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Chemicals northwest

Summer 2026

A spotlight on the vibrant north west chemicals sector

Elements

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This issue also covers AI patents, EPC models, safety, asset integrity, project risk, sustainability, skills, innovation, partnerships, growth, and training....

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Date for your diary

Chemicals Northwest 2027 awards

18th March 2027

2026 Winners

Venue to be confirmed

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Chemicals Northwest
The Innovation Centre
Sci-Tech Daresbury
Keckwick Lane
Daresbury
Warrington
WA4 4FS

The Chemicals Northwest Team is:

Ian Cranshaw
Operations Manager
cranshawi@cia.org.uk

Alex Abraitis
Member Services
& Events Manager

For membership, event or advertising enquiries please contact:
Alex.Abraitis@chemicalsnorthwest.org.uk

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Contents Summer 2026

Membership

Would your company benefit from joining an organisation that supports and promotes the chemistry-using sector in the Northwest? Do you want to understand more, and contribute to, the industry issues within the region?

If you are a manufacturer, chemical user or offer products and services to the sector, why not join us today?

https://www.cia.org.uk/chemicalsnorthwest/Membership/Benefits-Costs/

2026 rates. ***(from 1st April 2026)***

Micro corporate membership	(1 - 10 employees)	£ 515.83 + VAT
Standard corporate membership	(11-100 employees)	£ 897.20 + VAT
Large corporate membership	(100+ employees)	£1141.78 + VAT

Our membership year runs from 1 April to 31 March. A pro-rata basis usually applies to joining at other times in the year and we'd be happy to discuss on application.

Welcome

Dear Reader,

We are delighted to bring you the Summer edition of Elements, featuring the latest news, highlights and updates from Chemicals Northwest and our members. This issue is packed with 44 pages of features, articles, adverts and items of interest for the sector. We are also pleased to share the hot-off-the-press announcement of the 2027 Awards date as the 18th March 2027. Keep the date in your diary, venue to be confirmed.

Our March breakfast event took place at the Innovation Centre on the 11th March, with 40 attendees joining us for a varied and engaging programme of presentations. Carolyn Nicholls, Managing Director of RAS, spoke about the soon-to-be-published Chemical and Downstream Oil Industries Forum (CDOIF) guidance, ***Understanding Major Hazard Human Harm Risk Assessment (MHHHRA)*** for the Control of Major Accident Hazards (COMAH). This guidance is intended to promote good practice and a consistent approach to risk assessment across high-hazard industries, providing operators, third parties and regulators with a common reference point. The guidance covers the full range of high-hazard businesses, from the storage of single substances, such as bulk LPG, through to complex chemical processing.

Kevin Simmonds, Business Development Director at adi Group, provided a company introduction, while Steve Bennett of Business of Science Ltd introduced the forthcoming Business of Science Conference, which has now taken place. Glyn Horner from Charles River Laboratories also shared an overview of the company. Founded in 1947 by Dr Henry Foster in a small Boston laboratory, Charles River Laboratories has grown into a leading global contract research organisation, operating more than 150 facilities across 21 countries. The company continues to support the safe development of novel compounds worldwide and is at the forefront of developing New Alternative Methodologies (NAMs), helping to reduce the use of animals in scientific research while delivering robust and accurate data.

Our Sustainability event took place on the 30th April and was facilitated by SLR. This highly interactive session explored what is meant by Scope 3 emissions, how to identify relevant emission sources, what 'value chain analysis' involves, and practical approaches to calculating a Scope 3 carbon footprint. Matt Whitworth from SLR delivered an insightful presentation, and Liam Moore from Arthian spoke about the forthcoming ISO 14001:2026 update, outlining the expected changes and how companies can prepare for the transition.

On the 4th June, Chemicals Northwest and Green Economy brought together industry professionals for a practical discussion on energy, cost and risk in the chemicals sector. "Reducing Energy, Cost and Risk in the Chemicals Sector." The session explored rising energy costs, supply chain pressures and operational challenges affecting chemical businesses. Roundtable discussions and presentations focused on energy efficiency, sustainability requirements, renewables and available support, with the event closing over a networking lunch.

As we were going to print, our 10th June breakfast event was due to take place at Catalyst Science Discovery Centre & Museum. The write up for this will be featured in the Autumn edition of Elements. Our next Sustainability event will take place after the Summer break, on the 10th September and next breakfast event on the 17th September in Daresbury.

As always, we welcome your news, case studies, and thought leadership contributions for future editions of *Elements.*

Alex Abraitis - Member Services and Events Manager

About us...

Chemicals Northwest is an established business network owned by the Chemical Industries Association.

With around 130 members we actively promote this important regional sector and our objective is to

help membership to grow through;

- facilitating networking events, common interest groups and interactive workshops, all aimed at covering topical industry issues.
- supporting projects and programmes that identify and enhance business performance and generally support continuous improvement across the sector.
- promoting science and engineering based skills, helping to address the region's future needs.
- improving the image of the industry overall, including generating a positive reputation, through communicating achievements and success.
- contributing to the industry's strategic voice and the national growth agenda aligned to the work of the Chemical Industries Association.
- connecting the community of chemistry-using businesses and the vital supply chains here in the Northwest.

Here are the main features and benefits of membership...

- Annual Awards Dinner
- Breakfast Networking events
- Partner Events
- Common Interest Groups
- Quarterly Elements Magazine
- Website promotion and profiles
- Monthly E-bulletin & ad hoc bulletins with latest sector information
- LinkedIn Groups

Find out more here - https://www.cia.org.uk/chemicalsnorthwest/membership

Chemical Processing Services Wins further King's Award for Enterprise - Innovation with Patented Mannamide Technology

Chemical Processing Services Ltd (CPS), the UK-based speciality polymer consultancy and technology business, has been awarded another of the prestigious King's Award for Enterprise in the Innovation category in recognition of its patented Mannamide technology platform. The award represents one of the highest official honours for UK business and recognises outstanding achievement in innovation and commercial success.

For CPS, the award acknowledges years of technical development focused on creating safer, more sustainable, and higher-performing epoxy curing technology for global industrial markets. The patented Mannamide chemistry has attracted increasing international attention due to its ability to combine enhanced technical performance with reduced hazard characteristics and improved environmental credentials.

