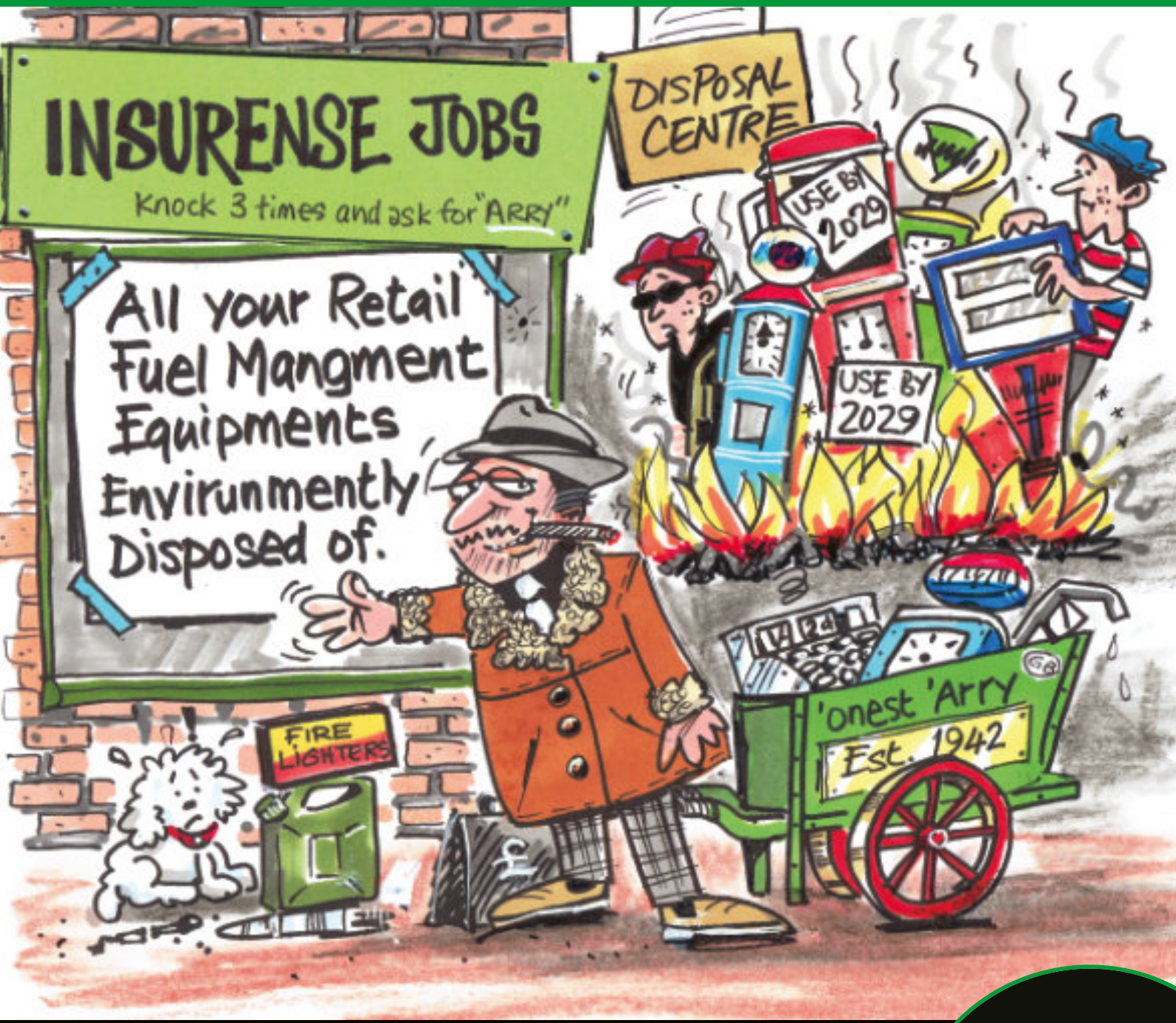
Summer 2023

ISSUE No.99

Insite

Insite is the official magazine of PEIMF+



PEIMF+
The future of fuel and energy services

In this issue :

- AdBlue products
- Importance of insurance
- Environmental services
- Retail fuel management
- What does AI mean for you?
- Rainwater harvesting

RECYCLE THIS WRAPPER
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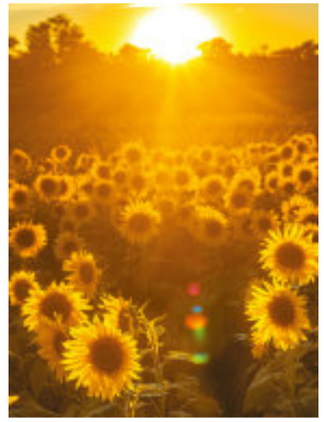
The sun has (hopefully) got his hat on



Hope the sun's shining (within reason of course) wherever you are when you pick up this latest issue of INSITE.

How scary is Ai?

When the head of Google Ai resigns, because even he's worried about the consequences of developments, what chance for the rest of us? Mark Truman of EdgePetrol outlines how he sees Ai possibly affecting our industry – including an interview with ChatGBT (who apparently will not be taking over the world!) See page 26.

Honesty should always be the best policy. Jacquie Davies, Managing Director of Hytek, is very candid regarding their situation on page 16.

Rainwater harvesting; read what Tuffa tanks have to say about how this can help contribute to us dealing with global warming.

Phil Monger provides a round-up of technical issues affecting the industry on page 5, plus we cover key industry topics in our editorial features: environmental issues, insurance cover, AdBlue services and retail fuel management technology. So lots for you to be getting stuck into.

Our always popular supplement, The Green Pages, fills the middle 8 pages of this edition and is always well worth a read.

Out and about

PEIMF+ exhibited at the recent UKIFDA event in Coventry, and many members either shared the stand or came along on the day. The new branding (PEIMF+) has gone down very well and seems universally accepted – which is great to hear.

We will be showing our face throughout the year, culminating with APEALive in November.

So I hope you enjoy this copy of INSITE. Have a great summer and I hope you get the chance to enjoy some sunshine (fingers crossed).

All the best

David Honeyman, Editor

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Front cover illustration
Brian Sage

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The Green Pages
New Fuels Guide

8 pages packed with specialist information on new fuel technologies

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PEIMF+

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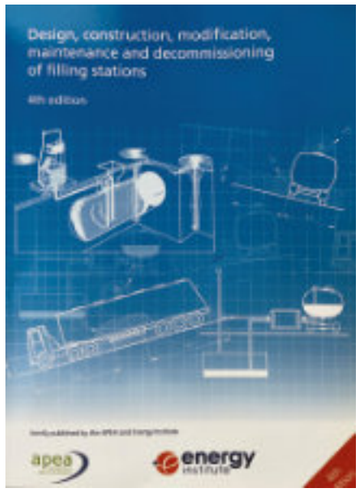
Technical update

Blue Book review



The first few months of 2023 has seen a lot of activity in reviewing the technical guide for petrol filling stations (The Blue Book).

The review kicked off with a meeting of the Energy Institute Service Station Panel which agreed a procedure for the review. Fourteen Sub-groups were set up; each being allocated a chapter to review as well as the Annex D on biofuels and an addendum covering hydrogen as far as it applies today. Work has progressed well, with several groups having completed their final drafts, and they have been submitted for the steering committee to comment on or approve.

After all the chapters have been reviewed with any changes or admissions made, they will be cleared by the Service Station Panel before being sent out to all sectors of the industry for consultation and comments.

A good number of PEIMF+ members have been involved in the review which has been much appreciated by the Panel.

Fire extinguishers

The Environment Agency has been carrying out research into the amount of PFOA foams that are in use in fire extinguishers in the petroleum industry.

Whilst the majority of petrol filling station operators use dry powder fire extinguishers, as being the most suitable for liquid fuel fires, there are still some foam extinguishers retained that are fully functional. Some retail shops also sell fire extinguishers for motorists to carry in their vehicles.

PEIMF+ members carrying out maintenance on forecourts may need to check on any extinguishers carried on board.

It is not known if PFAs are in all foam extinguishers, but it is most likely to be the case. It is understood that fluorine-free foam fire extinguishers could be manufactured for future use. If they are introduced, it will give time to phase out those currently on the market that are not compliant before a ban comes into force.

PELG: training petroleum inspectors

As previously reported, the Petroleum Enforcement Liaison Group (PELG) has been following its high-level strategy to implement the recommendations from the HSE PCR Post Implementation Review.

Already completed is a new training programme for petroleum inspectors which is being made available to all new PEAs. The purpose of this is to ensure that all new inspectors are fully trained and equipped to enforce the law on petrol filling stations in a consistent way, that avoids the varied approaches that PCR was introduced to prevent.

The Red Guide

The Operational Red Guide has been reviewed and changes made, to make it simpler to follow and encourage more site operators to use it. A comprehensive executive summary has been added which acts as a guide to operators and PEAs.

Some of the current PETEL circulars have been incorporated in the Red Guide to enable them to be withdrawn or, if technical, incorporated into the text of the Blue book - whilst that is under review.

HSE has drawn up a guide for inspectors to be able to determine which premises are to be included under PCR. This had previously been a problem for authorities. It will also be welcomed by PEIMF+ members, who frequently install storage tanks on other businesses that were not previously subject to licensing.

Phone payments

Additional material has also been added to the section on use of mobile phone payment for fuel and how that can be used in a controlled way.

All of the above projects under PELG have yet to be signed off.

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The world's most advanced forecourt protection system

PEIMF+ member, VARS Technology have saved forecourt retailers several million pounds. The world's most advanced forecourt protection system instantly reduces drive offs and then keeps them at bay!

The VARS system can protect your forecourt in many ways

VARS Dashboard allows simple 2 click management of the site for operators. Each vehicle that arrives or leaves the site shows at the top left corner of the screen. The operator can add any vehicle to the Blacklist with a simple click of a mouse, or they can Blacklist to a category with 2 clicks.

You will receive an audible and visual alert immediately when any of the following drive on to your site:

- Blacklisted vehicle for previous drive off
- Blacklisted vehicle for previous no means of payment not yet settled
- Blacklisted vehicle for previous dream off not settled
- Blacklisted Vehicle for previous aggression towards staff
- Warnings that vehicle may be stolen if make, model and colour do not match DVLA
- Customer service alerts (Disability assist days ETC)
- Shop theft alerts
- Jet wash damage protection

Continued on p8

Continued from p7

VARS uses state of the art ANPR cameras, they alert the cashier before a vehicle even arrives at a pump! Not only that, but they also chase first time offenders to reclaim the stolen fuel money; boasting the highest recovery rates in the industry.

The system includes a reporting tool for No Means of Payments and Drive offs which enables a cashier or manager to submit the details required in two minutes or less, so they are not tied up too long and embarrassed customers don't have a lengthy ordeal.

With additional features such as, hot and cold food storage temperature records, age refusal records and contractor signing in and out, these free value-added features make this a well-rounded forecourt tool.

As a fully accredited member of the British Parking Association, VARS Technology can also manage any car park small or large to free up spaces for customers to come and spend money in your outlets. Profits from parking are shared too.

Using a state-of-the-art ANPR solution developed over several years, the result is the most effective drive off reduction tool in the industry. With approximately 36,000 vehicles known for offences countrywide, forecourts can get instant protection from the minute the system is switched on.

2023 VARS latest

- Increased site count by over 500 sites in Q1 2023
- Recovered over £1 million for UK customers.
- Due to be rolled out to another 1000 sites in the next 6 months.
- Drive offs reduced by over 80% for all customers with ANPR sites.
- Winners of the APEA Award for Innovation.

Testimonials

EG Group: Sameer Ali

Vars Technology produce a fast and simple to use end-to-end solution, using forward thinking technology. The whole process could not have been any easier.

Sharma Garages Group: Kumar Sharma

I have found the ANPR Forecourt Protection and parking services to be an essential part of a forecourt business.

Shell Horncastle: Guy White

The team are fantastic, service is superb quality of images is second to none. The system helps us serve our customers better, particularly disabled and elderly people.

www.varstechnology.co.uk

The world's most advanced forecourt protection and parking solution.

VARS TECHNOLOGY

The VARS system can protect your forecourt in many ways

VARS Dashboard allows simple 2 click management of the site for operators

Each vehicle that arrives or leaves the site shows at the top left corner of the screen. The operator can add any vehicle to the Blacklist with 2 clicks on the touchscreen

State-of-the-art ANPR solution

Preventing and reclaiming millions of pounds of retail fuel loss for forecourts

Fully compliant accredited member of the British Parking Association

Simple and fast reporting No Means of Payments and Drive offs

Audible and visual alerts of Blacklisted vehicles

VARS Parking will allow you to manage your parking spaces in the following ways:

- **Charge for a select few bays for hourly or all day parking**
- **Charge for overstay if people spend too long in the car park**

VARS TECHNOLOGY

varstechnology.co.uk

Fuel meters – it pays to be precise!

A large proportion of fuel retailers across the UK employ the services of a reputable wetstock management service to help monitor their fuel stocks. This type of specialist service can help to identify instances of fuel loss from a variety of sources including; leaks, theft, short deliveries and meter drift. On detection of an issue, the site manager is informed, allowing for remedial action to be taken.

This article focuses on meter drift; its definition, the impact and how to mitigate the risk of it developing. Drift is a measurement error caused by the gradual shift in a gauge's calculated values over time. The variance is generally caused by normal wear and tear on the meter's components and is more likely to occur on ageing or high-usage fuel dispensers.

Impact on profitability

Drift causes the meter to pump inaccurate measures of fuel, typically dispensing a greater amount than recorded on the display and consequently eroding the site's profits. Conversely, if the meter drift results in less fuel being dispensed, it could be exposing the site to substantial fines for contravening weights and measures standards. In either event, meter drift has a severe impact on operational profitability, to say nothing of the potential damage to the site's reputation.

How to manage drift

Prevention is always better than cure – so investing in a proactive scheduled service and maintenance programme is recommended, to stop meter drift from becoming a real problem. Regular pump verification checks conducted by qualified technicians, approved by the Office for Product Safety and Standards (OPSS), can provide peace of mind for site owners. If the meter is found to be over/under dispensing, it can be recalibrated and restamped on the same day, restoring integrity to the refuelling process. On completion, a full verification calibration report is supplied to the site and the Trading Standards Office is informed. Early identification of meter drift will ultimately save fuel retailers a significant amount of money and prevent unnecessary dispenser downtime.

Innovative meter technology

The meter is responsible for the fuel flow rate, accuracy and efficiency of a dispenser and as such, is arguably the most important active component during refuelling. Retailers in the market, whenupgrading their site equipment, should take into consideration the calibre of the onboard meter during the dispenser selection process.

The Dover Fueling Solutions (DFS) industry-recognised, positive displacement piston meter delivers an improved flow rate, better accuracy, extended life and an outstanding return on investment (ROI). Engineered to retain its precision over time, ensuring lasting performance for a variety of fuel types and boasting a robust design, to withstand an extreme operational temperature range of between minus 40°C to plus 60°C.

The piston meter has an embedded intelligent pulser, with component authentication and encrypted communication, for security and protection against tampering. Manufactured with fewer moving parts, a durable crankshaft and optimised yoke guidance to minimise wear (which can impair accuracy) and assembled with fluorosilicone o-rings for excellent fluid compatibility; this meter provides superior lifetime stability for an outstanding total cost of ownership (TCO).

