in 2020, taking the total to 90 CNG tractor units. It is also trialling a 12-tonne CNG vehicle – an industry first – and operates a fleet of fully electric vans within London's Low Emission Zone. Evri's targets are ambitious: the company plans to achieve year-on-year reductions in CO<sub>2</sub> at parcel level by 5% and to be carbon neutral within its infrastructure by 2030.

The rapid expansion of vehicles using alternative fuels has significantly reduced the company's CO<sub>2</sub> emissions. In 2020, its alternative fuels fleet achieved a reduction in CO<sub>2</sub> emissions of 8,410,742kg versus a comparable diesel fleet. The use of telematics has also reduced CO<sub>2</sub> emissions by an estimated 4,806,073kg.

For trunking, Evri uses a CNG-powered fleet as an alternative to diesel. The business placed the largest ever initial order of CNG tractor units in the UK, making it first to market in the parcel delivery sector. It currently has 90 tractor units

and is expanding this by a further 70 this year – around 50% of the company's core hub tractor fleet.

The company's Gemini site operates with 100% electric vehicles to service final-mile deliveries in central London. Its 32-van fleet delivers an average 6,500 parcels per day, rising to 11,000 daily during peak. In its ParcelShop network, it has committed to upgrading its fleet, and has just placed an order for 168 zero-emission electric vehicles – around 50% of the fleet.

In terms of its buildings, Evri's 270,000 square foot Rugby Hub incorporates transparent roof sections for natural daylight, LED lighting and rainwater harvesting.

Evri's Hemel Hempstead depot site has its whole-life carbon impact officially certified by The Planet Mark, which includes solar panels, charging points and transparent roofing sections.

Meanwhile, for its forthcoming ISO 14001-accredited hub at Barnsley, Evri is planning to include CNG fuel on site, and solar panels to help achieve its aim of 40% renewable electricity. ■

**CONTACT**  
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# Cut your fleet's costs. Keep performing



**David Almazán**

*Bridgestone's Commercial  
Business Unit Director*

**Bridgestone prides itself on being a flag-bearer for decarbonisation. The company firmly believes that it has a responsibility to support the realisation of a sustainable society. The foundations are already being laid to become a business that future generations of children can rely on.**

Bridgestone is underlining its commitment to the realisation of a sustainable society by unveiling its E8 company framework.

The "Bridgestone E8 Commitment" consists of eight values starting with the letter "E" (Energy, Ecology, Efficiency, Extension, Economy, Emotion, Ease and Empowerment), which the company will commit to creating, together with employees, society, its partners and customers. They include the creation of a carbon neutral mobility society, advancing tyre technologies and solutions, and inspiring excitement and spreading joy to the world of mobility.

Using this as the axis to drive management while earning the trust of future generations, we will commit to supporting the realisation of a sustainable society by co-creating value with employees, society, our partners and customers.

In the commercial mobility world, a number of new products and solutions are already combining to align with its E8 commitment.

## FLEETCARE

Fleetcare combines Bridgestone's best-in-class tyre range and tyre management solutions with fleet management solutions from Webfleet, Europe's number one telematics solution for fleets. It offers both tyre and fleet management solutions with integrated and connected data and reporting available under one agreement and delivered by one single partner. Thanks to the use of combined tyre and vehicle data, Fleetcare provides smarter and more predictive maintenance solutions, resulting in optimised performance and increased convenience.

## PREMIUM TYRES

The Ecopia H002 is a fuel efficient tyre engineered to help long haul fleet operations cut their operational costs and CO<sub>2</sub> emissions, while the Duravis R002 is designed to help fleets lower their operational costs by significantly reducing cost per kilometre through outstanding wear performance and optimised fuel efficiency. Designed for the versatility segment, the tyres are available to all types of on-road fleet operation and deliver outstanding wet grip.

Both products are fully in line with demanding EU legislations, notably in terms of CO<sub>2</sub> emissions and noise and are

traceable with electronic tagging system RFID (radio-frequency identification), adding value to customers looking to benefit from connectivity and predictive maintenance on the roads.

## RETREAD

Bridgestone's unwavering investment in its retread products has maintained the company's position as leaders in the sector.

Commercial businesses are looking for sustainable solutions, with fleets placing a heavier emphasis on being 'greener', with their corporate and social policies evolving as a result. This is where Bridgestone's retread offering comes into its own.

Generally in the marketplace, there is a move towards the lowest total cost of ownership of product, combined with increasing awareness of the need for a more sustainable and circular economy where recycling is standard.

Bridgestone is fully committed in this regard, and a sustainable future fits with our company ethos, where retread is a core environmental policy.

## FOR MORE INFORMATION

★ [www.bridgestone.co.uk/](http://www.bridgestone.co.uk/)





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# GROUNDBREAKING

## BOOSTED WEAR PERFORMANCE

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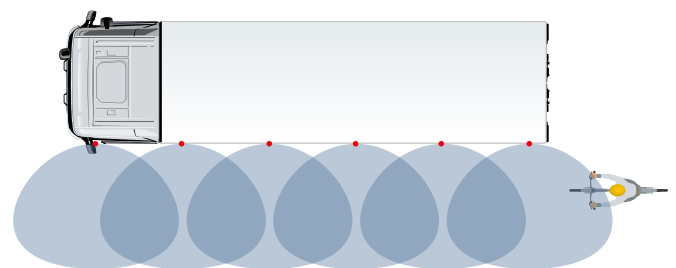


**Brigade's Sidescan®Predict is the next generation of side-detection sensor system, designed for collision avoidance between vehicles, objects and vulnerable road users.**

Utilising ultrasonic technology, this intelligent system predicts if a collision is likely to occur and alerts the driver by a visual and/or audible warning, depending on the severity of the calculation.

## **Sidescan®Predict**

- Differentiates between stationary and moving objects
- Data such as vehicle speed, wheel position and the speed and direction of a VRU feeds an algorithm to calculate the risk of a collision
- System in constant operation below 20mph/32kmh, with or without the indicators activated
- Detection area extends up to 2.5m from side of vehicle
- Designed and developed by Brigade



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