Founded and led by polymer specialist and entrepreneur Paul H. Jones, CPS has built a reputation for developing disruptive technologies that address changing regulatory pressures, and evolving market demands within the coatings, adhesives, composites, and industrial materials sectors.

The Mannamide technology platform was developed to overcome several long-standing limitations associated with conventional amine curing agents used within epoxy systems. Traditional curing technologies can present challenges relating to hazard classification, application limitations, flexibility, moisture sensitivity, and sustainability concerns. CPS sought to create a next-generation solution capable of addressing these issues whilst simultaneously improving end-user performance.

The resulting patented Mannamide technology delivers a unique combination of low temperature cure capability, excellent adhesion, corrosion resistance, flexibility, and reduced surface preparation sensitivity. Importantly, the chemistry also enables formulators to move towards lower hazard systems, whilst maintaining the robust performance required for demanding industrial and marine applications.

The innovation has proven particularly valuable in protective coatings where durability, application efficiency and sustainability are becoming increasingly important purchasing considerations. The technology has enabled customers globally to formulate coatings capable of curing under difficult environmental conditions, whilst helping improve operational efficiency and reduce maintenance downtime.

Sustainability has also played a major role in the development of the technology. CPS has increasingly focused on renewable and Bio-based chemistry platforms as industries seek alternatives to more traditional petrochemical-derived materials. Mannamide technology incorporates principles aligned with this transition, helping support the wider movement towards lower environmental impact materials without compromising technical performance.

Paul H. Jones, Managing Director and owner of CPS, commented: "We are absolutely delighted to receive a King's Award for Enterprise for Innovation. The Mannamide technology was developed to provide meaningful solutions to both technical and regulatory challenges faced by industry. Receiving recognition of this level is a tremendous achievement and demonstrates the strength of innovation taking place within the UK chemical sector."

He added:

"Our businesses have always focused on scientific advancement, sustainability, and the development of safer, higher-performing materials. We continue to invest heavily in research and development, horizon scanning for future legislative pressures and identifying opportunities where chemistry can make a positive contribution to both industry and wider society."

The award further strengthens an already impressive record of innovation-led recognition associated with Paul H. Jones and his businesses. Across multiple ventures, including Anacarda Ltd, Bitrez Ltd and CPS, the group has now achieved five Queen's and King's Awards for Enterprise spanning both Innovation and International Trade categories, an accomplishment that reflects a sustained commitment to technology development, export growth and advanced manufacturing within the UK.

Although CPS operates globally, the company remains firmly rooted in the Northwest of England, an area with a long-standing heritage in chemicals and materials innovation. From this base, the business supplies technology and technical expertise into international markets where demand for advanced performance materials and lower hazard chemistry continues to grow rapidly.

The success of Mannamide technology also highlights the increasing importance of speciality chemistry innovation within the transition towards more sustainable industrial practices. As regulations tighten and industries seek to reduce environmental impact while improving efficiency, technologies capable of balancing performance, safety and sustainability are becoming increasingly valuable.

CPS continues to expand its intellectual property portfolio and development pipeline, with ongoing work focused on next-generation curing technologies, Bio-based chemistry platforms and materials designed to help customers address emerging regulatory and environmental challenges.

The King's Award for Enterprise for Innovation represents another major milestone for the business and reinforces the company's position as a recognised innovator within the global speciality polymer sector.