Advanced engineering and precision design combine, to significantly reduce the amount of fuel that retailers give away through meter drift every year.

Choosing the right dispenser

TSG is pleased to be able to offer two brand new dispenser ranges comprising:

- Tokheim Quantium™ ML and Quantium™ FS
- Wayne Helix™ 6000 II and Century™ 3

All of which incorporate the superior DFS piston meter. The next-generation Quantium, Helix and Century dispenser models showcase the latest in technological innovation, combined with a sleek modern outline to enhance any forecourt.

These trusted favourites have been redesigned to deliver outstanding performance and durability, with minimum service interventions to provide the lowest TCO in the industry. All three new model ranges offer unparalleled choice and modularity, with configurations available for both conventional and alternative fuels, making them the perfect fit for any forecourt, now and in the future.

Tokheim

The new range of Quantium dispensers will doubtless be a popular choice for retailers wishing to upgrade their ageing equipment, to keep pace with the raised expectations of today's drivers. They contain advanced inbuilt payment options to improve the traffic flow on busy forecourts, and the opportunity to add media screens to drive incremental sales in the store.

Quantium™ ML

The Tokheim Quantium™ ML fuel dispenser is the successor to the extremely popular Tokheim Quantium™ 510M model. The ML dispenser family offers more options through modularity, greater customer retention through reliability, and unfaltering customer loyalty through its clear emphasis on quality. The Quantium™ ML fuel dispenser is versatile, durable and highly configurable, offering superior nozzle availability that can dispense up to five fuel grades per side. It comes with an extended range of options to meet specific site requirements, from heavy-duty vehicle refuelling to fuel retailing.

Quantium™ ML is also available as an AdBlue® dispenser, engineered to combat

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the corrosive nature of the additive, and as a Liquid Petroleum Gas (LPG) model, designed to deliver outstanding performance time after time.

Quantium™ FS

Tokheim Quantium FS fuel dispenser is small but unbelievably powerful, with a vast range of configuration possibilities. Engineered with precision and flexibility in mind, this dispenser is perfect for small retail and commercial fleet environments, with a compact footprint to suit the layout of any forecourt. Comprising Tokheim quality components, the Quantium™ FS offers unparalleled meter stability, requires fewer service interventions and delivers a low TCO over its lifetime.

Quantium™ FS is also available as AdBlue® and LPG models, both built for durability and reliability for longer operational life.

Wayne Fueling Systems

TSG is the sole distributor of Wayne Fueling Systems products and solutions in the UK, and this new range of dispensers is already proving to be a great success with fuel retailers. The single global platform emphasises intelligent design, advanced technology, safety and security. All dispensers come with certified metering accuracy and electronic calibration, to mitigate meter drift and provide complete stability.

Helix 6000 II

The Helix 6000 II is configurable for up to five fuel grades with a wide range of flow rates, providing up to 4 metre hose reach from a choice of hose management systems. This dispenser has been designed to require fewer service interventions, which adds up to a much lower TCO. Certified accuracy from advanced meter technology delivers exceptional stability for minimal drift. The Helix 6000 II benefits from an intuitive user interface, with the option to upgrade to digital media content.

Helix 6000 II is available as a standalone model or a back-to-back configuration and comes in several variants: Standard, AdBlue®, LPG, Compressed Natural Gas (CNG) and Additive. The Helix 6000 II additive dispenser has the capability to transform regular fuel into a premium grade, allowing retailers to broaden their fuel offering without the need to invest in additional underground tanks.

Century™ 3

The Century™ 3 fuel dispenser is designed to deliver powerful performance and operational reliability year after year. When configured for high-capacity fuelling, this dispenser delivers fuel at very high and ultra-high flow rates to meet the needs of busy HGV fleets. Century 3's modularity capabilities support a large number of fuel types and flow rates, built with field-proven, corrosion-resistant componentry it provides an exceptionally smooth fuelling experience over its long lifetime.

Century™ 3 is also available as AdBlue® and LPG models, both built for durability and reliability for longer operational life. Constructed with corrosion-proof components, these dispensers will stand the test of time, even in the harshest conditions.

TSG is here to help

Retailers wishing to ensure their dispensers are delivering an accurate amount of fuel can book a pump verification check with TSG UK. Call: **0333 015 3001.**

Alternatively, those looking to upgrade their equipment to the new Tokheim and Wayne dispenser range can find more information at: **https://www.tsg-solutions.com/uk**

TSG

Driving tomorrow's technology onto the forecourts of today

Wayne Helix 6000 CNG

TSG supplies and installs British made fuel dispensers for forecourt and business fleet operators - quality and reliability backed up by a nationwide after-sales support team.

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- EV Charger Installer - Hardware Agnostic
- Media & Payment Solutions
- Kärcher Wash Solutions
- Service & Maintenance Agreements
- Tank Services
- Site Audits including DSEAR Assessments

Tokheim Quantium ML AdBlue B2B VGA Media

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TSG Retail TSG Fleet TSG Wash TSG Technics

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Ski resort refuelling centre – Andorra

Need to quickly refuel your snowmobile or snow plough?

This project at a ski resort in Andorra (Pyrenees) involved the design and installation of a new diesel pipeline system for the resort's private snowmobile, snow plough and maintenance vehicle refuelling centre. KPS piping was specified for the project by a trusted regional contractor and KPS-certified installer.

Key requirements:

- Reliable and compatible with the low temperatures consistent with this operating environment.
- Easy to install.
- Electrostatically safe (conductive piping).
- Double wall piping with an interstitial space.
- Installed by a certified installer.

The KPS solution:

- KPS conductive 2" (75/63mm) double wall piping proved the perfect solution for this project, enabling the fuel flow rate required to supply diesel to the fleet and exceeding safety requirements.
- KPS conductive pipes are electrostatically safe (like the metal piping used in the past) avoiding potential static charge build-up (which can lead to sparks). In fact, KPS developed the first conductive HDPE piping system in the world.
- KPS 75/63 double wall piping system provides an extra layer of safety due to the interstitial space between the inner and outer pipes. This interstitial space can be monitored by a leak detector to prevent leaks and contamination, a big concern for the resort.
- KPS pipes are tested and approved according to EN14125. This testing standard facilitates an operating temperature range between -20°C to 50°C making KPS the ideal choice for the harsh winter environment consistent for this region.
- KPS offers technical support from the beginning to the end of every project, services offered including relevant product drawings, site surveys (on request), on-site training and pipefitter certification. The wealth of technical support readily available to KPS-certified installers ensures they are optimally equipped and trained in the installation and effective use of KPS plastic pipe systems.

For more technical case studies, visit:
www.kpspiping.com/fuel-transfer
www.kpspiping.com/ports

KP 75/63 double wall pipe coils were installed in a concrete trench around the ski resort

Above-ground diesel tank: KPS piping was installed on the roof of the gallery using metal supports

KP 75/63 double wall and KP 63 single wall piping connected to the above-ground tank. A leak detector is also connected to the interstitial space of the double wall pipe

KPS conductive piping can easily be earthed to prevent electrostatic discharges. The yellow cables required for this are connected at the end of the pipe run

KPS piping connects the above-ground tank to the outdoor refuelling area

Back to the future

How Hytek is looking to the past, to thrive in the future

By Jacquie Davies, Managing Director, Hytek

Firstly, if you have seen our ad, I want to make it clear that we are not in the habit of fuelling DeLoreans. If you haven't seen the ad yet, you'll be wondering what on earth I am talking about. Hopefully all will become clear. Bear with me.

I've been the managing director of Hytek for almost a year now, having spent a good proportion of my career before that as someone on the other side of the fence; a customer of Hytek. I joined our industry in 2000, working in the commercial tank manufacturing sector. For some 14 years, I relied on Hytek; a key supplier for 90% of the tank equipment and ancillary products used to adorn our tanks. Quality fuelling equipment and reliable monitoring solutions. A brand you could unequivocally trust.

For so long, Hytek was rightly seen as the market leader in the field; unquestionably a preferred supplier. Known for quality products, first class service, product availability, next day collection and delivery, no-quibble warranties, exemplary field support, and perfect-pitched levels of communications. Across everything Hytek did, there was a clear commitment to always deliver for customers.

Standards slipped

Yet, over the last 18 months, some of these standards have slipped. That may seem like a mildly odd thing for me to admit but, above everything else, we are a business that values honesty and so we are prepared to admit our mistakes.

We know that delays and a general lack of communication on deliveries of vital equipment would cost thousands, with field engineers coming to a standstill. Of course, that had a knock-on effect for our customers' reputations with their customers. That's simply not good enough. It has been a frustrating time for us and, more importantly, for you.

Yet, we are prepared to acknowledge this, because we are now confident; confident we are getting back to what we've always done best. Our high-quality products are on the shelves, and communication with you, the people we are privileged to call customers, is an unwavering priority. I'm confident you'll see and experience that when you work with us.

One thing that has never changed in the business is the commitment to valuing good people. Be those our clients, our partners or our employees. In fact, the people of Hytek have always been such a key part in making it the organisation it is. I remember my first encounter well; with Hytek's own Emmett Brown (I thought I had better get another tenuous BTTF reference in here) Ian Taylor.

Introduced to me by Terry Barker, he was an incredibly positive personality, oozing the Hytek ethos of putting people first. I'd go so far as to say he has created a legacy. Because we are still a business packed with the very best people.

The word count does not permit me to mention them all by name, but there are a couple of people I'd like to highlight briefly. Andy Seal, or as we affectionately call him, "The Oracle". He wows me daily with his encyclopaedic knowledge of our business, our products and the commercial fuel sector at large. To say he goes above and beyond for customers would be an understatement of significant proportions.

Andrew Olive; who joined our business when we acquired Pumptronics, remains at the forefront of product innovation. He has developed many great products including the Zeon and C Series, and is also responsible for the ongoing research and development of our Fuel Management Systems, ensuring we remain at the cutting edge of product innovation. He's particularly excited about accurate live fuel management data right now, but again, I don't have the word count to go into that here. Be sure to ask him about it if you speak to him.

Personally, I look forward to meeting many more of our customers soon. I wanted to end this article with perhaps the greatest quote from Back to the Future;

"Where we're going, we don't need roads".

But given what we do, that would be just plain wrong - to say the very least. So, I'll leave you with this. We are back. And we very much look forward to proving that to you soon.

www.hytekgb.com

INSITE editor's comment

Thanks Jacquie for this candid and open statement regarding the market position for Hytek and I wish you well for the future. At PEIMF+ we're delighted to have Andrew Olive as part of our committee and look forward to continuing working with you.

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For more information about Ancorra Environmental Services

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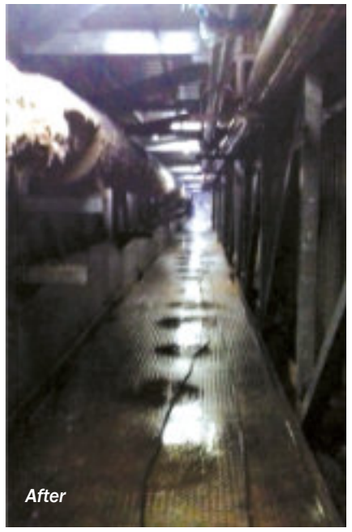
Decontamination of 'Guano' Bridge

Ancorra have recently undertaken the task of decontaminating a heavily contaminated pipework bridge for a major UK brewery.



The project was required as the pipework was due to undergo testing procedures, but had become heavily exposed to guano (pigeon droppings) over a number of years.

Pigeons can transmit a number of diseases such as; Histoplasmosis, Pigeon Ornithosis, Salmonella and Encephalitis.

So when Ancorra's cleaning team entered the bridge to take on the 'Rock Bird' Challenge they were kitted out in full PPE including nitrile gloves, type 5/6 tyvec suits and full face Abec combination filter masks.

Manual scraping

The works involved manual scraping of the bridge internals to remove the high volume of spent guano. The waste was double bagged, secured and sent for licensed incineration disposal.

The work was completed over a 3 day period, much to the satisfaction of the client.

'Rick & the team were superb! They were very professional in their work as they undertook the challenging conditions before them. We are very pleased with the outcome' .

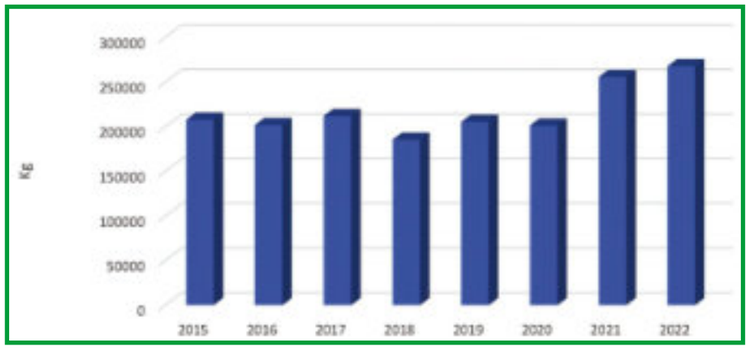
Ancorra's attention to service and detail has made us an industry leader, providing a wide range of environmental services including;

- Specialist vessel tank cleaning
- Forecourt/interceptor maintenance service
- Emergency spill response
- Site decommission
- Waste management
- Confined space entry experts

To learn more about the full range of our environmental services, please contact the office on **0151 546 3012**
commercial@ancorraenvironmental.co.uk

NUPI committed to reducing greenhouse gas emissions (CO_2)

As a global manufacturer of plastic pipework, NUPI recognises its responsibility to act in reducing the environmental impact of its activities, by working towards environmental sustainability.

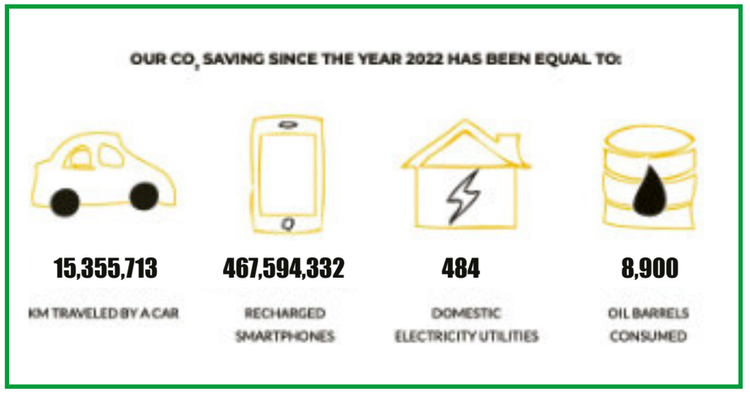


Being aware of the environmental impact of the organisation is key. This is the first step in understanding how to contain emissions, plus the energy measures needed to be introduced in order to reduce energy consumption.

In 2022, thanks to energy efficiency improvement, NUPI avoided emissions of CO_2 equivalent to the emissions of over 800 cars in a year, or the consumption of 8,900 barrels of oil, or the charging of almost half a billion mobile phones

By the end of 2023, NUPI expect to prevent over 500 tons of CO_2 emissions being released into the atmosphere (see chart above).

NUPI's CO_2 saving since 2022 has been equal to:



NUPI was awarded the **ISO 14001 Environmental Management System Certificate** after demonstrating its commitment to sustainable management within its supply chain.

