

# **Alternative Fuels**





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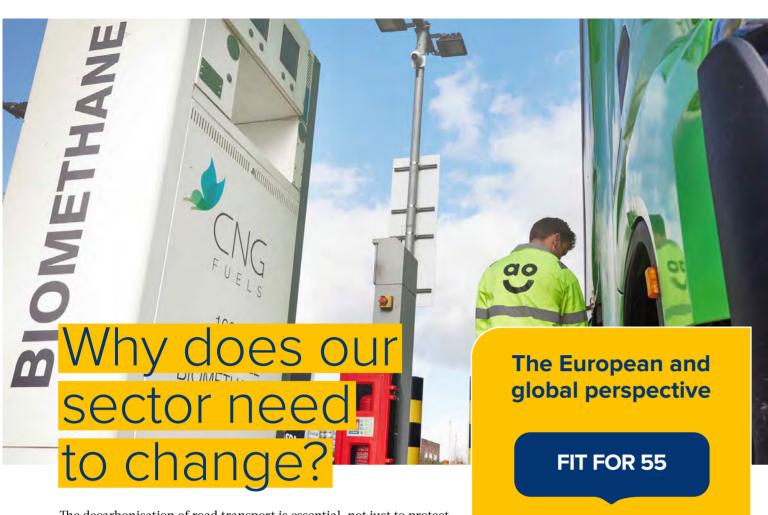
aced with the major challenge of combatting climate change, road transport must reinvent itself. Today, our sector contributes a quarter of greenhouse gas emissions in Europe, and given the commitments taken to achieve carbon neutrality by 2050, we must work together to accelerate our industry's decarbonisation ambitions.

I'm delighted to say that Fraikin is already well ahead of the curve on this front, in fact, we deployed our first electric vehicle into a customer fleet as far back as 2008. Since then, we've continued to pioneer alternative fuels, successfully placing a variety of different driveline technologies into customer fleets across the UK.

In this booklet, we set out to underline the solutions we can offer to both new and existing customers that are considering a switch to alternative fuel vehicles for their fleets. We aim to showcase the independent expertise, knowledge and support available from our expert teams, helping you to choose the right option for your specific requirements.

Peter Backhouse
Chief Executive Officer, Fraikin UK

Alternative Fuels



The decarbonisation of road transport is essential, not just to protect the climate, but for the betterment of the health of everyone in society. Today, road transport is responsible for more than 91% of total transport emissions in the UK, with vans, light and heavy commercial vehicles accounting for 35% of that total. This means our industry has a key part to play in limiting the damage done to our environment.

Of particular focus for regulatory authorities is limiting the emission of particulate matter (PM), nitrogen oxides (NOx) and greenhouse gases (GHGs), all of which contribute significantly to global warming and decrease air quality. To increase sustainability across the industry, we must look toward gradually reducing the number of fossil-fuelled vehicles on our roads, replacing them with alternative drivetrain options, ideally powered through renewable energy sources.

Road transport is responsible for

> 91%

of the UK's total transport emissions.<sup>(1)</sup> As part of the European Green Deal – Fit for 55 – the EU has set itself a binding target of achieving climate neutrality by 2050, with a goal to cut emissions by at least 55% by 2030.

Transport accounts for 25% of greenhouse gas emissions in the EU, so the goal of Fit for 55 is to build the necessary infrastructure to significantly increase the use of alternative fuelled vehicles.

### **COP 26 – GLASGOW 2021**

Governments worldwide declared that they would work towards all sales of new cars and vans being zero emission by 2040 or earlier, and by no later than 2035 in leading markets.