Visit https://www.cps-consultancy.com/

RAS

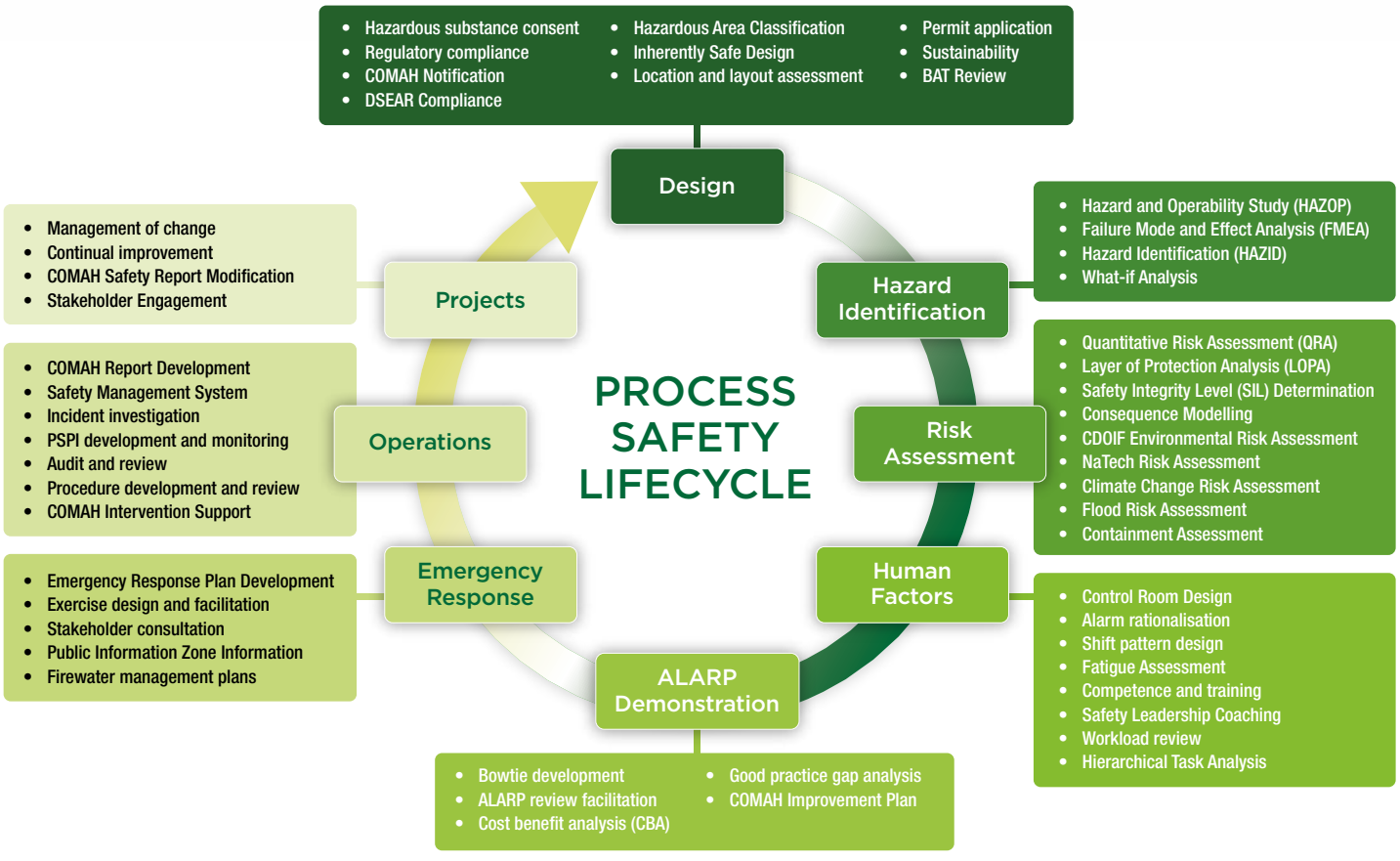
Safe | Smart | Sustainable

RAS Limited is a well-established, specialist risk consultancy working with an extensive portfolio of large corporate clients which manage complex industrial sites and businesses. Our team of expert consultants have experience in a wide range of sectors - from pharmaceutical to energy, aviation and specialist chemical sectors.

We are a Chester-based company with a national and international client list. We work differently because of our great team of specialists. Our multi-disciplinary approach to solving challenges enables us to stand out from the crowd. We are passionate about supporting industry to be safer, smarter and more sustainable.

People are the centre of everything we do. We do not believe in off-the-shelf solutions. We partner with our clients to find the best solution for their particular challenges and businesses.

PRODUCTS AND SERVICES



+44 (0) 1244 674 612 · enquiries@ras.ltd.uk · ras.ltd.uk

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Promoting Diversity in a Traditionally Male Dominated Field

The 2026 Chemicals Northwest Awards in Liverpool were a memorable night for RAS, as we proudly took home the Equality, Diversity & Inclusion Award. This was our second consecutive CNW award win—an achievement that reflects our long standing commitment to operational excellence.

Our award-winning entry focused on promoting diversity in a traditionally male dominated field and how, at RAS, we have never accepted gender disparity as the norm. Our culture and recruitment approach have made us industry leaders in workforce diversity, and we want to share how we empower all employees, regardless of background.

Understanding the Gender Gap
Before exploring how inequality can be challenged, it's important to recognise the scale of the issue. Engineering UK reported that in 2023, women made up just 15.7% of engineering and technology roles, down from 16.5% in 2022. This imbalance stems from several entrenched factors:

• Societal stereotypes portraying engineering as a male profession
• Hostile or exclusionary cultures that limit recognition and progression
• Inflexible working practices, contributing to the "leaky pipeline"—57% of female engineers leave the profession before age 45, compared with 17% of men.

The RAS Difference
RAS stands apart. As an independent, woman owned business, 65% of our employees are women, and three quarters of our Senior Leadership Team is female. Over two decades, our gender balance has naturally fluctuated between 50 and 65 % women—evidence of organic parity, not targeted intervention. This balance exists because of the culture we've built; it is simply our norm.

Policies That Support Real Lives
We have strengthened our support framework with progressive policies on flexi time, fertility, pregnancy loss, menopause and parental leave. These policies remove barriers to progression and support all employees through personal and health related challenges. They were not introduced to "fix" gender imbalance—they were implemented because they are right for our people and our business. Gender inclusivity is a natural outcome of being a genuinely great place to work.

Recruitment That Broadens Capability
We recruit from a wide range of STEM backgrounds, encouraging multidisciplinary thinking and reducing traditional gender bias. Hiring decisions are based solely on applicant quality. This approach has built a dynamic, capable team and expanded our organisational expertise.

Flexibility That Works
In 2024, we introduced fully flexible working, allowing employees to work contracted hours in any pattern that suits their lives. We trusted our team to manage this responsibly, without invasive oversight. The results were overwhelmingly positive:

• Over 11% of hours worked flexibly outside standard business times
• No drop in productivity, quality, or client delivery
• No lost revenue or customer complaints

While beneficial for all, this flexibility particularly supports women, who still carry disproportionate caring responsibilities.

Trust and Empowerment
We trust our people to act in good faith and manage their own schedules with minimal bureaucracy. This autonomy creates an empowered workforce able to balance external pressures without compromising performance.

Visibility and Outreach
We show young women and girls that engineering and process safety are viable, rewarding careers. The visibility of women in our leadership and ownership, combined with our outreach, demonstrates that this sector is for everyone.

Career Development and Retention
We invest actively in career development to ensure every team member thrives. Our inclusive culture means people feel valued and supported through all stages of life. As a result, almost half our team has been with RAS for over a decade—far above the UK average of under 30%. This stability strengthens our expertise and supports consistent client delivery. Our culture has been a driving force behind our sustained growth, with the company more than doubling in size over the past 15 years.

Empowering the Whole Workforce
We prioritise positive social impact because it aligns with who we are. Our diversity and gender parity are natural outcomes of doing the right thing—and our continued success shows the value of this approach. By investing in our people and enabling them to work flexibly and authentically, we retain talent, build trust, and create an environment where everyone can thrive. In a sector still predominantly male, we are proud to demonstrate that longstanding gender parity is not only possible but sustainable.

About RAS Limited
RAS Limited is a Chester-based process and technical safety consultancy with 30 years of experience across sectors including pharmaceuticals, energy, aviation, and chemicals. With a team of expert consultants, RAS is a trusted partner for managing complex risk in industrial operations and delivering long-term value. **If you would like to get in touch, please go to our website: https://ras.ltd.uk**

Carolyn Nicholls – Managing Director, RAS Ltd

Delivering science-based sustainability across global and UK supply chains

From strategy to sustained action

For the chemicals sector, sustainability is no longer a parallel initiative, but an operational requirement shaped by regulation, customer expectations and global climate objectives. Rhenus combines science-based commitments, recognised reporting standards and practical transport solutions to support this transition. From shipment-level emissions transparency to alternative fuels, electrified corridors and site-level energy improvements, sustainability is embedded across operations. By aligning governance, measurement and implementation, Rhenus provides a structured pathway from climate ambition to measurable operational progress.