The new ISCC PLUS - International Sustainability & Carbon Certification scheme

This is an international standard focused on the concept of circular and sustainable economy. In particular, the ISCC certification focuses on checking the traceability of recycled materials of fossil origin (Circular) and recycled materials of vegetable origin (Bio-Circular). This is based on the principles of mass balance accounting principles.

The ISCC PLUS certification is, therefore, a certification system of the sustainability of a fully traceable supply chain.

These are the KEY POINTS of the ISCC PLUS certification:

- Traceability in the supply and transformation chains of circular and bio-circular products (and related finished and intermediate products)
- Implementation of environmental, social, and ecological sustainability criteria
- Improved environmental management and increased biodiversity.

Modernisation of production

NUPI have undergone complete modernisation of the production plants, including a timely recovery policy for processing waste.

The most important part of reducing the company's impact on the environment is the use of alternative energies.

Photovoltaic systems

NUPI factories are equipped with photovoltaic systems resulting in significant energy savings and a consistent reduction of CO_2 emitted.

LED lighting

Following the energy audits carried out in its production plants, since 2017 the company has undertaken a campaign of progressive replacement of traditional industrial lamps with LED lamps.

High efficiency cogeneration system

NUPI installed modern trigeneration systems in their plants, for the combined production of electrical and thermal energy; in a high-efficiency cogeneration (CAR) regime and with nominal power of 1702kW in their plants.

NUPI Industrie Italiane understands the value of sustainability, and has for some time now adopted a policy aimed at reducing its environmental impacts.

Environmental piping

One of the most important features of this action was the implementation, in 2018, of a dedicated EPD TOOL, for the creation of the Environmental Product Declarations (EPD) of its piping systems.

This tool allows NUPI to calculate and report the environmental footprint of its main products and production processes. This is with the aim of reducing the potential environmental impacts associated with its activities, objectively and transparently.

Thanks to the environmental product declarations, NUPI can also analyse both the life cycle of the products and the activities carried out by the company; identifying the areas on which to intervene to reduce and offset greenhouse gas emissions.

The aims of reducing and offsetting these emissions concern raw materials:

- The purchase of electricity 100% generated from renewable sources
- The replacement of plastic packaging with paper or plastic (as much recycled as possible)
- The activation of a virtuous system for the recycling and recovery of pre-consumer waste and process water.

With regard to energy consumption, it is important to note that, in relation to most of the other materials used for the production of piping systems (steel, copper, cast iron), plastic pipes consume less energy for their production.

They are also extremely durable (100 years) and require minimal, if not non-existent, maintenance and repair interventions, as they are not subject to wear, fatigue and corrosion, typical of metallic materials.

NUPI's commitment to the environment and future generations

Reduction of energy requirements

Constant improvement of the company's performance and resources.

Process optimisation:

- Eco-sustainable product design, digitisation of activities, selection and procurement of sustainable packaging materials, strategic and responsible selection of its suppliers
- Promotion of policies to generate awareness. So people, at all levels, understand that their choices today will build the future of our planet.

This is NUPI's commitment to the environment and future generations.

www.nupiindustrieitaliane.com

Insurance for contractors

Businesses involved in the maintenance and installation of forecourt equipment in the UK are evolving, as they help with the pursuit of the UK's carbon reduction strategy. So it's worthwhile highlighting some of the insurance-related factors, which contractors should be mindful of.

PEIMF+ member Oamps are ideally placed to offer advice, particularly regarding new technologies.

Policy wordings

As with all insurance policies, the devil really is in the detail. So you should always ensure your policy wordings & schedules reflect what you're doing!

Is business description vague or comprehensive?

A vague description could lead to insurers being able to decline a claim if your activities are not accurately described – e.g. fit-out contractor, or commercial builder.

You should also get confirmation of what activities have been disclosed to your insurers. The increasing use of insurer portals for quotations means that the choice of trades offered might not quite cover what you do; especially if you're involved in installing, servicing or decommissioning fuel storage systems or high voltage electrics or hydrogen production plants.

Many Public Liability policies contain a property being worked on exclusion, which means that there is no cover for any damage caused to the property that you're actually installing or servicing.

The wording of this exclusion is very wide in some policies. We've seen a claim where an employee incorrectly fitted a pressure relief valve, which failed to operate correctly when the system was refilled and the pressure distorted the tank. Insurers declined to indemnify their policyholder because the wording stated that damage to any part of the system being worked on is excluded.

The Pen policies we provide have no such exclusion.

You might well also have a condition or endorsement, stating that in order to cover your Bona Fide Sub Contractors activities, they must have valid insurance to the same level as yours. So check theirs too or get your broker to do it – they should know what to look for!

Public liability

Underwriters covering the installation of EV charging stations and small-scale Hydrogen generation plants will still expect the contractor to be specialists. If their best rates are to be secured, they will need to demonstrate this with comprehensive training records and site-specific RAMS, that show a strong and detailed understanding of the risks involved.

Underwriters generally also want more information than they did a few years ago; especially around these "new" technologies. They will also want the comfort that there are no "hold-harmless" clauses in place to prevent insurers subrogation of any claim against the manufacturers of a faulty product.

The installation of high-powered rapid charging stations might also be an area of concern for insurers. Some commentators have expressed reservations on the impact of repeated "rapid" charging sessions on the long-term integrity of lithium batteries. And whilst any claim for damage or injury caused by an allegedly defective charging station would likely be made against the manufacturer or distributor of the equipment, invariably the contractor could get drawn into claims. There there might also be allegations of negligence against the contractor by their employer or the manufacturer, in an effort to pass the claim on.

Contractors handling these "new" technologies could also face appetite challenges from the insurance market, as underwriters traditionally like to rely on historical data to support their rating structure. So rather than make a relatively uninformed decision on future rating, some will simply decide not to get involved until more data is available.

Given that these "new" technologies are relatively recent additions to many business's activities, underwriters will not often have long-term verifiable claims histories that show a low level of activity and claims payments.

That lack of capacity and claims history could lead to rates being inflated and choice of insurers being limited for these activities.

Employer's liability

Do your insurers sometimes settle Employers' Liability claims a little too easily in your view?

When we have seen this, it's usually due to the insurers feeling that there isn't a robust enough defence to dispute the claimant's allegations (PPE not provided, no training records, everyone else does it that way etc).

Being able to evidence the work you undertake to keep your employees safe, and that you reinforce these policy statements with real world recording & intervention, goes a long way to giving your insurers the confidence to be able to refute allegations.

Some business are using pre-employment health screening, to try to avoid being saddled with spurious claims for conditions that pre-date the employee's time with the company.

Occupational health plans can also support employees' physical health as well as general well-being.

Professional indemnity for contractors

If contractors are being asked to provide a turnkey solution for an alternative energy station, they could inadvertently end up being the designer of the system.

Many Public Liability policies have exclusions relating to professional services (and design is often included within the definition of those services) so any injury or damage to third party property would not be covered if the loss arises from the defective design.

Likewise, if the defective design leads to a financial loss where no damage occurs, even policies with no professional services exclusion could fail to respond, as the policy activation point (damage to third party property or physical injury to third parties) has not been triggered.

This cover is also sometimes purchased because of contractual obligations, where the principal contractor agreed to provide the design; and even though you might sub-contract the design element out or work to a someone else's design, you still have to pay for the cover.

If you make any amendments to a system design, you also run the risk of assuming design responsibility, unless all changes are signed off by the designer (not just your employer, who may not possess sufficient experience or expertise to be able to accept these changes from a position of knowledge).

Always ensure proposal forms are properly completed . If you only have 10% of your turnover on Design & Construct contracts, then this needs to be conveyed to the underwriters; otherwise you run the risk of being charged premiums that don't reflect your exposure levels.

Professional Indemnity policies often also have onerous claims reporting clauses too, so make sure you don't fall foul of them by not reporting a possible claim as soon as you know about it.

www.oamps.co.uk

The sole purpose of this article is to provide guidance on the issues covered. This article is not intended to give legal advice, and, accordingly, it should not be relied upon. It should not be regarded as a comprehensive statement of the law and/or market practice in this area. We make no claims as to the completeness or accuracy of the information contained herein or in the links which were live at the date of publication. You should not act upon (or should refrain from acting upon) information in this publication without first seeking specific legal and/or specialist advice. Pen Underwriting Limited trading as OAMPS Hazardous Industries accepts no liability for any inaccuracy, omission or mistake in this publication, nor will we be responsible for any loss which may be suffered as a result of any person relying on the information contained herein.

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Do you want insurers to pay your claims? Beware of underinsurance!

Peter Jackaman, Managing Director of Jackaman Ins Services Ltd outlines the pitfalls of underinsurance

What is underinsurance?

Underinsurance is when a policyholder has inadequate insurance cover for their needs. In the event of a claim, this could mean a claim amount exceeding the maximum limit that can be settled by the insurance company.

This could result in a shortfall for the policyholder, potentially leading to a serious financial loss for the organisation. Common areas of underinsurance are typically property, stock & contents, equipment and business interruption.

What can lead to being underinsured?

There are a number of reasons a policyholder may be underinsured. It can happen when valuations are out of date, roughly estimated, or incorrectly calculated.

Your business premises may be your highest value asset, and integral to the smooth running of your day-to-day operations. And yet, many businesses have an element of underinsurance on their commercial properties.

Here are some of the common pitfalls:

Out-of-date valuations:

If a property has not been professionally valued for insurance purposes there may be a shortfall in cover, even if the premises have not been altered or improved. If you have made alterations or extended the property, you should let your broker or insurer know as soon as these changes are made, rather than waiting until your policy is due to be renewed.

Market value versus reinstatement costs:

Another common oversight for business owners is to insure for the market value, when the sum insured should be the rebuild cost. Not only can the market value fluctuate but it is not an accurate reflection of the total cost to rebuild the premises from scratch. As well as materials and labour costs, you should also consider factors such as professional fees (architects, legal, planning, demolition etc).

Rebuild/repair of listed buildings:

When considering the original construction of the building a number of factors will determine the reinstatement cost such as: whether the building is listed, the nature of materials it is built from, and the age of the building. Listed or heritage buildings may typically have higher rebuilding costs than other properties, as they must adhere to traditional forms of construction and specialist materials. This is where a professional valuation should be an important consideration.

For example; we have recently had clients whom (after obtaining a professional valuation of their building) realised they had underinsured their buildings by over £4,000,000. A further client was 100% under insured on their buildings following a professional valuation.

Stock and contents

When determining the cover required for the contents in the business (both on and off the premises) and the stock you hold, it is important to bear in mind how insurers view this. As a policyholder, you may believe selecting a cover amount is your choice, based on how much cover you think you may need should an insured event occur. However, insurers are seeking to establish the total level of risk they will be taking on their books. Therefore, rather than simply selecting what you feel is an appropriate amount of cover, it is important to determine the cost of replacing all contents and stock on a new-for-old basis.

Why is this important?

If you were to insure only part of the total value of your buildings/stock or contents on the basis that a complete loss of your stock seems unlikely, this overlooks the fact that the total figure is required by your insurer. Policyholders may believe they can claim up to that limit, however this is not necessarily the case. This is due to a standard 'average clause' within most policy wordings that allows insurers to pay a lower claim amount if a policyholder has underestimated the declared value of stock and/or contents.

Business interruption

When 'business-as-usual' trading is affected or interrupted, there will most likely be a financial impact. Therefore, considering a realistic time frame to get back up and running after an insured event is an important aspect of a business continuity plan; taking into account scenarios including physical events such as a fire or flood.

A common oversight with cover for business interruption, is that the period of cover selected to protect the business financially turns out to be far shorter than the actual period of disruption. This then leaves the business with ongoing losses after the insurer stops paying.

The recovery process may take longer than you think – even smaller, straightforward businesses can need longer than 12 months' protection. If you are rebuilding premises for example, you may require planning permission which can often take months before any rebuilding works can even begin.

Business interruption insurance cover and the definition of profitability

Another accidental cause of underinsurance within business interruption policies is the confusion around the definition of profit. Standard accounting says that gross profit is sales minus the costs of production. But the insurance definition is different. Business interruption insurance generally defines gross profit as turnover less the cost of raw materials and other expenses directly variable with turnover.

Tips for preventing underinsurance

By considering all aspects of your business, from your assets to your staff and customers, it is possible to identify areas and help remove the risk of underinsurance.

Rebuild:

Your overall sum insured is the most you would need to rebuild and replace from absolute scratch. Consider a professional valuation by a RICS qualified valuer.

Limits:

Are the policy limits insufficient? Check them against the needs of your organisation.

Values:

Update the new-for-old replacement values of plant, assets and premises for your organisation annually.

Recovery:

Set a realistic indemnity period within business interruption insurance that gives your business enough time to recover from an insured event. Your sum insured should reflect the anticipated business growth and not just past performance.

Review:

Conduct an annual review of all relevant policies with your insurance broker, based on your changing valuations, so you have suitable cover. Remember areas such as Employers' Liability, Public Liability and Professional Indemnity: as your circumstances change, so does your risk.

Inflation:

Check if your insured sums have automatically been index-linked to inflation. The cost of materials for re-build or replacement of goods will change from one year to the next.

Ultimately, managing the risk of underinsurance is about doing the groundwork to provide an accurate valuation to the insurer, and being aware of what could happen if you fail to fulfil your duty of disclosure. Working with a broker provides an extra set of eyes to ensure you have a clear, in-depth picture of cost, value and liability.

In a more challenging insurance market it can be more difficult for businesses to secure cover, as insurers may be more selective of the risks they will take on. Remember when reviewing your existing cover and ascertaining your up-to-date valuations, you should not take for granted renewal on the same terms as the previous year. This is where an insurance review from a dedicated broker can help you prepare for renewal in order to secure adequate cover.

Risks change so businesses need to constantly reassess what could affect them. We can help you ensure you have sufficient cover for your organisation in a shifting risk landscape.

How can we help?

Call us today on **01474 557427** to discuss the benefits of a full insurance health check.

You can ensure that adequate protection is in place across your business, and navigate any underinsurance pitfalls. As well as helping you to secure the most appropriate cover at renewal, we offer dedicated support throughout the policy year should you need to make any amendments to your policy if your cover requirements change.

Jackaman Ins Services Ltd is a friendly and professional service with over 40 years' experience in commercial insurance. We are specialist hazardous trade and fuel insurance brokers with exclusive products available.

www.jackamaninsurance.co.uk

What does artificial intelligence mean for suppliers?

All this talk about ChatGPT and AI. But what exactly is AI and what does it mean for suppliers to the fuel industry?

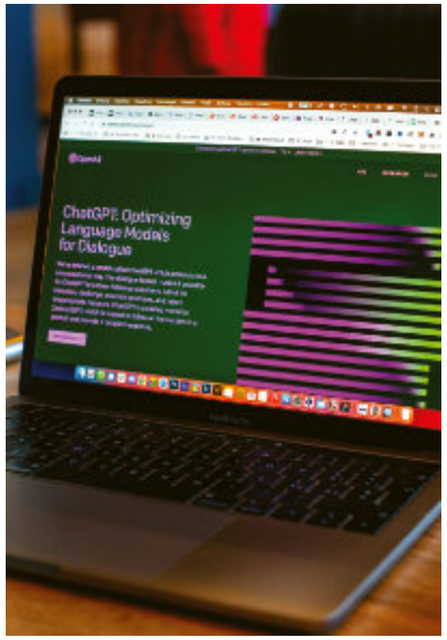
Let's start with a definition. Artificial Intelligence, simply put, is the simulation of human intelligence processes by machines, especially computer systems. By this definition, much of the automation processes our companies offer is already AI.