## On the UK's Road to Zero

In 2018, the UK government released its Road to Zero strategy, a detailed document outlining how it intends to reduce transport emissions – with the following proposed timeline:

2025

HGV greenhouse gas emissions reduced by 15% versus 2015 figures

2030

Up to 40% of new vans sold to be ultra low emission and sales of conventional diesel and petrol vans and cars to end

2040

Most new vehicles sold must have some zero-emission capability and all new vehicles built will be emission-free

2050

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



Low emission vehicle =



# The UK's Clean Air Zones

To help improve air quality for residents an array of clean air, low emission and ultra low emission zones are already or will soon be operating in towns and cities across the UK. For commercial vehicle operators, keeping track of what regulations apply where and when can be daunting.

There are four types of clean air zones in the UK, Class A to D. Most UK cities have opted to implement Class D – this targets buses, coaches, taxis, private hire vehicles, HGVs and vans, though some cities are considering other Classes moving forward.

Class	Vehicle Type			
Α	Buses, coaches, taxis, private hire vehicles			
В	Buses, coaches, taxis, private hire vehicles, HGVs			
С	Buses, coaches, taxis, private hire vehicles, HGVs, vans, minibuses			
D	Buses, coaches, taxis, private hire vehicles, HGVs, vans, minibuses, cars (the local authority has the option to include motorcycles)			

For all types, the minimum emission standards for vehicles are as follows, with non-compliant vehicles generally subject to charge.

Vehicle Type	Clean Air Zone Minimum Standard			
Buses, coaches, HGVs	Euro VI			
Vans, minibuses, taxis, private hire vehicles, cars	Euro 6 (diesel) and Euro 4 (petrol)			
Motorcycles	Euro 3			

 $(1) https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/984685/transport-and-environment-statistics-2021.pdf$ 

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## Winter 2022 Clean Air Zone update

City	Update	Zone Type	Daily Charge		
Aberdeen	LEZ now active, charges effective as of June 2024	Class D	All vehicles: £60		
Bath	LEZ now active	Class C	HGVs, buses and coaches: £100 (reduced to £9 if registered with the council)  Taxis, vans: £9		
Birmingham	LEZ now active	Class D	HGVs, buses and coaches: £50  Cars, taxis and LCVs: £8		
Bradford	LEZ now active	Class C	HGVs, buses and coaches: £50  Taxis: £7  LCVs and minibuses: £9		
Bristol	LEZ now active	Class D	HGVs, buses and coaches: £100  Cars, taxis and LCVs: £9		
Dundee	LEZ now active, charges effective as of May 2024	Class D	All vehicles: £60		
Edinburgh	LEZ now active, charges effective as of June 2024	Class D	All vehicles: £60		
Glasgow	Buses subject to LEZ. All other vehicles to be included in future	Class D	All vehicles: £60		
Greater Manchester	LEZ to be introduced	Class C	HGVs, buses and coaches: £60 LCVs: £10 Taxis: £7.50		
London	ULEZ active	ULEZ	HGVs, buses and coaches: £100  Vans, LCVs and taxis: £12.50		
Newcastle and Gateshead	LEZ now active	Class C	HGVS, buses and coaches: £100 LCVs and taxis: £7.50		
Oxford	LEZ now active	Zero Emissions Zone	All vehicles: £2, £4 or £10 depending on vehicle emission level		
Portsmouth	LEZ now active	Class B	HGVs, buses and coaches: £50  Taxis: £10		
Sheffield	LEZ to be introduced	Class C	HGVs, buses and coaches: £50 LCVs and taxis: £10		



All details are correct at time of going to print - December 2022

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# How to start your fleet transition

Before you welcome any new vehicles to your fleet it is vital to properly assess all the available powertrain technologies to understand which best fits your bespoke operational needs. Considering factors such as your location, daily mileage, fleet utilisation and any local clean air regulations will provide a basic plan that you can discuss in greater detail with your Fraikin account manager.

To help shape your fleet strategy to alternative fuels, you may wish to consider some of the points below on the road to making that decision, then talk to Fraikin about discovering the answers:

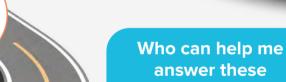
our transition?