From ambition to accountable climate action

At Rhenus, sustainability shapes how we operate and how we support complex supply chains globally and in the UK. We define sustainable business as balancing economic performance, environmental responsibility and social accountability, in line with the UN Brundtland Commission's definition[1]. For the chemicals sector, this means combining operational reliability with measurable emissions reduction and transparent reporting. In summer 2025, Rhenus committed to the Science Based Targets initiative[2]. This aligns our global operations with recognised standards and provides customers with a credible framework.

Currently, we are reevaluating our emissions pathway with the ambition to set formal near-term reduction targets within 24 months in alignment with climate science and the Paris Agreement's 1.5 °C objective. Our performance is already independently assessed, with Rhenus participating in EcoVadis since 2017 achieving EcoVadis Platinum status in 2025. This recognition places Rhenus among the highest-rated companies worldwide for environmental, social and governance performance. These commitments underpin our sustainability strategy and serve to measurably improve our customers' logistics chains in terms of sustainability.

Emissions transparency built on recognised standards

For chemicals supply chains, reliable emissions data is essential for compliance and planning. Rhenus provides shipment-level carbon visibility across road, air and sea transport using recognised methodologies and independent calculation tools.

Road transport CO_2 tracking with EcoTransIT

For road freight, Rhenus works with EcoTransIT, a market-leading emissions calculation platform. Emissions are calculated in accordance with ISO 14083 and the GLEC Framework, the globally recognised methodology for logistics emissions reporting. This delivers consistent, transparent and comparable data across multimodal supply chains.

Carbon visibility across other modes of transport

Rhenus also provides carbon transparency for air and sea freight utilizing EcoTransIT and searoutes. Furthermore, through the Emission Dashboard, customers receive shipment-level CO_2 visibility for main haul transport, enabling consistent reporting across all major modes.

ESG-ready client reporting

Rhenus provides shipment-level emission reports to support ESG disclosures and regulatory requirements. These reports can be used to support corporate sustainability frameworks and Scope 3 emissions management. Transparent reporting alone is not enough, though: Measurable progress requires operational change.

Operational innovation in action

Lower-emission transport concepts are already deployed across various European operations, for example. An electric groupage line between Venlo in the Netherlands and Duisburg, Germany shows how high-frequency cross-border corridors can be electrified without compromising reliability. Starting in 2026, Rhenus is also running a one-year Daimler hydrogen truck trial to evaluate hydrogen-powered heavy goods vehicles under real operating conditions.

Also, alternative fuels are being introduced at scale. HVO projects in Spain and Italy and a biodiesel initiative in France reduce transport-related emissions within existing fleet structures. Electric trucks are increasingly used for last-mile delivery, supporting lower-emission distribution. These initiatives demonstrate a practical decarbonization approach that combines pilot technologies with scalable fuel solutions.

UK leadership in sustainable logistics

Beyond the progress being made across different modes of transport at an international level, in the United Kingdom, sustainability is already embedded at site level and supported by measurable operational improvements that reduce our carbon emissions, drive efficiency and reduce our reliance on fossil fuels:

- At the Bradford facility, on-site solar panels generate renewable electricity and reduce reliance on grid power, directly contributing to carbon reduction objectives.
- Across the national network, diesel-powered forklift trucks have been reduced by 80 percent and replaced with electric alternatives, lowering emissions and improving air quality within warehouses.
- Energy efficiency initiatives further strengthen performance. At the Cannock depot, thermal imaging identifies heat loss and energy inefficiencies.
- In Manchester, an automated dead-switch lighting system has reduced electricity usage by 50 percent by ensuring lighting operates only when required.

Furthermore, digital transformation also contributes to progress within Rhenus in the UK. Electronic record-keeping and optimised processes have significantly reduced paper usage. Full compliance with new waste legislation has strengthened waste segregation, recycling and resource management, supporting a more circular operational model.

Together, these measures show how Rhenus in the UK contributes to group-wide sustainability targets through tangible action.

Learn more on www.rhenus.group

FOREST

The FOREST project has demonstrated that bio-based benzoxazine resins can serve as a high-performance and sustainable alternative to conventional thermoset systems for transport applications, particularly in safety-critical components such as electric vehicle (EV) battery enclosures.

A key aspect of this development was the successful formulation and processing of Bio-based polybenzoxazine systems in prepreg form, enabling the production of structurally robust, multifunctional composite components. The bio-benzoxazine was produced at Bitrez Ltd using patented technology from Northwest innovator Paul H Jones.

Benzoxazine resins are a class of thermosetting polymers, characterised by a molecular structure that combines a benzene ring with an oxazine ring. This unique chemistry provides several intrinsic advantages over traditional epoxy and phenolic resins, including high thermal stability, low curing shrinkage, excellent mechanical performance, and inherent flame-retardant behaviour. These features make benzoxazines particularly suitable for applications requiring stringent fire, smoke, and toxicity (FST) performance, such as battery enclosures in electric mobility.

Within FOREST, the resin systems were redesigned to incorporate bio-based building blocks, significantly improving their sustainability profile. The primary platform consisted of a furanic benzoxazine, derived from furfuraldehyde, a renewable chemical sourced from lignocellulosic biomass. In selected formulations, this was combined with plant-based phenolic derivatives to further increase the renewable carbon content. The result was a series of bio-benzoxazine systems with a high proportion of biogenic carbon, verified through standardised methods such as ISO 16620-2 (percent modern carbon, pMC).

A central challenge addressed in the project was achieving a balance between sustainability and performance. Bio-based resins often face trade-offs in terms of thermal or mechanical properties; however, the FOREST formulations were engineered to overcome these limitations. The developed bio-benzoxazine systems exhibited strong mechanical properties, including high stiffness and strength, making them suitable for structural applications. At the same time, they retained excellent thermal resistance, ensuring stability under the elevated temperatures associated with EV battery operation.