But something has changed. Over the last few years the abundance of data has allowed for the training of more complex AI models. What's more is they have become more simple to use.

ChatGPT

Take ChatGPT as an example. If you haven't already heard, ChatGPT is a natural language processing tool that anyone can use. Just type in a question or a request and it responds. It's not perfect, but it's learning every day.

The potential impact of this sort of intelligence is never ending (although Terminator does come to mind). It may not happen today, but this new level of AI will be coming to the fuel market, so it is important to understand how it might impact it.



So, in the spirit of the article, I asked ChatGPT itself how AI might impact the fuel industry.

It started by telling me that it can enhance the customer experience, offering 'chatbots' that can assist customers, but more interestingly it could eliminate the need for cards or cash through facial recognition. If you're in the payment card industry, take note.

The analysing of data from sensors and equipment to predict maintenance requirements came next. Ok, that's cool ChatGPT, but monitoring equipment in real time to identify issues before they result in breakdowns or service disruptions is something already offered. But it occurs to me that in many cases it has a human element that could likely disappear in the next few years. Improvements in this area mean less callouts and less site visits, resulting in less engineers needed on the payroll.

Things got really interesting from a fuel supplier perspective. AI will not only enhance wholesale trading and improve hedging, but also management of inventory and delivery schedules. With this improved service, trust from retailers will likely go up in vendor managed inventory, so we will see more retailers agreeing to let their fuel suppliers manage their deliveries.

Energy efficiencies

With many retailers suffering from rising costs, energy efficiency couldn't be more relevant. According to ChatGPT (who I am now talking to as if it were sat across from me in the pub), data from energy usage, weather conditions, and customer traffic patterns will be used to optimise energy consumption in lighting, heating, and cooling systems.

If you're in the EV market, AI will better manage charging stations, optimising both their usage and availability. This will make putting charging points on site more appealing for both consumers and retailers.

The real Mark Truman, or AI?

And then I decided to get more specific. What about marketing? Customer segmentation and personalisation, predictive behavioural analytics (importantly including demand), pricing optimisation, and sentiment analysis were all mentioned.

Dating apps

As a marketer myself, my feeling on AI is that it will make my life easier. ChatGPT alone is reducing the time I spend writing content by about 50%. I will have more information at my fingertips to engage properly with the right customers. Saying that, whilst I am not a user of dating apps they did come to mind. Meeting people is more accessible, but it is more accessible for everybody. You can meet more people, but so can they. The point is, expect a lot more noise and the quality of your competition's marketing activities to go up.

I finished up by asking ChatGPT if it intends to take over the world. It assured me that it doesn't have intentions, desires, or even the capability to take over the world. It's here to impact the world positively.

But it would say that, wouldn't it?

And the question Mark asked of ChatGPT

How will AI impact marketing in the petrol industry please mate?

www.edgepetrol.com
020 3865 8689

The Green Pages
NEW FUELS GUIDE
PEIMF+
SUMMER 2023 • ISSUE 14

New mobile hydrogen bowser, refuelling solution

from Commercial Fuel Solutions®

As industry continues to decarbonise, looking to the future, Hydrogen will certainly have its role to play, especially when it comes to the commercial vehicle sector. This gaseous fuel will be fundamental for heavy transport and off-road applications. Commercial Fuel Solutions Ltd are one company who are looking to escalate Hydrogen's uptake and have already developed a reputation as an authority in this emerging sector.

Commercial Fuel Solutions® are pleased to announce the debut of our H35 Hydrogen Bowser, mobile hydrogen storage and refuelling system at this years Hydrogen UK conference in Birmingham.

Managing Director and system designer Robin Futcher, is an accomplished engineer with a wealth of experience spanning over 26 years. He has worked on a diverse range of projects, from developing equipment for the British Antarctic Survey to use in sub-zero temperatures, to providing systems for leading Formula 1 teams.

Robin also has extensive expertise in developing regulatory guidance. He currently serves on numerous technical committees for gaseous hydrogen fuelling, including BSI, British Standards Institute and ISO, the International Organisation for Standardisation.

Models are expected to roll off the production line before the end of 2023 and will be available in a range of sizes with varying capacities.

The new Commercial Fuel Solutions® hydrogen bowser is available to pre-order directly from Commercial Fuel Solutions® and can be tailored to suit your specific requirements.

https://l.ead.me/h2bowser

BP invests in Carbon Capture technology

BP has acquired a 40 per cent stake in the UK's Viking CCS project from Harbour Energy, as the government looks to accelerate plans to develop carbon capture and storage. The Viking project aims to meet up to a third of the UK's annual target of capturing 30million tonnes of carbon dioxide by 2030, by repurposing old depleted gasfields off the Humber region coast.

BP's own CO_2 emissions in its upstream oil and gas production totalled 307mn tonnes in 2022, and there are also plans to ship in additional CO_2 emissions from other parts of the UK and abroad through the port of Immingham.

BP's investment provides significant backing for a project that is among the leading contenders for the government's next phase of approvals, under its Track 2 carbon capture development process. The oil major will apparently absorb 40 per cent of the total costs, although terms of the overall deal were not disclosed.

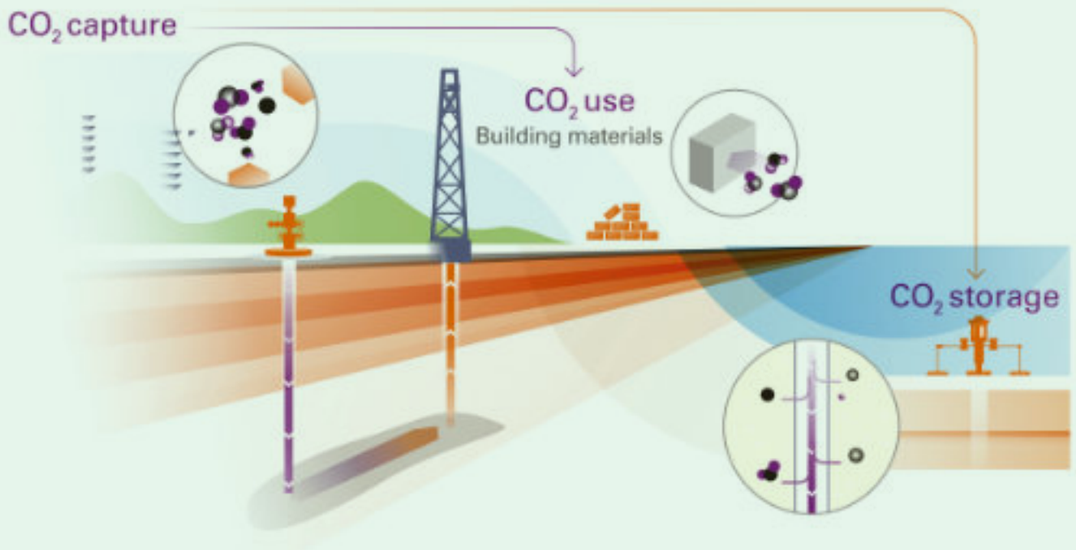
BP is already leading the East Coast Cluster as operator of the Northern Endurance Partnership on Teesside and the Humber, which is targeting cutting 23mn tonnes of CO_2 emissions a year by 2035. Harbour, the largest oil and gas producer in the UK North Sea, will operate the Viking project and retain a 60 per cent stake. But investing in Viking would give BP an additional back-up in its UK CCS operations, as well as opening up options such as shipping in CO_2 from overseas, a potentially higher margin proposition. Anja Dotzenrath, head of gas and low carbon energy at BP, said the company was *"excited"* about the project's potential for *"helping to decarbonise the UK"* and as *"a future CO_2 shipping destination"*.

EXPANDING GREEN TECHNOLOGIES

BP is looking to expand its investments in green technologies and renewable energy, although CEO Bernard Looney has come under pressure from investors to show technologies such as offshore wind and CCS can provide competitive profit margins when compared with oil and gas. Having reduced the company's focus on the North Sea in previous decades, BP has started to invest more in the UK again, focusing on offshore wind and carbon capture as part of its energy transition strategy.

WHY THE UK SHOULD BOOST CARBON CAPTURE

The UK government said in March that the Viking project and the Acorn project in Scotland were seen as "best placed" to be appointed in its Track 2 process, joining the East Coast Cluster and the Hynet North West projects that were selected in 2021 in the first round. The government's deadline for other projects beyond Viking and Acorn to submit proposals is April 28, otherwise, the two will be automatically selected. *"Our entry into Viking CCS demonstrates BP's commitment to Backing Britain through substantial investment and helping the country achieve its net zero goals,"* said Louise Kingham, BP's head of country for the UK. Harbour Energy's chief executive Linda Cook, who has been a fierce critic of the UK government's windfall tax on oil and gas producers, said the Viking project could *"unlock billions of pounds of investment across the full CCS value chain"*.



It's become a well-known addition to the net-zero conversation, but:

What exactly is carbon capture?

Carbon capture and storage (CCS) is a way of reducing carbon emissions, which could be key to helping to tackle global warming. It's a three-step process involving:

- Capturing the carbon dioxide produced by power generation or industrial activity
- Transporting it
- Then storing it deep underground.

Here are the potential benefits of CCS and how it works.

WHAT IS CCS?

CCS involves the capture of carbon dioxide (CO_2) emissions from industrial processes, such as steel and cement production, or from the burning of fossil fuels in power generation. This carbon is then transported from where it was produced, via ship or in a pipeline, and stored deep underground in geological formations.

HOW CAN CCS HELP PREVENT GLOBAL WARMING?

The Intergovernmental Panel on Climate Change (IPCC) highlighted that, if we are to achieve the ambitions of the Paris Agreement and limit future temperature increases to 1.5°C, we must do more than just increase efforts to reduce emissions. We also need to deploy technologies to remove carbon from the atmosphere. CCS is one of these technologies and can therefore play an important role in tackling global warming.

WHERE ARE CARBON EMISSIONS STORED IN CCS?

Possible storage sites for carbon emissions include saline aquifers or depleted oil and gas reservoirs, which typically need to be 0.62 miles (1km) or more under the ground.

As an example, a storage site for the proposed Zero Carbon Humber project in the UK is a saline aquifer named 'Endurance', which is located in the southern North Sea, around 90km offshore. Endurance is approximately 1 mile (1.6km) below the seabed and has the potential to store very large amounts of CO_2.

Similarly, in the US there are multiple large-scale carbon sites such as the Citronelle Project in Alabama. This saline reservoir injection site is about 1.8 miles (2.9km) deep.

WHAT IS CARBON CAPTURE, UTILISATION AND STORAGE (CCUS) AND HOW IS IT DIFFERENT TO CCS?

As well as CCS, there is a related concept, CCUS, which stands for Carbon Capture Utilisation (or sometimes this is termed 'usage') and Storage. The idea is that, instead of storing carbon, it could be re-used in industrial processes by converting it into, for example; plastics, concrete or biofuel.

IS STORING CARBON AS PART OF CCS SAFE?

According to industry body the Global CCS Institute, CCS is 'a proven technology that has been in safe operation for over 45 years'. It adds that all components of CCS are proven technologies that have been used for decades on a commercial scale.

WHERE IS CCS BEING USED ALREADY AND WHAT'S IN DEVELOPMENT?

According to the Global CCS Institute's 2022 report, there were 194 large-scale CCS facilities globally at the end of the year (compared to 51 in 2019) 61 of which were new CCS facilities added to the project pipeline in 2022. Thirty of these projects are in operation, 11 under construction and the remainder in various stages of development.

Of the total number of projects, 94 were in the Americas (80 in the U.S.) 73 in Europe (27 in the UK) 21 in Asia-Pacific and 6 in the Middle East.

The CO_2 capture capacity of all CCS facilities under development grew to 244 million tonnes per annum in 2022 – an impressive increase of 44% over the year.

SUMMER 2023 • ISSUE 14 • THE GREEN PAGES - NEW FUELS GUIDE

House of Commons
Transport Committee

Fuelling the future: motive power and connectivity

Here is an abridged summary of The House of Commons Transport Committee report from March of this year. It is based on the initial summary and conclusions from the minutes of the meeting and makes for very interesting reading.

You can contact our editor for a full copy, or read it at:
https://committees.parliament.uk/work/1711/fuelling-the-future-motive-power-and-connectivity/

SUMMARY

In July 2021, the Government published its Transport Decarbonisation Plan, which outlined the pathway for the transport sector to be net zero by 2050 in the UK. It reaffirmed the Government's commitment to decarbonising all forms of transport including maritime, aviation, road and rail, and stated that this will primarily be achieved by a combination of modal shift and alternative decarbonisation technologies.

The Government has repeatedly stated its position as "technology neutral" regarding the decarbonisation of fuel or technology chosen for each transport mode. This has apparently been a barrier to investment in decarbonisation technologies, due to the financial risk posed to private companies who invest in infrastructure for a technology that may not be the eventual 'winner'. The Government should change its policy to one of 'targeted technology investment', allowing it the flexibility to make strategic investments in new technologies that offer evidenced solutions to lowering emissions. This would give the private sector more confidence to invest in its own infrastructure.

SYNTHETIC FUELS

The potential of sustainable fuels (biofuels and synthetic fuels) has been overlooked in this debate. The key benefit of these fuels is their 'drop-in' capabilities, meaning they are usable in existing vehicles. They can be engineered over time to improve efficiency and reduce particulates and other emissions, while taking advantage of ever-more efficient engine technology. They can also be blended with fossil fuels until production ramps up sufficiently to replace them.

Various types of these fuels are already in production worldwide and have been used successfully in a variety of applications including motorsport, high-performance cars and an RAF test flight. The ability to provide existing private cars the opportunity to remain on the road for some time, with drop-in replacement fuels from renewable sources, seems a sensible and economically sound approach, making the best use of legacy assets. The current legislative framework, however, fails to capture the benefits of these fuels by focusing only on tailpipe emissions and not accounting for carbon savings elsewhere in the lifecycle.

EV?

The sidelining of sustainable fuels is particularly marked in the arena of private cars, where in contradiction to its stated policy of technology neutrality, the Government is currently succumbing to groupthink and putting all its eggs in one basket: battery EVs.

Not everyone will be able to afford to replace their current car with an EV, nor will everyone easily be able to charge one at home. There are questions over the adequacy of infrastructure and the use of raw materials to produce the necessary batteries. An exclusive focus on battery electric vehicles risks failing to meet the UK's climate goals.

The huge potential for sustainable fuels to provide a low-carbon option for conventional engines must be further explored. Reducing greenhouse gas emissions right now by using increasing quantities of drop-in sustainable fuels, would enable us to address the existing fleet and minimise cost, and carbon emissions, through the use of existing infrastructure.

Direction, guidance and regulation from the Department for Transport in respect of sustainable fuels is urgently required. A mechanism is needed to recognise the carbon savings associated with sustainable fuels which would incentivise investment and drive down costs, allowing automotive companies to provide the solution by applying the right mix of technologies.