How can we finance

- What government grants, subsidies and schemes are available?
- Are there any private sector schemes you can access?
- Are there any opportunities to collaborate with strategic partners?
- Will long-term total cost of ownership gains provide a return on investment in good time?
- Will it mean passing on costs to customers, will they accept this?







#### answer these questions?

#### Why do we want our fleet to go 'green'?

- Sustainability/Environmental: To decarbonise your fleet operations and/or reduce noise pollution
- Regulatory: To ensure you're in a position to meet any current, or future, regulations
- Commercial: To give you a competitive edge or improve brand image
- Strategic: A move driven by wider CSR policies or at the request of your customers

How would new powertrain technology fit into our operation?

- What is the average distance your vehicle(s) travel each day?
- What types of roads or routes do you primarily operate?
- Are your vehicles subject to clean air zone regulations?
- What additional ancillary equipment do you use? Tail lifts, cranes, tippers, refrigeration?

How will we recharge refuel our vehicles?

- Are there any public charging/ refuelling stations available nearby or on your regular routes?
- How quickly do your vehicles need to be turned around?
- Do you have the space to install recharging infrastructure on your premises?
- What permissions would you require to progress those installations?

What else should we consider?

- Will your drivers and/or technicians require additional training to operate these new vehicles?
- How will upcoming and proposed regulations change the market?
- What can you do with your existing assets?

Fraikin can. We can guide you along the road, using our extensive experience to provide insight and advice at every turn.

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# Which alternative fuel could work for us?

The automotive industry is considering a broad array of powertrain technologies in its quest to decarbonise, with each capable of helping the sector improve its emissions footprint if deployed appropriately. However, understanding which technology best suits your needs can be a tricky task, especially as no two operators are the same. However, as the table below outlines, some technologies are better suited to certain operating environments than others.

	FUEL TYPE	URBAN	REGIONAL	MIXED	NATIONAL & INTERNATIONAL	WHAT ENVIRONME	ENTAL ASSETS?	CONSIDERATIONS	
					CO2 emissions compared to diesel  PM emissions compared to diesel				
<b>3</b>	BIODIESEL	****	****	****	***	-60% TO -90%	-80%	The installation of a biodiesel tank on your site is mandatory	
<b>(</b>	CNG/LNG					-15%			
<b>(</b> )	BIOCNG/BIOLNG	***	**** ***	***	****	**	-80%	-90%	Are there nearby fuelling stations you are able to use?
						4000		Recharging infrastructure – where will	
Ø	ELECTRIC	****	**	***	*	-100% (*dependent on the electricity source)	-100%	they charge?  Do you need rapid recharge capacity?	
								Recharging infrastructure – where will they charge?	
	HYBRID	**** *** ***	****	* **	NC	NC	Do you need rapid recharge capacity?		
	HYDROGEN	***	***	***	***	-100%	-100%	Refuelling infrastructure - where will they refuel?	

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<sup>★</sup> Very unsuitable ★★ Unsuitable ★★★ Moderately suitable ★★★★ Quite suitable ★★★★ Perfectly suitable Overall rating taking into account different elements such as TCO and vehicle range. Source: Panorama of alternative energies, Fraikin 2021

#### From emissions monitoring to carbon offsetting, Fraikin is ready and waiting with expert advice and technology to help refine your decarbonisation efforts

#### **MYSMARTFLEET**

Telematics is the most effective option for monitoring vehicle CO<sub>2</sub> emissions. With My Smart Fleet, together we can begin to understand how, where and when you use your vehicles to build appropriate and effective measures to reduce your fuel consumption and carbon footprint.

STAGE



Through Fraikin Business customers bespoke consultancy services to build a competitive package to best suit your company's specific needs.



With Fraikin's My Route, operators can to reduce empty miles and, by extension, extend fuel consumption and reduce vehicle emissions.