Fire performance was another critical requirement. Benzoxazine chemistry inherently promotes char formation and reduces flammability, which allowed the FOREST materials to achieve enhanced fire-retardant behaviour with reduced reliance on conventional flame-retardant additives. Where necessary, bio-based or compatible flame-retardant systems were integrated to further optimise FST performance while maintaining environmental compatibility.

Unlike out-of-autoclave SMC processing routes, the FOREST composites were manufactured using prepreg technology, which offers superior control over fibre impregnation, resin distribution, and final laminate quality. In this approach, fibres, specifically recovered carbon fibres (rCF) in nonwoven or aligned formats, were pre-impregnated with the bio-benzoxazine resin system to create semi-finished materials with controlled fibre volume fraction and resin content.

Prepreg processing enabled the production of high-quality composite laminates with excellent fibre wet-out and low void content, both of which are critical for achieving consistent mechanical performance. The prepregs were subsequently consolidated and cured under controlled temperature and pressure conditions, ensuring optimal crosslinking of the benzoxazine matrix and strong fibre–matrix interfacial bonding.

The integration of recovered carbon fibres represents a significant advancement in circular material design. By incorporating rCF into a high-performance bio-based matrix, the FOREST project demonstrated a viable pathway for upcycling carbon fibre waste into structurally demanding applications. This approach reduces dependence on virgin carbon fibres, lowers the overall environmental footprint, and aligns with circular economy principles.

The resulting composite system was applied in the development of an EV battery enclosure demonstrator, designed as a lightweight alternative to conventional aluminium structures. The prepreg-based bio-benzoxazine composite delivered a combination of properties essential for this application: high mechanical integrity, excellent fire resistance, and effective electromagnetic interference (EMI) shielding. The inclusion of conductive fillers or fibre architecture contributed to shielding effectiveness, ensuring protection of sensitive electronic components.

From a manufacturing perspective, prepreg technology also supports reproducibility and quality assurance, which are essential for certification in the automotive sector. While typically associated with higher-performance or lower-volume applications compared to SMC, prepreg processing provides a clear pathway for scaling in applications where safety and performance are paramount.

In conclusion, the FOREST project has validated bio-based benzoxazine prepreg systems as a credible and competitive solution for next-generation transport composites. By combining renewable resin chemistry, recycled fibre reinforcement, and high-quality prepreg processing, the project successfully delivered multifunctional materials that meet demanding structural, thermal, and safety requirements. This work highlights the potential of bio-benzoxazine composites to contribute to lightweighting, circularity, and decarbonisation in the mobility sector, supporting the transition toward more sustainable transport systems.

For further details please contact wendy.howarth@bitrez.co.uk

Bitrez

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The Circular Economy – what does it mean for the chemicals sector?

The "circular economy" is central to UK and EU sustainability policy. Understanding and implementing circular solutions will help chemicals companies meet current and future ESG and compliance requirements, whilst also increasing resilience and reducing the cost of waste.

Most patterns of human activity are linear in nature: we take materials, manufacture useful items, use them and then discard them as waste, causing various environmental problems along the way. The circular economy is a different approach: originally inspired by the efficient cycling of resources in the natural environment, it seeks to change the way we use resources and, by doing so, minimise the impacts of resource extraction and use.

The concept has been developed over recent decades and is becoming increasingly important in policy terms. The European Union's Circular Economy Action Plan (supported by a raft of directives and acts) and the UK Government's Circular Economy Growth Plan are intended to implement the principles of circularity into regulation.

So what is the circular economy? There is no single definition, although much digital ink has been spilled discussing and defining what it should include. Key principles include:

- Keeping resources in use at their highest value for as long as practicable;
- Treating waste as a design problem to be eliminated where possible.

Some definitions also include minimising the use of hazardous materials and regenerating natural systems, as well as overarching principles such as systems thinking and resource traceability.

In some ways the circular economy can be seen as the next step up from the familiar "waste hierarchy" or the 3Rs of reduce, reuse and recycle. However, viewing it in this lens doesn't capture the more fundamental challenge of the circular economy to existing business models and our societal pattern of resource use: it will require a very different approach to value creation and resource stewardship.

It's also worth remembering that circularity is a means to an end, and that end is environmental protection. Tools like life cycle assessment can be used in evaluating circular approaches to confirm whether they do indeed reduce environmental impacts, and to quantify the carbon savings and other benefits.

As the foundation for virtually all industrial activity, the chemicals sector has a central role to play in the transition towards a circular economy.

Some circular practices are already well-established in the sector: for instance, solvent re-distillation and green chemistry. But there are also many more opportunities to innovate in this area and spread best practice more widely, to address both customer demands and emerging regulations (for example, the EU's Ecodesign for Sustainable Products Regulations and its requirement for digital product passports). Work done by the National Interdisciplinary Centre for the Circular Chemical Economy between 2021 and 2025 examined the potential for using biomass, solid waste and CO2 as circular feedstocks for the organic chemical industry and the Chemical Industry Association has also reported on the opportunities of these circular carbon feedstocks. The Government's Critical Minerals Strategy also highlights the importance of circularity in developing a resilient supply chain.

Circular approaches such as the recovery of critical raw materials from waste streams also help build resilient supply chains, which is becoming more important than ever in these geopolitically turbulent times.

The UK Government's Circular Economy Growth Plan will hopefully be published this year and is expected to include a range of proposals to enhance circularity. But even in advance of this, there is plenty that companies in the chemicals sector can be doing now to build more circular business models and processes that are sustainable by design and address the challenges of the future.

Looking at resource use and waste generation through the lens of the circular economy can bring both environmental and financial benefits and will help companies keep ahead of the ever-changing regulatory landscape.