ROAD

For cars and taxis, battery electric has already been chosen as the preferred decarbonisation technology. We also believe there is a case for many people right across the country in all areas, but particularly in rural and isolated communities, to continue to drive wholly diesel or petrol-powered cars, or hybrids (or EVs if they wish). Over time they will very likely account for a negligible proportion of transport emissions.

The cost of introducing EV charging infrastructure is completely unrealistic and will require massive amounts of taxpayers' money through government subsidy for electricity generation, infrastructure provision & storage, and basic raw materials, for battery production; in order to be anywhere near acceptable as an alternative to ICE or hybrid personal vehicles, delivery, farming or construction vehicles.

HGV'S

The biggest decarbonisation challenge for the road sector is Heavy Goods Vehicles (HGVs), which need significantly more power. In November 2021, the Government announced that the UK will become the first country in the world to commit to phasing out new, non-zero emission heavy goods vehicles weighing 26 tonnes and under by 2035, with all new HGVs sold in the UK to be zero emission by 2040. For lighter-weight goods vehicles that are travelling shorter

distances, battery electric appears to the most viable solution, but for heavier HGVs travelling long distances, there does not appear to be a single obvious solution. We recommend that the Government publish a long-term HGV decarbonisation strategy as a matter of priority.

MARITIME

The maritime sector presents a significant challenge to decarbonisation. It appears to be the furthest behind of the transport sectors in terms of technology readiness. The global nature of the shipping industry means international consensus on the chosen decarbonisation technology is required for alignment of infrastructure, and the longevity of vessels means that fossil fuel-powered ships built today will likely still be in operation in 2050. The UK Government should use its influence at the International Maritime Organization to ensure that, globally, the path forward for investors in alternative maritime fuels becomes more secure.

AVIATION

There will likely be significant remaining emissions in the aviation sector by 2050, due the limited decarbonisation options currently available. We were told that zero emission flight will mostly likely be achieved via hydrogen or battery electric. Both options, however, are currently only viable for short-haul routes and will likely remain so until after 2050. Sustainable aviation fuels (SAF) are the most viable option for the immediate reduction of aviation emissions. In July 2022, the Government published its Jet Zero Strategy, which introduced a SAF mandate that will require at least 10 per cent of jet fuel to be made from sustainable sources by 2030. We consider that further measures are needed to stimulate uptake of SAF. We recommend that the Government should introduce a Contracts for Difference model to support the commercialisation of SAF and create price certainty to incentivise further investment.

RAIL

Rail travel is a naturally low-carbon transport mode, but trains in the UK still heavily rely on diesel traction for their power. In 2018, the Government committed to phasing out all diesel-only trains by 2040, including freight trains. Electrification is currently the only decarbonisation technology that can deliver a full range of requirements including high-speed, long-distance passenger travel and freight haulage.

To achieve its decarbonisation goals, the Government must electrify the network at a faster rate. Electrification may not be viable on all routes, as the long-term benefits may not justify the high investment cost and level of disruption caused by engineering works; in these cases battery electric and hydrogen may provide a solution, but neither are currently capable of delivering the power required by freight and high-speed train services because of their high energy demand.

Biofuels may be the most viable option for decarbonising rail freight in the short and medium term.

We reiterate a previous recommendation that the Department for Transport publish a long-term strategy for decarbonising the rail network, including a vision for what proportion of the future network will use electrification, battery and hydrogen, and a credible delivery plan..

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CONCLUSION

Witnesses agreed that the Government has broadly been neutral in its approach to choosing which alternative decarbonisation technology is the best solution for each transport sector. However, we also heard that this approach in practice has resulted in a lack of guidance from the Government as to which technologies the private sector should be investing in, effectively slowing down the take-up of decarbonisation technologies and innovation in the sector.

There are challenges with increasing uptake of alternative fuels in the transport sector. Financial investment in zero and near-zero emission technologies, adequate production facilities and the introduction of market incentives to improve uptake will all be necessary for the UK transport industry to transition to alternative fuel power.

Prioritising investment towards alternative fuels that are proven to have the greatest effect on emission reductions, while providing value for money, will be the optimal way for the Government to distribute its finite resources.

The Government may not always be able to adhere to its technology agnostic policy as it seeks to achieve the target of net zero emissions by 2050. If that aspiration is to be fulfilled, it must introduce policies that enable a functioning market, which encourages alternative fuel uptake. That will sometimes mean 'picking winners'.
A technology agnostic approach from the Government should not be used as an excuse for doing nothing to lead.

The technology agnostic approach has led to a lack of investment in alternative decarbonisation technologies by the private sector. A more nuanced approach to increasing the uptake of alternative fuels is required.

The Government must shift its 'technology agnostic' policy to a 'targeted technology investment' policy. Such a policy will provide the Government with the flexibility to make strategic investments in new technologies that offer evidenced solutions to lowering emissions, while allowing the Government to maintain a level of neutrality on the emission reduction approach in transport sectors which are currently difficult to decarbonise.

CONCLUSIONS AND RECOMMENDATIONS

SUSTAINABLE AND SYNTHETIC FUELS

The case for full electrification in private cars is 'the received wisdom', and therefore needs further scrutiny and investigation. Given the existing private cars that will remain on the road for some time, drop-in replacement fuels from renewable sources could be a no-risk, very sensible and economically sound approach. Government needs to take account of legacy petrol and diesel-powered motoring and continue to explore the potential of alternative fuels where possible.

Maintaining an official line on technology neutrality with respect to achieving zero emissions in private cars, the Government is in fact 'putting all its eggs in one basket': battery EVs. The reality is that not everyone in the UK can afford a new or second-hand electric vehicle, and if they could, cannot easily charge one at home. The infrastructure is not adequate to deliver sufficient electricity to homes, and there are insufficient raw materials to produce the battery banks needed for all vehicles to be EVs. We therefore caution against the promotion of electric vehicles as being the only solution to reducing carbon emissions from private vehicles.

A reality check is needed. High-end premium and supercar manufacturers, and smaller specialised manufacturers, which have a much smaller construction carbon and pollutant footprint compared to EV manufacturers, need direction, clear guidance, and regulation from the Department for Transport.

While long-haul aviation and international shipping are often identified as the most likely users of sustainable fuels, we believe that the Government must open-mindedly consider all alternative fuels for all modes of powered transport, including private cars.
All the propulsion alternatives have a significant role to play, so the Government needs to stop demonising specific technologies that could really help. Addressing the existing fleet will be decisive in achieving the UK's climate goals. Reducing greenhouse gas emissions right now, by the use of increasing quantities of drop-in sustainable fuels, enables us to address the existing fleet and minimise cost (and carbon emissions) through the use of existing infrastructure.

It would also enable more socially equitable access to carbon reduction technologies for everyday transport, as it would not be necessary to buy a new electric car and have access to charging infrastructure. However, sustainable fuels still produce emissions at point of use so offer no 'apparent' benefit in the current, misleading, legislative framework.

We need a mechanism to enable the carbon savings associated with sustainable fuels to count, which would incentivise investment, drive down costs and offer a better-managed and complementary set of solutions.
The continued focus on battery electric vehicles alone risks failing to meet the UK's climate goals. Demand for more and more range from electric vehicles makes them very heavy and very expensive, tying up precious resources in

an energy store that might rarely be used. Distributing those resources across more plug-in hybrid vehicles with smaller battery packs, that enable 80 per cent of our journeys to be completed electrically, yet retaining extended range using an ICE running on a sustainable fuel, might be a better compromise.

The ideal solution may be to allow automotive companies to fix the problem, and provide the solution by applying the right mix of technologies. Plugin hybrids (petrol and diesel) offer the best options when, in urban areas, they can make a switch to electric propulsion on entry (such as at low emission zones) or pay the charge and revert back to ICE (on sustainable/synthetic fuels) propulsion if required. They can also utilise ICE propulsion outside of urban environments, where they are very efficient and 'cleaner' over long distances and/or at higher average speeds. Hence 'range anxiety' becomes a thing of the past.

ROAD

We recommended in our July 2021 report on zero emission vehicles, that some of the £950 million rapid charging fund be used to provide fully future-proofed grid capacity, and that the Government work with National Grid to map the electricity network, to assess potential weak areas. In October 2021 a proof-of-concept version of a National Energy Systems Map was published. We reiterate our previous recommendation, that this kind of information be used to develop a plan to prevent 'not-spots' in grid capacity from emerging.

We believe there is a case for many people right across the country in all areas, but particularly in rural and isolated communities, to continue to drive wholly diesel or petrol-powered cars, or hybrids (or EVs if they wish). Over time they will very likely account for a negligible proportion of transport emissions.
The cost of introducing EV charging infrastructure everywhere is completely unrealistic, requiring massive amounts of taxpayers' money through government subsidy for electricity generation, infrastructure provision and storage. Also basic raw materials for battery production, in order to be anywhere near acceptable as an alternative to ICE or hybrid personal vehicles, delivery, farming or construction vehicles will be extremely costly.

We recommend that the Government publish its future of rural transport strategy as a matter of priority. The strategy should include the Government's plan to ensure people living in rural areas have adequate access to charging infrastructure.

The Government should examine the roll-out of public charging networks in other European countries and in Scotland. They should asses how best to harness government expenditure on chargepoints—particularly in rural and more economically marginal locations—to help increase the pace of the rollout and increase coverage and EV-to-charger ratios.

HGV'S

There is not yet a solution for the decarbonisation of HGVs in heavier weight categories that travel long distances. We recommend that the Government publish a long-term HGV decarbonisation strategy as a matter of priority.

MARITIME

The UK Government should support the International Maritime Organization's work to develop global standards for vessel construction. This would enable ships to utilise alternative fuels such as ammonia, synthetic fuels and hydrogen. The UK should use its influence at the IMO to ensure that, globally, the path forward for investors in alternative maritime fuels becomes more secure.

AVIATION

There is significant demand and potential for sustainable fuels in the aviation sector; they are the most plausible option for significant decarbonisation of aviation in the short and medium terms. We welcome the SAF mandate in the Jet Zero strategy, but consider that further measures are needed to stimulate the progress required. The Government must introduce a Contracts for Difference model to stimulate uptake of SAF. The Government should also examine whether such a model could be used to incentivise the uptake of other sustainable aviation technologies such as hydrogen.

RAIL

Freight transport and high-speed rail are the most significant decarbonisation challenges in the rail sector. To meet its objective to phase out all diesel-powered trains by 2040, the Government must increase the current pace of electrification set out in Network Rail's traction decarbonisation plan. The lifespan of rolling stock alone means that any rail projects currently being developed that are not wholly electrified (such as East West Rail) place in doubt the achievability of the 2040 target.

As stated in our 'Trains fit for the future?' report, we recommend that the Department for Transport publish a long-term strategy for decarbonising the rail network as a matter of priority. This should include a vision for what proportion of the future network will use electrification, battery and hydrogen. That strategy should be supported by appropriate costings, a credible delivery plan, and enabling targets and milestones. These targets and milestones should clarify how the 2040 and 2050 targets will fit together.

CONCLUSION

The Government may not always be able to adhere to its technology agnostic policy as it seeks to achieve the target of net zero emissions by 2050. If that aspiration is to be fulfilled, it must introduce policies that enable a functioning market which encourages alternative fuel uptake. That will sometimes mean 'picking winners'.
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Dover Fueling Solutions introduces DX Power™

to integrate EV chargers with the Prizma Ecosystem

Dover Fueling Solutions (DFS), a part of Dover Corporation is thrilled to announce the launch of DX Power™ within the European, Middle Eastern and African region. DX Power is a solution that integrates electric vehicle (EV) chargers with Prizma, DFS' connected mobility and convenience hub. This provides retailers with improved visibility and control, and customers with flexible payment options.

In today's fuel retail environment, most EV chargers run separately to the main point-of-sale (POS) and outdoor payment systems, resulting in customers requiring a roaming contract or registration to pay via charge cards. As a modular and open cloud-based platform, DX Power can interface with any EV charger and charge point operator to provide a frictionless customer journey. This solution seamlessly bridges the gap between EV chargers and the remaining forecourt system, helping streamline retail sites as they transition to supporting a new way of powering vehicles.

Raf Tormans, Senior Manager Product Management, DFS says;

"DX Power is a solution that can set a fuel retail business apart from the competition. It efficiently connects EV chargers, fuel dispensers, payment systems and your c-store; offering retailers increased visibility into their sales and providing customers with an effortless experience."

DX Power leverages the Prizma ecosystem and existing loyalty programs on fuel retail sites, to ensure EV chargers are included in transactions through the POS. This gives customers the additional ability to pay with cash, as well as traditional bank (credit or debit), local account and fleet cards. Facilitating the re-use of existing forecourt equipment DX Power, in conjunction with Prizma, optimises investments and provides site operators with clear visibility and control over payment options, and the status of EV chargers on their forecourt.

David Mc Guinness, Director Product Management, Electric Vehicle Charging, DFS commented;

"The energy mix in the fuel and convenience retail industry is changing. DX Power will help future-proof businesses, by allowing them to easily navigate the energy shift and ensure they're well prepared to serve a combination of customer needs. This solution further strengthens DFS's product portfolio around EV charging, following on from the launch of the Power UX™ 180 Electric Vehicle Charging System last year."

DX Power is compliant with applicable industry standards (OCPP and OCPI), European Union regulations and proposed Alternative Fuel and Infrastructure Regulations.

For more information about DX Power visit: www.doverfuelingsolutions.com/dxpower

For more information about Prizma visit: www.prizma-dfs.com/

For more information about Power UX 180 visit: www.doverfuelingsolutions.com/evchargers

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Henderson Technology & EDGEPoS future proofing your business

Henderson Technology realises that retail is a rapidly changing business and recognises the impact of innovative technology. The company provides forward-thinking solutions for convenience stores and forecourt retailers, enabling their businesses to maintain their competitive edge and ultimately boost profitability.

EDGEPoS covers the three main areas of running a retail business: operational efficiency, security and business development.

EDGEPoS Retail: an EPOS software solution supporting businesses from one to fifty lanes. The system delivers across all business needs, whilst carefully addressing the key areas of security, operational efficiency, and business development within a store.

EDGEPoS Head Office: can help to reduce administration overheads and staff time by controlling areas such as pricing, product maintenance and offers, across all sites from one central location. Multi-site operations require enhanced control and reporting to enable retailers to be proactive in decision making, aiding store success.

Real time sales reporting across all sites so that performance can be tracked from one location.

EDGEPoS Self-Checkout: is simply bolted onto one or more existing EDGEPoS tills and requires no additional counter space. The EDGEPoS Self-Checkout differs from other products on the market, giving retailers more choice to utilise space and staff.

EDGEPoS ESELs: the EDGEPoS electronic shelf label (ESL) system is a tool to display specific product pricing on shelves. The automated ESL system reduces time and cost for pricing management, improves pricing accuracy and allows dynamic pricing. Dynamic or demand pricing is a concept by which retailers can modify pricing for a myriad of reasons, such as: to match demand, because of online competition, stock levels, shelf life of items or to create promotions.

Other features:

EDGEPoS is a live system, which means that all updates are instant and automatic. Self-populating PLUs make for speedier transaction, with the top 15 PLUs automatically populating on the till based on up-to-date sales.