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STAGE

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STAGE

MYPLANET BY FRAIKIN

Through Fraikin's partnership with WeNow, our customers can access UN-certified carbon reduction and sequestration projects to offset the carbon emitted by their vehicle fleet.



From CNG heavy-duty trucks to battery electric LCVs, Fraikin is constantly monitoring the latest alternative fuel technologies to ensure you have access to a diverse range of modern vehicle options.

**FRAIKIN** SAFETY ACADEMY

To maximise your new vehicles' environmental potential, Fraikin offers dedicated training programmes to ensure your drivers and staff can work with new technologies with

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# Fraikin Business Solutions



Across the Fraikin Group, we have already supplied more than 1,500 vehicles operating across the full range of the alternative fuel options, of all types and sizes. We delivered our first electric vehicle into a customer fleet in 2008, building unrivalled experience and knowledge of how our industry is evolving.

Fraikin Business Solutions is a package that not only helps customers make the move into alternative fuels; it also provides comprehensive support for all other aspects of operating your new commercial vehicles.



Questions
to Colin Melvin,
Commercial Director,
Fraikin UK



# Alongside our industry-leading understanding of the alternative fuel market, Fraikin Business Solutions:

Provides support and advice to all customers from initial conversations through to operational support once your vehicles take to the road

Delivers a full range of contract hire, rental or fleet management options

Uses our long-standing relationships with manufacturers and other suppliers to deliver all vehicle types, makes and models

Supplies each vehicle with cutting-edge telematics and connected technologies, allowing us to use the data collected to perform comprehensive fleet performance analysis

Offers full scheduled maintenance, emergency repair and roadside assistance from our service partners and dedicated mobile technicians

Delivers 24/7 customer support through our dedicated centralised call centre



#### How do you approach the move to alternative fuels?

The internal combustion engine (ICE) has been the cornerstone of our industry for almost a century, and we're acutely aware that for many of our customers diesel will still be their first consideration when looking at new vehicles.

However, it is now plainly clear that if we are to win the battle against climate change and meet the decarbonisation targets set both nationally and internationally, we must prepare for the transition to new, greener powertrain technologies.

For many operators, we understand that this move is a daunting prospect and that they have genuine and understandable concerns over how this transition could impact their business.

At Fraikin, we've made clear commitments to continue investing in new products, to develop our expertise and to keep our finger on the industry's pulse, helping to ensure we can give old and new customers the best possible

advice on alternative fuel technologies, guiding them to make the best decision for their operation.

# What role does Fraikin play in its customers' transition?

We've made a concerted effort to get to grips with the emerging powertrain technologies as soon as possible, a mantra that saw us supply our first electric vehicle more than a decade ago. Since then, we've continued liaising with manufacturers, local and national authorities and other industry stakeholders to build a deep understanding of the latest industry trends.

Those efforts mean our customers can rest assured that we sit as a genuine source of current, accurate information. At Fraikin, we have adopted a completely agnostic position regarding the technology recommendations we make. Faced with the vast field of possibilities, customers can call on our expertise, we see ourselves as integral partners on the journey, from the consulting phase right through to deployment.

#### What support can you give to fleet managers?

To ensure we have a global view of this ecosystem, at Group level we created Fraikin Business Solutions to provide dedicated support for customers looking to transition to greener energy.

Part of our role is to ensure we keep a close eye on all technological and regulatory developments, promote the discourse on alternative energies and support customers when they decide to make that move.

From the outset our team will be proactive with both new and existing customers, addressing the subject of potential new drivetrain options from the first conversation. With the support of Fraikin Lab, our international vehicle, product and service evaluation laboratory, and our wellestablished relationships with bodybuilders and manufacturers, we can ensure any vehicle joining your fleet meets your exact requirements.

If you want to make the move to a greener future, simply talk to Fraikin!

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#### Whatever you need, Fraikin is eager to help you not just meet, but exceed your CSR goals











Eco-driving training



Support for carbon offsetting Alternative fuel vehicles

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