For advice on any aspects of the circular economy, please contact: Mike.Bains@Geosyntec.com

Plastic waste treatment and recycling: a new perspective on how mixers and dryers support sustainability

Energy-efficient mixers and dryers are widely acknowledged to support manufacturers' sustainability goals by reducing production-related emissions. But many people don't realise that they also play a role in circularity thanks to being embedded in processes that turn plastic waste into valuable raw materials. This article takes a closer look at how mixing and drying technology supports various polymer recycling routes so that the growing mountain of plastic waste can be valorised and reused.

Today's high-performance mixers and dryers are known to be designed with energy efficiency in mind. Efficient heat transfer, low specific energy input and the ability to recover process heat all contribute not only to lower operating costs, but also to more sustainable manufacturing operations. What is less visible, however, is their contribution to sustainability thanks to their role within processes that recycle or upgrade waste streams.

The benefits of recycling

"Recycling is another important aspect of many companies' sustainability efforts nowadays, besides energy," says Marc Jacobs, Team Manager CMM at Hosokawa Micron BV. "This often makes economic sense. After all, if you can reuse material from within your own process, you immediately reduce your raw-material consumption and also waste disposal costs."

As a leading designer and builder of mixing, drying and agglomeration systems for powders, particles and bulk solids based in Doetinchem, the Netherlands, Hosokawa Micron has been supporting recycling in various industries for many years. Around a decade ago, for example, the company adapted one of its Nauta mixers for a biscuit manufacturer. Thanks to a relatively small change to the mixing screw, any non-mixed dough could be extracted at the bottom of the drum and fed back in at the top. "This 'internal recycling loop' kept more material in the process, thus significantly reducing waste for the customer," explains Jacobs.

Plastic production has doubled

The polymer industry is under particular scrutiny when it comes to waste reduction and recycling. According to the 'Global Plastics Outlook' report published by the Organisation for Economic Cooperation and Development (OECD), global plastic production has more than doubled in the past two decades (increasing from 234 million tonnes in 2000 to 460 million tonnes in 2019).

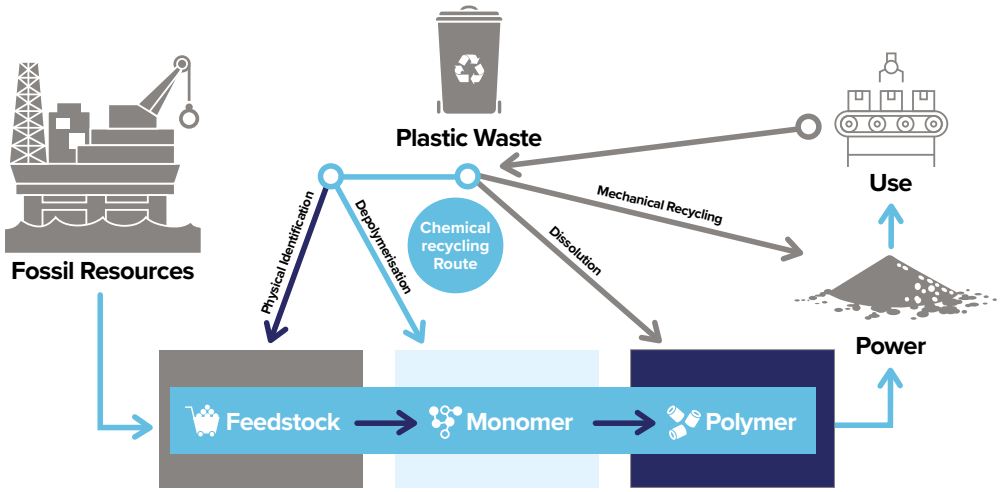
This is creating more plastic waste than traditional disposal systems can handle, and posing environmental and climate-related threats. To minimise such impacts by reducing plastic waste, many governments are introducing stricter regulations stimulating companies to keep recycle or upcycle polymers. For example, the European Union's new Packaging and Packaging Waste Regulation (PPWR) requires all packaging on the EU market to be designed for recycling by 2030, and mandates specific recycled content targets – ranging from 10% to 35% – for all plastic packaging.

Besides mechanical recycling, which is the most common route for plastic recycling and involves sorting, cleaning, shredding, remelting and reforming plastic waste while preserving the original polymer structure, there are several other techniques available for reusing plastics. These include dissolution and pyrolysis/gasification, both of which are discussed in more detail below.

Dissolution of plastic-rich waste

Whether plastic waste can be recycled or upgraded, and which process is most suitable, depends on the composition of the material involved. Plastic-rich waste streams (comprising more than 80% polymer) can be recycled in a dissolution process.

In this case, a solvent is applied to the waste to dissolve the polymer, allowing any undissolved contaminants to be mechanically separated and removed. The polymer is then recovered by evaporating the solvent under vacuum. "Our



vacuum dryers can be used in this process, either based on our Nauta technology or our conical paddle dryer (CPD). Operating at reduced pressure and low temperatures prevents thermal degradation while still achieving high residual solvent removal," comments Jacobs. The resulting polymer material is then passed through an extruder to prepare it for pelletisation.

Homogeneous mixing of performance additives

Manufacturing the actual performance additives used to upgrade the polymer material following dissolution also involves a classical Nauta powder mixer. For example, a high-performance, industrial-grade mixer from Hosokawa Micron has been a critical component in the compounding line of a European producer of plastic additives active in the international polymer and recycling industry. This customer manufactures peroxide masterbatches that are used to decrease viscosity in the recycling sector. "To guarantee uniform product quality, the plastic additives must be mixed into a consistently homogeneous blend. This homogenisation must occur smoothly and without generating excessive heat due to the heat-sensitive nature of the ingredients," comments Raymond Fels, Application Engineer CMM at Hosokawa Micron.

"Our mixer not only meets these performance requirements, but is also easy and safe to operate, highly reliable for continuous feed into the extrusion machines, and cost-effective in terms of maintenance," he continues.

Pyrolysis for mixed-plastic waste

In the case of mixed or contaminated plastic waste streams, the pyrolysis (or 'gasification') route offers a solution. This entails heating the waste in the absence of oxygen and converting it into oil and gas, leaving a solid residue behind. This residue contains mineral components such as calcium carbonate and titanium dioxide, which makes upgrading it for reuse more complex – but not impossible.