EDGEPoS has a local accounts package built into the system, allowing the cashier to check and print balances from the front till and process payments. There is an accounts wizard package built into the back office, giving the retailer the option to automatically email out statements to the customer, directly from the system.

When it comes to paying for a transaction, EDGEPoS allows dual currency between sterling and euro, it allows multiple tender options between cash, card, and local accounts. All No Means to Pay and Drive Offs are recorded at the till, so no need to keep separate logbooks.

Advanced Age Checking is built into EDGEPoS, allowing the cashier to refuse a sale, and all data is recorded on the back office, giving instant access through the reports for local authority spot checks.

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EDGEPoS allows the retailer to offer their own deals and promotions on the system. Articles can be included in as many promotions as required, and promotions set to run as required, e.g lunchtime or weekends. Instore coupons can also be set up as required at each store.

Case studies:

A retailer who has installed the system onsite is Manpreet Bawa from Burnpark Service Station in Kilmarnock. Manpreet has a wealth of experience in using EPOS systems and made the decision to install EDGEPoS into his Gulf and Premier branded store in May last year. He said:

"We are delighted with the functionality of EDGEPoS. It allows us to be able to refund a fuel transaction instantly. Over the years we found it really hard to find a system which can easily do our wetstock management, instead of having to pay an outside company to do it.

Henderson Technology has reduced the cost when it comes to wetstock management. We used to have to do it every day. Now we do it once or twice a week and the fuel stock is always perfect to within a litre."

Darren Moir at Westhill Service Station in Aberdeen said:

"We chose EDGEPoS over other systems because of the ease of use, ability to install the system within our timeline and the competitive pricing model."

Westhill Service Station has also implemented the fully integrated Appetite! Home Delivery and Click n Collect App instore.

Naz and Jen Zokiuddin set up Refuel Forecourts in 2020 and have EDGEPoS currently in four of their five sites.

Naz says:

"At last, a user-friendly system for my forecourts, shop cashiers and employees. The training on the tills is so straightforward, streamlined and easy to use. What would have taken two weeks can now be completed in three days. More importantly we don't get charged for training.

"The backoffice system is used by my managers onsite, who have been trained on EDGEPoS. They love the daily routine on EDGEPoS and find the system so easy to navigate and use. Reporting is consistent and accurate.

"We have recently ordered the EDGEPoS Head Office system which I have promoted one manager to control. I'm really looking forward to seeing how that saves us even more time. This also allows Jen to have access to site visibility and control, giving up the confidence to know we can grow the current business volumes and overall portfolio.

"One thing that managers couldn't live without, is the ability to change pump prices at the till and input a fuel delivery on the till, and not the back office; a huge inconvenience and additional work if these little features were not on the system.

"The support is great – weekdays, weekends, bank holidays. Being one and two-lane sites, we need to have the confidence that if something goes wrong, someone is there to answer the phone and fix it. I can honestly say that the ease of use has given me the confidence to choose EDGEPoS and work with Henderson Technology into the future."

Jen adds:

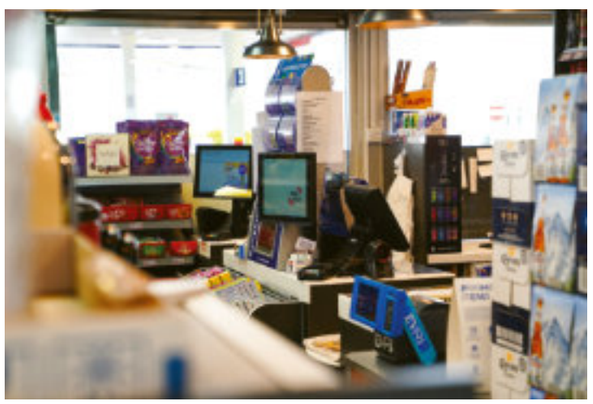
"EDGEPoS has a full suite of reports that allow us to manage costs within the business. It helps us to spot check our costing and the reports are exceptionally good for shop margin, price checking, etc. Everything is live and real time with EDGEPoS, which allows us to move swiftly onto the next business challenge."

Keep competitive with EDGEPoS

EDGEPoS is the future of retail technology. With its innovative and cost-effective self-checkout solution for retailers, alongside the award-winning Gander, Appetite and Ubamarket app integrations.

Henderson Technology works with all its customers, to ensure that the award-winning EPOS solution brings added functionality and integrations into the fuel forecourt and convenience sectors.

For more information and to find out how you can get a free tailored EDGEPoS demo visit :
www.henderson.technology
Twitter: @_HendersonTech
Email: sales@henderson.technology
Telephone: 028 9094 1900



Back to the future
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HYTEK

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AXON – Welcome to the future of refuelling

New for 2023, Petrotec have launched their new flagship Axon fuel dispenser family.

Combining intelligent construction with a sharp & dynamic user experience, the new Axon range features high quality materials and uses state-of-the-art hydraulic and electronic components; producing long service life & reduced maintenance.

Axon has been designed alongside feedback from our customers. It incorporates straight and minimalist lines allow for clean and simple look, while ensuring easy maintenance and cleaning.

Axon has been designed from the ground up, with integrated multimedia capability to allow for an amazing customer experience. This allows customers to increase shop sales, with the ability to promote offers whilst refuelling.

Axon also has the option to integrate the new Petrotec ConnectPay Outdoor Payment Terminal alongside the multimedia system. Thus giving customers the option for 24hr refuelling on their fuel stations - increasing business profitability.

Contact Petroassist UK today for more information on the new Axon range.

About Petrotec:

Petrotec Group comprises a group of companies whose activity is focused on the production, marketing and technical assistance of equipment and systems for the storage, distribution and retail areas of the oil industry. The Group has also increasingly directed its activity towards the development of solutions that answer to the needs of a new era of mobility, namely in the areas of EV and Hydrogen.

Equipped with 100% proprietary technology, the Petrotec Group is dedicated to the production of fuel pumps, vehicle washing equipment, payment and automation systems for fleets and gas stations.

We also provide flexible and customised solutions that, combined with its technological innovation and design, sustain the entire course of the organisation. It also presents solutions for electric mobility with the sale, installation and maintenance of charging systems.

The Petrotec Group also combines its products and technologies with engineering solutions and services, dedicated to the optimisation of its business model.

The Group is also represented at an international level, with affiliates and distributors on five continents, thus assuming itself as a "Global Player". The partnerships established ensure an organised distribution network, currently supported in 84 countries, and which has clients of high international reputation and prestige.

For more information about Petrotec set of solutions please visit www.petrotec.uk

About Petroassist UK

Petroassist UK supplies, installs, and maintains a broad range of forecourt equipment including: fuel pumps, payment and control solutions, tank gauges and other ancillary equipment.

With a multi-skilled team of field service engineers, Petroassist UK offers a broad range of services nationwide. The company ensures the maintenance of fuel pumps or tank gauges, the installation, or upgrades to fuel infrastructure installations, tailoring its services to suit the most demanding business needs.

Tel: 0131 440 5810
info@petroassist.uk
uk.sales@petroassist.uk

An ounce of prevention is worth a pound of cure

By Clay Moore, Senior Director of Product, Leighton O'Brien

Gone are the days where the only way to measure the fuel level in an underground storage tank (UST) was to insert a long stick into it, "read" the height of the fuel and then consult a tank-strapping chart to extrapolate how much more fuel it can accommodate, or how long it may be until the fuel runs out. Thankfully, there's been some noteworthy mechanical and digital advancements in automated tank gauging (ATG) and fuel monitoring since the days of tank sticking.

But the data these next-level systems are able to gather and monitor is still disjointed and largely reactive, with each monitoring component its own little ecosystem, with no universal connectivity. The next evolutionary step of site monitoring is a system that can not only pull information from an ATG, but collate, centralise and interpret that data on a minute-by-minute basis; and intuitively recognise points of failure before an actual failure can occur.

These systems would also parse this breadth of operational data across compliance, alarms, wetstock and fuel inventory, proactively suggesting ways it could be used, for instance:

- To identify the best day or time to order more fuel
- Improve nozzle flow before customers complain
- Be alerted to a fuel system component that may be close to breaking down or becoming out of compliance.

At a typical forecourt, there are three significant pressure points: Fuel inventory, compliance and maintenance, that must be monitored constantly. Any slippage in performance in these areas will put the site at risk of incurring excessive downtime, operational disruptions, out-of-compliance fines or even, in the worst-case scenario, a complete site shutdown.

Pressure point no. 1: Fuel inventory

A forecourt that consistently runs out of fuel won't be in business for very long. Given ever changing demand and supply conditions, site operators need to have complete visibility into the fuel level in every UST at all times of the day. Often, however, fuel retailers are at the mercy of their carriers, who will schedule deliveries that will make them profitable, not necessarily the site owner. Which is why 'stuffing the tank' or runouts are not uncommon.

Another piece of the inventory puzzle is fuel reconciliation. When a delivery occurs, the operator must be confident that the amount of fuel that finds its way into the UST is the amount that was actually ordered, since everyone wants to get what they pay for. Traditionally, the only way to confirm the delivery amount was trusting a potential erroneous ATG reading and matching it against the BOL or allowing a threshold of variance per delivery.

Pressure point no. 2: Compliance

Staying in compliance is both an imperative and a headache for retail fuelling sites. Storing and tracking testing, permits, certifications and inspection information and staying up to date on any changes in requirements is time-consuming, but there are dire consequences if a fuelling site falls out of compliance.

To stay in compliance, site operators must identify the cause and effect when an out-of-compliance condition occurs. To do this, they must have an almost supernatural ability to find an issue before it becomes a problem. For example, when frequent outages occur, it often causes air to get into the fuel supply lines, which in effect will put the system out of compliance and create other maintenance costs.

Pressure point no. 3: Maintenance

Industry-wide labour shortages – including maintenance departments – continue to plague fuel retailers. So, when a line-leak alarm is sounded, how can the site operator know when, or even if, a service engineer is available to come out and inspect it?

Additionally, by their very nature, maintenance routines can be inefficient. After a call is made to the service provider to schedule a site visit, the technician must travel to the location and troubleshoot the situation, identifying the best way to fix the problem. This can be problematic if they don't know the root cause.

The most efficient and profitable retail fuelling sites are those that create a symbiotic relationship between the fuel inventory, compliance and maintenance areas of their operations. This can only be possible, however, if these three departments have the right data and tools at their disposal to proactively determine an issue long before it affects the customer.

Bringing it all together: A unified view

The next evolution of fuel management solutions can collect, centralise and analyse fuel sites' data via a single access point, putting actionable operational insights at the fingertips of the user.

Utilising the power of artificial intelligence (AI) and advanced data analytics, these solutions enable operators to gain a full picture of real events and fuel losses at site that pose an efficiency, business or compliance risk, with notifications and workflows to manage each issue to resolution.

Instead of logging into multiple systems, the latest software solutions enable fuel managers to truly manage by exception on a single platform, remotely diagnose key issues and automate traditionally repetitive tasks. This would include relying on site staff to enter daily variance totals on a spreadsheet, calling sites for inventory levels to order fuel, or running manual weekly reports to review ATG alarms.

Easy to connect and deploy, these tools perform two previously unattainable tasks when it comes to optimised fuel-site management:

It gives its users fingertip access to all key points of Fuel Inventory, Compliance, Alarm and Wetstock data on one platform

It takes advantage of next-generation AI algorithms and machine learning to compile and analyze historical operational trends in order to create a proactive system and workflows that alerts site operators to an issue before it becomes a costly problem.

So, while technology will undoubtedly continue to evolve, today's smart fuel retailers are shifting from a reactive to proactive mindset, armed with the tools to run a more efficient, compliant and profitable fuelling operation.

Clay Moore is Senior Director of Product for Leighton O'Brien and can be reached at claymoore@leightonobrien.com.
Leighton O'Brien is a leading global fuel-analytics technology provider that enables retail fuel networks to reduce environmental risk, prolong asset lifespan and optimise capital spend.

Leighton O'Brien operates in 33 countries through direct operations and partnerships with 70+ licensed distributors.

For more information visit leightonobrien.com.

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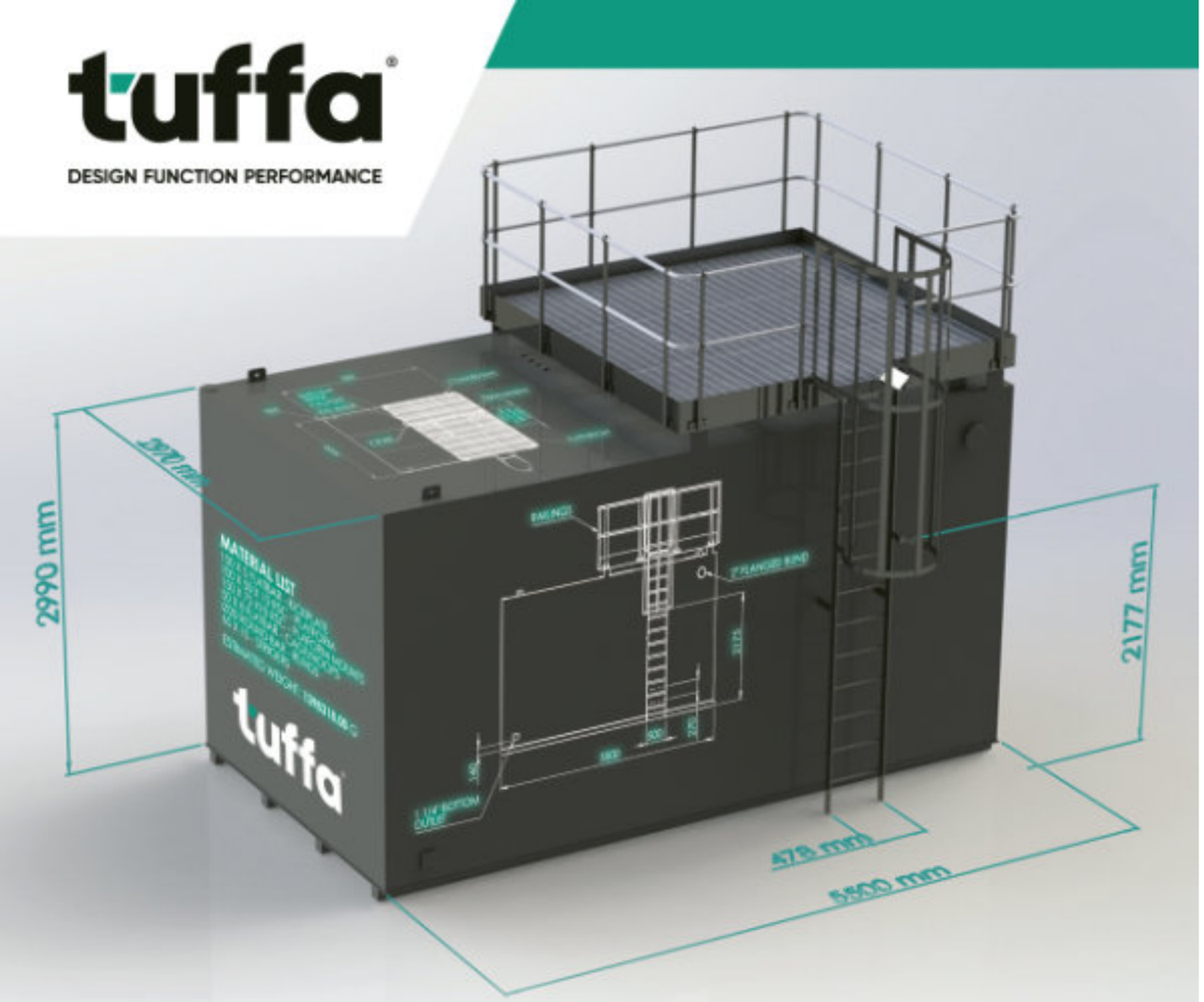

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The future's bright, the future's (Ad)Blue

There's an AdBlue revolution, and we are on the front line!