"Pyrolysis is also the route for obtaining recovered carbon black (rCB) from rubber tyres," comments Jacobs. In that process, after pyrolysis, the granules are pre-crushed and then finely ground. They then enter the pelletising system, which consists of a mixer to add the binding solution and a dryer to convert the wet carbon black pellets into easy-to-handle, dry and stable pellets.

"Together with our sister companies, Hosokawa Alpine AG and Hosokawa Solids, we provide all the equipment needed for this process and have already developed a number of cost-effective total systems for carbon black recovery," explains Jacobs.

"It's still early days for this technology in plastic recycling. But based on how the rCB market has evolved over the past 15 years, taking tyre recycling from technically possible to economically viable, I see no reason why similar things couldn't happen within polymer recycling," he adds.

Improving sustainability and profitability

"Polymer waste treatment and recycling is such a complex area that there is no one-size-fits-all solution," says Fels. At Hosokawa Micron, he and the company's other technical specialists are always open to hearing customers' ideas and discussing and exploring together how mixing and drying technology can contribute to solving their challenges. "Drawing on our process knowledge, we can determine which of our solutions are most suitable for a specific application and then run pilot-scale testing in our Test Centre," he continues.

"Polymer recycling is a very exciting, fast-moving and urgent topic. Our mixers and dryers are already embedded in some process steps at various companies involved in polymer recycling. We are keen to help them, and others make the entire process even more sustainable and more profitable, for a better future for all," concludes Jacobs.

For further information, please contact: John Buck at Hosokawa Micron Ltd jbuck@hmluk.hosokawa.com
+44 (0)1928 755164 +44 (0)7734 098904
Or visit https://www.hosokawa.co.uk/

PFAS in lubricants: what you need to know

What are PFAS? PFAS — per- and polyfluoroalkyl substances — are a large family of synthetic chemicals in industrial use for decades. Exceptionally stable, heat-resistant, and effective across a broad range of applications, they were once regarded as wonder chemicals. In lubricants, these properties made them attractive for high-performance and demanding environments. Only in recent years has the full picture become clear.

The "Forever Chemical" problem
PFAS do not break down. They persist in the environment indefinitely, accumulating in water, soil, and living organisms — earning them the label "forever chemicals." The scientific evidence linking PFAS to environmental harm and human health risks has grown substantially, and regulators have begun to respond.

In the UK, DEFRA has identified PFAS as a priority concern under the UK REACH framework, recognising their persistence and potential for harm across environmental and human health endpoints. The Environment Agency and UK Health Security Agency have both flagged PFAS contamination — particularly in water sources — as a significant and growing issue, with monitoring and restriction measures under development.

The EU is simultaneously progressing one of the most sweeping proposed PFAS restrictions ever considered. Although the UK is no longer subject to EU regulation, EU restrictions shape supply chains and customer expectations, making the European direction highly relevant to UK industry. The compliance and reputational burden on industries that rely on PFAS is increasing.

PFAS in lubricants: where the risk lies
Not all lubricant applications carry the same environmental exposure. In closed systems — industrial gearboxes, for example — lubricant is contained and managed as a controlled waste stream. The concern is greater in total-loss applications, where lubricant is deposited onto a surface and not recovered. Chainsaw bar oils, open gear lubricants, wire rope lubricants, and certain rail and machinery greases all fall into this category. Whatever is in the formulation enters the environment directly — meaning any PFAS present becomes a persistent, accumulating contaminant in soil and water systems. This is where the case for PFAS-free formulation is strongest.

Performance without PFAS
A common concern is whether removing PFAS compromises performance. In practice, for the vast majority of lubricant applications, it does not. Friction modification, film stability, water resistance, and extreme pressure performance can all be achieved through alternative chemistries — carefully engineered base oils, additive packages, and thickener systems. PFAS offered largely a formulation shortcut, useful when alternatives were less developed, but no longer the only route to the required result.

What to look for — and where RS Clare fits
For procurement teams, the practical questions are straightforward: does the lubricant contain PFAS, and can the supplier confirm this clearly? For total-loss applications, has the product's environmental profile been independently verified?

RS Clare, a UK-based specialist lubricant manufacturer, offers a broad range spanning both conventional and PFAS-free formulations, giving customers the flexibility to select products suited to their application and environmental obligations. Where PFAS-free performance is required — particularly in total-loss or environmentally sensitive applications — RS Clare has demonstrated that the necessary performance characteristics can be achieved without them.

Several RS Clare products carry the EU Ecolabel, the independently verified certification assessing environmental impact across a product's full lifecycle — from raw material sourcing through to end-of-life. It is one of the most rigorous environmental standards available for lubricants, providing assurance that goes beyond a supplier's own claims for organisations with sustainability or responsible procurement requirements.

As UK regulation continues to develop, suppliers who offer transparent product information, PFAS-free options where needed, and independently verified environmental credentials are well placed to support customers through the changes ahead.

For more information on RS Clare's lubricant range and EU Ecolabel certified products, contact the team at info@rsclare.co.uk or visit rsclare.com

Water-Smart Industrial Clusters: Britain's Overlooked Industrial Constraint

Water is rapidly emerging as a critical constraint on the United Kingdom's industrial growth. Its availability is becoming increasingly important to regional development, project timelines, and future investment decisions. Despite this, water is still not being treated with sufficient weight in the UK's industrial strategy.

That was the key message from the inaugural Foresight Water Webinar, held on 23 April, which brought together experts from Evides Industriewater, Arup, Centrica Energy Storage, and the Confederation of British Industry to discuss the role of water in industrial cluster development.

For years, policy has focused heavily on the energy sector, particularly renewables, grid expansion, hydrogen, and carbon capture. Yet this emphasis can obscure a critical interdependency: many of these industries are not only energy-intensive, but deeply water-dependent too. Failing to integrate water into industrial planning risks undermining the UK's wider decarbonisation agenda.

The challenge is not simply one of scarcity, but of governance and policy. Water in the UK is still largely treated as a local utility rather than as strategic infrastructure. The prevailing model, where individual projects secure their own supply and manage wastewater independently, may have worked under conditions of stable demand and surplus capacity, but that is no longer the case.