Most in the industry know that the demand for AdBlue, a diesel exhaust fluid (DEF) used to reduce harmful emissions, has grown exponentially - due to increasing environmental concerns and emission regulations. Tuffa and GreenChem, two prominent companies in the industry, have established a solid partnership over the past decade to meet customer needs, by pursuing a sustainable approach.

Tuffa's Managing Director James Shenton *(pictured above)* says;

"Collaboration is key to guarantee quality. GreenChem are leaders in their field for a good reason. They constantly refine an already proven product and business model."

Tuffa and GreenChem understand the importance of providing high-quality, reliable supply AdBlue to provide an optimal supply chain. Their partnership emphasises a shared commitment to quality assurance, with both companies implementing stringent manufacturing and testing processes. GreenChem's business model supplies a dependable, reliable product however you need, whether dispensed from a tank, a mobile fuelling station, or an old-school 5-litre container.

Chris Haynes, GreenChem's Managing Director *(pictured above)* says;

"By working together, Tuffa and GreenChem can maintain the highest standards in the AdBlue supply chain, guaranteeing customers receive a reliable product that meets industry requirements when needed. Irrespective of other supply chain issues".

"GreenChem is only able to supply a reliable supply because we are both producers and distributors. The distributor-only supply chain from other companies is fraught with jeopardy and unreliability. Our customer base now includes transport and haulage, fleets and agriculture where the supply chain is business-critical."

Tuffa, renowned for its expertise in storage solutions, manufactures and supplies AdBlue tanks specifically designed to meet customers' needs; but the tank alone is a skeleton. GreenChem, as a leading producer and distributor of AdBlue, is the beating heart of this particular supply chain.

James Shenton adds;

"Unlike our other standard tanks, the GreenChem project was a true collaboration. From the design stages, NPI and NPD were and are still joint ventures."

Chris says;

"People are well aware of our tanks on forecourts up and down the country and throughout Europe, but fewer people are fully aware of the depth of service we can offer to transport and fleet operators. We can seamlessly supply retail units, fuel management, security, and automation onto a site".

By understanding the importance of flexibility, AdBlue offers companies under increasing political, social and environmental pressure to cut corporate emissions. Both Tuffa and GreenChem share a solid commitment to environmental responsibility. AdBlue is a crucial component in reducing harmful emissions, and the partnership between Tuffa and GreenChem plays a vital role in fostering sustainable practices. By working together, they encourage the adoption of AdBlue solutions, ultimately contributing to a cleaner and healthier environment.

This commitment aligns with the global shift towards greener technologies and supports regulatory efforts to minimise the environmental impact of diesel vehicles. James and Chris aligned when they said;

"There is no panacea moment in reducing our reliance on fossil fuels. EV isn't fit for purpose for any significant distance. Hydrogen is an exciting proposition with vast investment, but we are a way off that being a viable option, so we must look at the immediate landscape.

Sure, there's biofuel, like B100 and HVO, but these have their own supply or environmental issues. B100 is a political hot potato because of its impact on globally available food supplies. AdBlue remains a positive and significant step in the right direction."

The partnership between Tuffa and GreenChem in providing AdBlue showcases the power of collaboration in driving sustainable solutions. Their shared commitment to quality assurance, supply chain efficiency, customisation, and environmental responsibility brings numerous benefits to customers pursuing reliable AdBlue products.

Through this partnership, Tuffa and GreenChem contribute to the global effort to reduce harmful emissions, positively impacting the environment and supporting regulatory compliance. Together, they exemplify the potential of collaborative efforts to drive sustainable practices in the diesel industry.

Remember, The Future's Bright, The Future's (Ad)Blue.

New low carbon AdBlue® solutions from Commercial Fuel Solutions®

Commercial Fuel Solutions Ltd have been supplying AdBlue for over 15 years. They have developed a reputation as both an authoritative and reliable national supplier.

Recognised for their innovative solutions, which embrace both the reduction of harmful emissions and those which help to protect the environment, Commercial Fuel Solutions® have launched a new range of AdBlue products. These offer reduced environmental impact when compared to other solutions.

2023 has seen the introduction of new packaging options and scheme. These reduce both the volume of virgin plastics as well as the associated lifetime carbon footprint of packed products.

Robin Futcher, Managing Director says;

"Everybody knows that the most carbon-efficient way to purchase AdBlue is to operate a bulk storage tank. However, this option requires a significant investment upfront and is not viable for smaller operators, who rely on the use of drums and IBCs.

"So we took it upon ourselves to evaluate options in the market, to see both where these products could be improved as well as their associated processes".

Fully recyclable containers

Earlier this year, Commercial Fuel Solutions® took the initiative and moved all AdBlue drum products to use a container, which is not only fully recyclable but one which contains 30% recyclate itself.

This move reduces the carbon impact of each drum supplied by 3.6 kg and by the end of this year, as a result of this simple yet effective change, this initiative will have hopefully prevented over 4 tonnes of CO2e from entering the environment.

In addition to the new lower carbon drums, Commercial Fuel Solutions have amended their IBC supply process to introduce a fair wear and tear policy. They will replace the internal bottle of their customers' IBCs free of charge once it reaches the end of its life. This process reduces the carbon impact by 97.5 kg/CO2e per container lifecycle.

These new packaging options are available immediately from Commercial Fuel Solutions® and can be ordered online through their website.

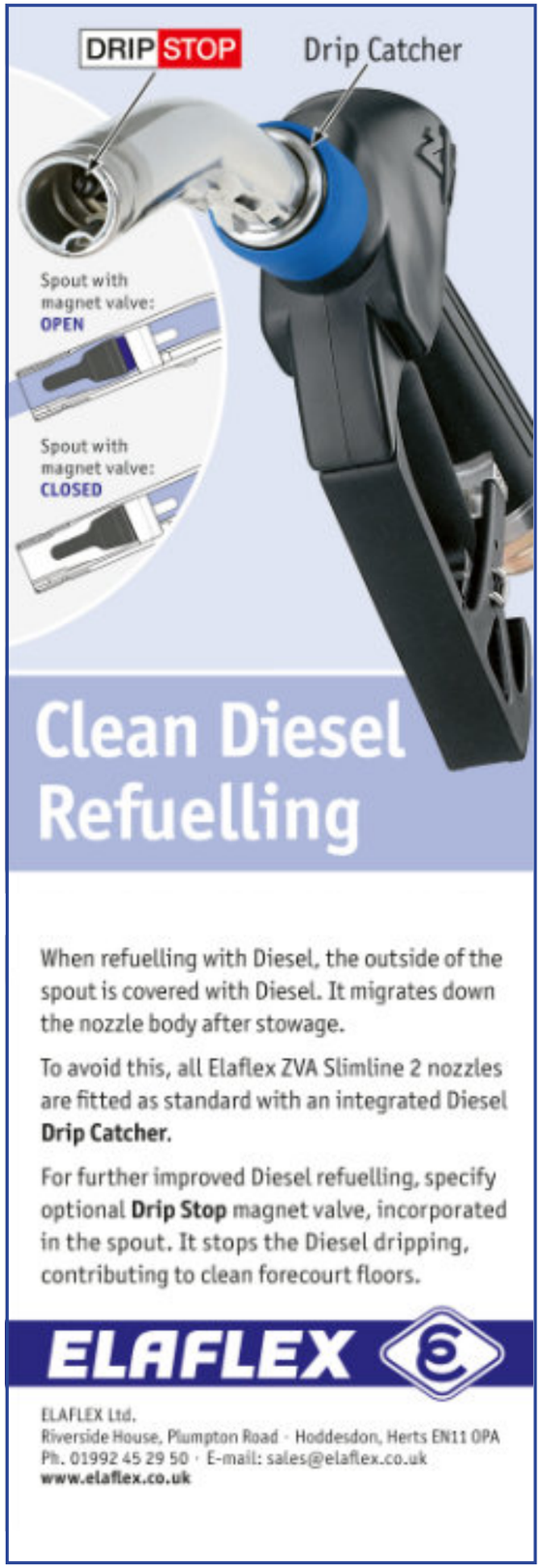
commercialfuelsolutions.co.uk
https://l.ead.me/lowCO2

See our new Hydrogen Bowser on Green Pages (page 1)

In the next INSITE

Hydrogen's role in decarbonising transport:

An insight into the future



When refuelling with Diesel, the outside of the spout is covered with Diesel. It migrates down the nozzle body after stowage.

To avoid this, all Elaflex ZVA Slimline 2 nozzles are fitted as standard with an integrated Diesel **Drip Catcher.**

For further improved Diesel refuelling, specify optional **Drip Stop** magnet valve, incorporated in the spout. It stops the Diesel dripping, contributing to clean forecourt floors.

ELAFLEX

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What are the AdBlue® storage regulations?

Our colleagues at PEIMF+ member company Fuel Storage Systems offer some useful help and advice.

AdBlue® solution is corrosive to some materials, and pollutes surface and groundwater. Despite this, there are currently no enforced AdBlue® storage regulations in the UK. However, the Environmental Agency has issued storage guidelines, and under the Anti-Pollution Works Regulations, they can issue a notice enforcing appropriate improvements.

The Environmental Agency guidelines state:

1. Your container, pipework and dispenser equipment are suitable for use with urea
2. You have secondary containment for the container and ancillary equipment (i.e. a bunded tank)
3. The dispensing area drainage is isolated from surface water drains
4. You have a trigger nozzle with an auto shut-off to dispense AdBlue®
5. You have appropriate emergency equipment to deal with large and minor spills.
6. You have an emergency plan and suitable training for dealing with spillages or other accidents

Additionally, the Environment Agency, SEPA and the APEA encourage using a secondary container (bund) when bulk storing AdBlue®.

How should I store AdBlue®?

AdBlue® stored incorrectly can become contaminated and cause damage to vehicles or equipment. When storing in bulk, it should be kept in an AdBlue® tank made from non-corrosive materials such as polyethylene.

AdBlue® stored outside should be kept out of direct sunlight in a sealed & clean container. Keeping AdBlue® out of direct sunlight and between -6°C and 25°C will prevent contamination and increase the lifespan.

Most AdBlue® tanks are bunded and manufactured from opaque UV-stabilised polyethylene. This means tanks can be stored outside while keeping the solution out of direct sunlight.

The capability of making these available for mass-market, and the percentage of ultra-low emission vehicles within the UK is still minimal.

Euro emission standards

AdBlue® and SCR technology remain the most popular and viable way of achieving Euro emission standards. With emission legislation becoming increasingly demanding, SCR technology and AdBlue® usage will likely become much more popular long before it declines.

It must be noted that it is only the *sale* of cars powered by fossil fuels (including hybrids) which will be banned by 2035 or before. AdBlue® usage for cars will wane after that but will still be required until a total ban on driving these cars is enforced.

Due to the increased difficulty in powering heavy vehicles, the sale of new diesel HGVs won't be banned until 2040.

www.fuelstoragesystems.com

FUEL STORAGE SYSTEMS

The dreaded drought!

Tuffa Tanks offer a very interesting option for dealing with the consequences of global warming: Rainwater harvesting

Summer's here (thankfully), but the big question is always, *will it be a nice summer?*

It's a subjective question, but based on last year's heatwave, what constitutes "nice"?

The National Drought Group (NDG) warns of a 'worst case scenario' summer ahead. Once again, temperatures are set to reach an all-time high in 2023 summer predictions. Grab your sandals, slap on some factor 50, and dust off the old Speedos as the UK sheds its winter coat.

2022 saw the UK enveloped in the "heatwave of the century", or at least the driest in the last *half* century. A slight exaggeration, but either way, it was 'too hot' for us Brits, spending the time sheltering indoors or congregating in the local beer garden (so not all bad!). Breaking records with a staggering 40.3C, the local pubs were rife with sunburn and Pimms on tap (again, not all bad).

Fast forward to 2023, and we're already seeing Global Warming at work. The NDG reports the UK experienced the driest February in 30 years. However, March was the wettest England has endured in the last 40 years! Talk about mood swings. With the bipolar weather kicking off this year, it's safe to say that predictions of drought aren't hard to believe, with a repeat of last year's rising temperatures and water shortages as the global climate change crisis begins to heat up.

Sky News reports that the NDG held a meeting on Monday, 24th April, expressing their concern that the country can't depend on the weather alone to keep the dreaded drought at bay.

Rising temperatures

Forward-thinking and better planning are the only ways we can help lessen the blow of the dry spell, by being more conscious of water preservation and supply. Climate change is on the rise now, more than ever, affecting us all globally. Actions speak louder than words, and action must be taken.

Forest fires are one of many consequences and challenges of increased temperatures. Wildfires ripped through parts of Europe, and we can all remember the devastating footage of Australia's wildlife fleeing to safety from the flames.

Rising temperatures lead the way to drought, devastating the planet as a collective; from human health to water quality, the world depends on the natural order of things to survive. A homeostasis, if you will.

Agriculture will take the biggest hit. Crops will fail, and livestock will take priority to feed and water, but with a lack of water quality and supply, the consequences are ongoing, unforgivable and largely avoidable.

Which begs the question;

"How do we prepare for this? Is there a way to preserve the water while we still have an ongoing supply?"

Rainwater harvesting

Last year saw a ban on hosepipes in an attempt to put a stent in the loss of water supply, not that it made much of a difference as parts of the country are yet to fully recover from the last dry summer. South West Water has implemented another temporary hosepipe ban in Devon as early as April this year to get a precautionary measure in place, according to Sky News.

Let's go back to basics, gardeners have been doing it for decades, but rainwater harvesting is an easy solution, which can then be stored and distributed as and when needed. Although it has limitations, it's still a simple, cost-effective and easy-to-adopt step for any future dilemma.

Tuffa is supporting South Staffs Water with their SPRING initiative as they prove that actions speak louder than words; creating a grant of up to £15,000 per year for farmers; to help ease the supply and financial burden of maintaining a fully functioning farm.

The grant can be used for various reasons, from CapEx investments and concreting, to fencing and drainage to railway sleepers. Another bonus of the initiative

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is the focus on rainwater harvesting, as it can be spent on solutions and alternatives to preserve water use. Crops may be parched by the drought, but showering them with drinking water seems unresourceful!

A couple of caravan goers have also had some outside-the-box thinking and used Tuffa's effluent tanks for multipurpose use, housing them under their caravan to catch rainwater. Simple, yet effective (I do need to mention that the tanks were new and unused!).

Increased rainfall

Met Office data showed 111.3mm of rain fell during March this year, 91% more than the average, an alarming number in the growing state of climate change, but a positive spin is it also shows that rainwater harvesting is viable. However, the heavy rainfall in March, paired with February being the driest in recent decades, highlights that relying on the weather is not feasible for our water preservation ahead of the projected scorching summer.

At the start of May, total reservoir capacity across the country was at 94%. In September 2022 it was as low as 49% in the aftermath of the summer droughts. Highlighting the severity of drought on the overall functionality of water supply throughout the UK. Reservoirs at 49% capacity with any additional drain on resources might take 100 years to fully recover.

That's a long time to wait for a glass of water!

If droughts persist

Desertification (a process by which vegetation in grasslands or shrublands decreases until it eventually disappears) could be well on the horizon if temperatures continue to soar and droughts persist. Climate change isn't to be mistaken for a mirage.

Drought is detrimental to the delicate infrastructure of maintaining biodiversity on the land as soil organisms contribute massively to the health and wealth of the Earth. Who knew creepy crawlies were so important?

Despite the NDG's worrisome predictions, they have stated that "much of England is in a better position than last year", and preparations now will hopefully reduce the risk of introducing future drought measures. John Leyland, chair of the NDG and executive director of the Environment Agency, said:

"We all owe it to the environment and wildlife to continue to use water carefully to protect our precious rivers, lakes and groundwater."

Icebergs don't only exist in blockbuster movies, with a famous boat and a dashing DiCaprio! The ice caps are melting rapidly, and the Arctic is warming up faster than the rest of the world. The Arctic has been a homeland for thousands of years, but the habitat is declining.

Tuffa understands the importance of being more innovative, aware and prepared when it comes to water use. Our rainwater harvesting tanks are available in capacities of 1,350 to 20,000 litres. As droughts persist, there's one option we can all turn to;

Rainwater harvesting.

tuffa

Hydrogen refuelling network benefits from fuel management system

Installation of the MCS Sapphire fuel management system across Motive Fuels' hydrogen refuelling network

Who are Motive Fuels?

Motive's turnkey green hydrogen refuelling stations generate and store hydrogen fuel on site. All they require is a source of water and power, meaning they are able to generate an endless source of zero emission fuel.

Their stations are completely self contained and able to generate, dispense, and store all the Green Hydrogen you may need. Motive's mission is to decarbonise transport. They are making meaningful positive change as the world races to Net Zero, by enabling the uptake of hydrogen vehicles in hard to decarbonise sectors.

Fleets, industry and local authorities looking to clean energy to help them achieve net zero.

Their stations can help your fleets run as normal without downtime or loss of range... all with zero emissions.

Motive's largest refuelling station at Tyseley will be fully opened early 2022 and is already being used by National Express on their new, zero-emission, double decker buses operated for Birmingham City Council.

The station is open to cars and will also fill mobile refuellers and hydrogen tube tankers. This shows Motive's model for providing zero carbon infrastructure—built for a dedicated fleet—without capital investment by the fleet operator.

The site at Tyseley is the model for Motive's next generation of refuelling stations; providing green hydrogen for HGVs and buses as they decarbonise. The station, which has been open for cars since early this year was funded through a combination of private investment, EU and UK Government funding.

What were Motive's needs?

Motive were in need of a fuel management system that was reliable and supported, as the downtime caused by the previous fuel management system was having a serious impact to their business. Entire stations would go offline, sometimes for many days. These stations not only supply hydrogen to business and the general public, but also to frontline emergency service vehicles; so the need for the stations to be online was critical.

The need for immediate remote support when required was also imperative, to quickly assist with both the online web portal and to carry out any remote diagnostics and repairs to the fuel management system terminals, when it was urgently required.

octane

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What were Motive's goals?

The goal was to implement a fuel management system that was reliable, supported, cost effectiv, and that would seamlessly integrate with their existing hydrogen dispensing hardware

The fuel management system needed to support the existing internal Motive fuel cards, plus the fuel cards of an external fuel card supplier.

All information transferred to and from the fuel management system, such as fuel card information and transactional information, needed to be sent and received in real-time.

The web portal platform also needed to capture transactional information from hydrogen dispensers, that did not have our fuel management system connected to it.

The format of the information needed to directly integrate with Motive's accounting system, to automatically generate invoices to customers.

How did the MCS Sapphire fuel management system meet Motive's needs?

Initially, Octane attended the Rotherham depot to carry out testing on the existing hydrogen dispenser, to verify that the software protocol the hydrogen dispenser was using was compatible with the MCS Sapphire's range of different pump protocols. Testing was also carried out with Motive's inhouse fuel cards, to confirm that the existing fuel cards in circulation being used by Motive's many customers were transferable to the MCS Sapphire fuel management system.

Once this was verified, Octane provided a quotation and installation plan to roll out the hardware across the Motive network.

The MCS Sapphire is a fully online, real-time fuel management system with a full QWERTY keypad and card reader which allowed Motive to capture all information needed at the point of refuelling.

To achieve the software goals, a web developer from the MCS technical support team was assigned to the project to carry out two bespoke requirements. The first requirement was to be able to import and export fuel card data to and from the fuel management system from an external national UK fuel card supplier. A direct connection was developed to the fuel card suppliers' network and the MCS Sapphire's servers to give the ability to import external fuel card numbers and export external fuel card users' transactional data.

The second requirement was to be able to import transactional information from dispensers on site, that were not connected and controlled by our fuel management system. A path to import the information to the hose web portal TSM was developed using an FTP server, which provided Motive with the ability to import these transactions at a frequency of their choice. Once imported, the Sapphire web portal TSM already had the ability to automatically generate and automate reports with all transactional information in one place back to Motive, in a format suitable so they could import this into their accounting software.

All from Octane's HQ

Octane, as the UK distributor for MCS, has the ability to setup, program, install, commission and support the MCS Sapphire from our head office in West Yorkshire. Each fuel management system terminal was built to the bespoke specifications of the site in our in-house workshop and test centre. Octane's integration with MCS gives us the ability to project manage the software development and the hardware installation. Having full control over the Sapphire fuel management system allows us to seamlessly implement the system into a business, from start to finish.

Our engineers have been able to respond to any emergency hardware issues across Motive's hydrogen refuelling network the same day. This significantly reduces downtime, and Octane's technical support team have dealt with technical queries immediately.

Octane's 24/7 emergency support number acts as reassurance that any emergencies will be dealt with promptly.

James Cross, Commercial Director at Motive Fuels:

"The MCS Sapphire has saved us around £4,000 per station per year, compared to our previous solution. But more importantly, our station availability has been significantly improved due to a reduction in faults and quick response of the Octane team.

"The Sapphire/MCS solutions, and its links to our other systems, has simplified our accounting process and administration by allowing an automated link between the hydrogen dispensers, the MCS portal and our accounting system. This means we can view our sales records, in our accounts system on a daily basis and save time on invoicing and reconciliations.

"Octane have provided us with an exceptional service and gone above and beyond to make the installation of the equipment and continued support seamless."

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Octane's Tom Burns and the team provided exceptional service

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Membership code of ethics

In addition to our complete review of the PEIMF+ constitution, we have also had a team dedicated to reviewing and updating our members' code of ethics.

All membership renewals will be accompanied by this document, as all member companies are expected to agree with, and adhere to, these principles:

OUR AIMS AT ALL TIMES ARE:

- To provide the best possible service to our clients and customers.
- To observe superior standards of conduct in our dealings with clients, customers and peers regarding integrity, fairness and honesty.
- To maintain a strict duty of confidentiality of our clients' affairs.
- To acknowledge that contracts should be fair to all parties and, where appropriate, to settle disputes by voluntary agreement or impartial arbitration.
- To continually strive to achieve best practices and methods relevant to our industry.
- To provide superior quality leadership, materials and workmanship to the best of our ability.
- To undertake to share best practices and learnings with other members thus promoting our 'Working Together' philosophy.
- To show that, by virtue of membership of PEIMF+, the members have and do signify their commitment to the above principles.

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www.jwhtanks.co.uk
Tank cleaning, removal and disposal services

Kidderminster Petroleum Services Ltd
01562 861636
www.kidderminsterpetroleumservices.com
Petrol forecourt Installation, maintenance and service

Ledbury Welding & Engineering Ltd
01531 632222
www.lweltd.co.uk
Bunded tank manufacturers, SuperVault modular filling station

Lees Industrial Services Ltd
01942 722244
www.leesindustrialservices.co.uk
Tank and Pipeline decommissioning using BritFoam, a resin based hardfoam

Leighton O'Brien
07311 360 206
www.leightonobrien.com
Wetstock management services, tank testing /cleaning & fuel polishing

LCM Environmental
0808 1644 570
www.lcmenvironmental.co.uk
Fuel testing, polishing & uplifts; tank cleaning, installation

LS Forecourts Ltd
07921 392577
www.lsforecourts.co.uk
Pumps, pipes, tanks, gauges, sales, service, installation and repair

M&E Services (NI) Ltd
02830 878259
Installation of diesel generators, remote fuel tanks and pipe work, DC control systems. Commissioning generator and fuel control systems

M & Co Construction Group Ltd
01299 890348
Drainage specialists, groundwork and civil engineering

Makeen Energy
01792 224003
www.makeenenergy.com
LPG installation & maintenance, inspections, calibrations, training and decommissioning on forecourts throughout the UK

MDM Services (Cardiff) Ltd
01633 277277
www.mdmservices.co.uk
Installation and maintenance of forecourt and commercial fuel products

ME Group
07710 693204
www.me-group.com
Vending, Revolution Launderette, photo booths & speed labs

Merridale Ltd
01902 870037
www.merridale.co.uk
Fuel management systems for commercial diesel supplies

Merkland Tank
0141 440 6130
www.merklandtank.co.uk
Storage Tank Cleaning and Maintenance Services throughout the UK

Mitchell & Webber
01209 823439
www.mitwebservices.co.uk
Specialist fuel services supplier inc, tank cleaning & fuel polishing

Northern Pump Distributors
01924 275318
www.npd.uk.com
Forecourt installations & associated services

North West Pumps Ltd
01942 927219
www.nwpluk.com
Pump servicing, installation & maintenance. Gauges, POS configuration, vapour testing

Nupi Industrie Italien S.p.A
07736 751161
www.nupiindustrieitaliane.com
Pipework, tank and dispenser sumps, remote spill containments, manhole covers

OAMPS Hazardous Industries
01372 869700
www.ohes.co.uk
Specialist insurers for the petroleum industry

O'Connell Site Services
0151 546 9888
Tank installation, demolition, decommissioning, pump calibration

Octane Holding Group
0113 201 2460
www.octane.uk.com
Pumps, tanks, environmental and technical services

Oil Tank Supplies Ltd
01386 853409
www.oiltanksupplies.com
Fuel storage systems including hire and industrial tanks

On The Level
0780 0731489
www.ontheleveluk.co.uk
Installation & service of tank gauges, DCDs and associated equipment

OPW
01756 799773
www.opwglobal.com
Manhole covers, underground enclosures, tank & dispenser sumps

Panks Engineers (Castle Hill) Ltd
01603 620294
www.panks.co.uk
Water specialists, dirty water, bore hole drilling, treatment and installations

Pennine Pump & Tank Company
01254 679099
www.penninepump.co.uk
Pumps, fuel management systems, tank, pipe and electrical testing

Petroassist
0131 440 5810
www.petroassist.uk
Fuel dispensers and forecourt technologies

Petrol Sign UK Ltd
01302 346968
www.petrol-signuk.com
Supply & install brand signage, sister company to Global MSI

The Petrol Tank Company Ltd
01283 820213
www.thepetroltankcompany.co.uk
Manufacture small above ground petrol tanks

PFS Fueltec Ltd
01376 535260
www.pfsfueltec.com
Specialist suppliers of fuel equipment to contractors owners/operators

Power Post Ltd
0800 085 6746
Petrol pump services and suppliers

Premier Forecourts & Construction
01792 310600
www.premierforecourtsandconstruction.com
Specialists in PFS fuel systems, construction & maintenance

Project-A International Ltd
07785 570185
www.project-a.uk
AdBlue consultancy, project management, compliance auditing, process engineering and environmental management

Propel Finance plc
01633 415222
www.propelfinance.co.uk
Specialist asset finance in the forecourt and convenience market

Protego UK Ltd
01543 420660
www.protego.com
Safety valves and tank accessories

Pumpwatch Ltd
00353 458 92155
www.pumpwatch.ie
Carbon fibre test measures for checking the accuracy of fuel dispensers

Risbridger
0845 644 2323
www.risbridger.com
Forecourt products to protect the environment and make forecourts safer.

R M Pumps (Cumbria) Ltd
01768 892444
Forecourt maintenance, installation, decommissioning & servicing

Safefill
01782 414526
www.safefill.co.uk
Suppliers of refillable LPG cylinders

Scotia Forecourt Services Ltd
01382 828576
www.scotiaforecourt.com
Manufacturing, refurbishing, and servicing forecourt valeting equipment

SDM Fuel Solutions
0208 191 8889
www.sdm-fuelsolutions.com
Engineering services, fuel sampling, cleaning, uplifts, emergency response

Southern Tank Services Ltd
01722 714514
www.tankservices.co.uk
Domestic & industrial oil tank replacement, removal and general services. Fuel polishing, water services

SR Electrical Services Ltd
01562 750804
www.srelectrical.com
Design, install, test & inspect electrical systems in hazardous areas

STA Technical Ltd
0203 004 9326
www.statechnical.com
Bespoke engineering specialists for the forecourt industry

Suresite Group Ltd
01772 790901
www.suresite.co.uk
Providing health and safety (risk assessments and compliance audits) card processing, training & wetstock services

T.P.I (Ireland) Ltd
0771 5207168
www.tpi-ni.co.uk
Pump & tank installations, tank / pipeline testing, decommissioning and maintenance

Tanks & Pipework Ltd
01474 855587
www.fassuk.com
Tank / interceptor cleaning, inspection, relining. Fuel polishing, uplifts, transfers

TLM Technologies
0330 4339 620
www.tlmtechnologies.co.uk
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Toureen Retail Ltd
0208 424 7999
www.toureenretail.co.uk
Specialists in PFS construction, fuel systems, fit out maintenance, groundworks & signage.

Transflo Instruments Ltd
0844 257 8181
www.transflo.co.uk
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www.tsg-solutions.com/uk
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The Triscan Group
0845 225 3100
www.triscansystems.com
Onsite commercial fuel management solutions, including tanks, pumps, gauges & software

United Pipework Services Ltd
01922 722737
www.united-pipework-specialists.co.uk
Forecourt construction & pipework services

VARS Technology Ltd
www.varstechnology.co.uk
Forecourt protection and parking solution

Vectec Ltd
01296 624548
www.vectec.co.uk
Diesel fuel dispensing, storage & management

Washtec UK Ltd
01371 878800
www.washtec.com
Vehicle valeting, maintenance and service

Western Forecourt Services
01446 736900
www.wales-and-west.co.uk
Supply, installation, maintenance of fuel dispensing equipment. Contract service work

Westfield Services (UK) Ltd
01924 477324
www.westfieldservicesuk.com
Contractors for pumps, pipework, electrical and building work

West Fuel Systems Ltd
01709 296767
www.westfuelsystems.co.uk
A comprehensive & professional fuel system installation & maintenance service

Worcester Petroleum Services Ltd
01905 620053
Forecourt, commercial, marine, petroleum installations and servicing

Xmo Strata Ltd
01580 895630
www.xmostrata.com
Sign fitters, maintenance, site surveying, electrical work, CCTV

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www.yara.co.uk
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