This shift is particularly visible in industrial clusters such as the Humber, where multiple large-scale, water-intensive developments are emerging simultaneously. Hydrogen production, carbon capture, sustainable aviation fuel, and digital infrastructure are all competing for the same finite resource base. In this context, water is becoming a determining factor in project feasibility.

Colin Robinson, UK Business Development Manager at Evides Industriewater, highlighted: "It's really important to speak to the people and projects around you about what you see as your water and wastewater risks."

That principle points to a wider challenge: translating awareness into coordinated action at scale.

A growing misalignment is now evident between industrial policy and infrastructure planning. Energy systems are increasingly being designed at scale, with long-term demand in mind. Water systems, by contrast, remain largely reactive, expanding only once demand is clearly demonstrated.

As Catherine Darby-Roberts, Associate Director and Humber Growth Leader at Arup, put it: "Water has moved from being a background utility issue into a strategic determinant as to whether investment can happen, how quickly and at what cost."

The consequences are already becoming clear. Fragmented planning leads to duplicated infrastructure, inefficient allocation of resources, and late-stage bottlenecks. When projects are developed in isolation, cumulative impacts are often not fully understood until it is too late to respond effectively.

Addressing this challenge requires a shift from site-level management to system-level planning. Industrial clusters provide a practical framework for this. By coordinating demand across multiple users, clusters can enable shared infrastructure, facilitate water reuse and efficiency, and support cascading systems in which wastewater from one process becomes an input for another.

International examples demonstrate the potential of such approaches. Industrial regions in the Netherlands and integrated water systems in Singapore have shown that coordinated planning can deliver both efficiency and resilience. These models are not directly transferable, but they illustrate the benefits of treating water as a strategic system rather than a fragmented utility.

The primary barrier is institutional. Responsibility for water is distributed across multiple actors, including regulators, water companies, developers, and local authorities. Each operates within different regulatory frameworks and investment cycles, making alignment difficult. This fragmentation limits the ability to coordinate infrastructure, share data, and develop joint solutions.

Investment dynamics further compound the issue. Water infrastructure is typically developed in response to confirmed demand, rather than anticipated need. In a period of rapid industrial change, this reactive approach risks delaying critical capacity.

Current planning frameworks also tend to prioritise detailed data before action can be taken. While robust data is essential, an overreliance on precision can slow decision-making in fast-moving environments. In this context, the pursuit of certainty can itself become a constraint.

The UK therefore requires a more anticipatory, system-level approach to water infrastructure, one that matches the scale, speed, and complexity of its industrial ambitions. That will require stronger coordination across sectors and institutions, greater transparency and data sharing, and new models for joint investment in shared infrastructure.

For further details please contact sofiia@foresight.events

ENVIRONMENTAL CONSIDERATIONS FOR PFAS DECONTAMINATION OF SPRINKLER SYSTEMS

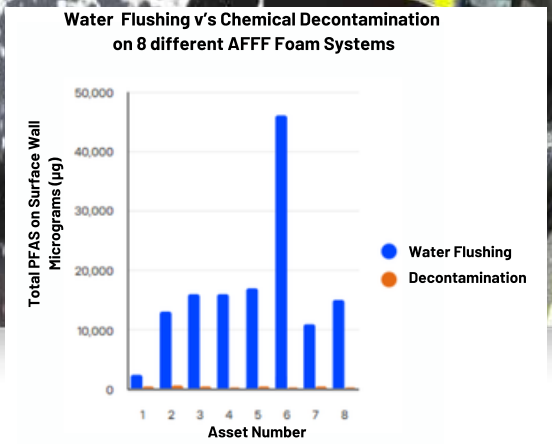


Chart 1: TOP Assay PFAS Surface Concentrations - Water Flushing v's Decontamination on 8 Different AFFF Systems

How to achieve an effective transition.

PFAS contamination across Europe is a growing concern for many water utilities, industrial companies, regulators, and the general public. Tightening regulations across Europe, is driving users of firefighting foam to transition from C8 and C6 Class B foams to fluorine-free alternatives (F3). ProDecon® have successfully decontaminated over 200 fire suppression systems across the UK and EU, which has enabled us to develop a vast amount of expertise within this sector. Together we have supported a range of different systems, including;

- Tanks (atmospheric & bladder)
- Pipework
- Fire tenders / tankers
- Sprinkler networks
- Marine vessels
- Jetty systems
- Pumps and proportioners

Over this time, we have continued to invest and develop our methodologies to reduce waste production and therefore reduce the cost of disposal, whilst maintaining schedule and quality. Our experienced team provides a full-service delivery with specialist manpower and mobile equipment to bring a local solution to our customers' sites all over Europe, ensuring the best results in the fastest times.

Why Decontaminate?

Current regulations specify at what concentrations PFAS (as a group or a singular compound) can be present within foam concentrate and the time period in which the transition to F3 foams needs to be completed.

One known concern, associated with fluorosurfactants within C8 and C6 firefighting foams, is their ability to bind and form self-assembled structures on the interior of fire suppression systems. The hydrophobic characteristics of certain PFAS compounds reduce the ability of water (even when hot) to effectively remove PFAS bound to the interior surface of fire suppression systems.

Therefore, post foam transition, significant concentrations of the bound PFAS can slowly desorb back into the replacement F3 foam exceeding regulatory limits, thus defeating the goal of the transition with economic and environmental consequences.

Chemical decontamination, using a known, biodegradable reagent such as PFAScrub®, has been proven to effectively remove PFAS layers adhered to the interior suppression systems through circulation to reduce companies' future liabilities.

Decontamination Validation

Verification using a TOP Assay water sample following water rinsing can indicate a false negative, as the majority of the PFAS will remain bound to the interior surface of the fire suppression system, rather than suspended within a water sample. To validate decontamination success, a surface TOP Assay surface swab should be carried out to qualify the PFAS 'rebound' risk. The chemical decontamination process should draw upon multiple lines of evidence to support a successful decontamination and provide assurance the system meets current and proposed regulatory limits.

Sprinkler System Verification

Recent PFAS investigations have shown that sprinkler systems and associated foam equipment can retain significant levels of surface-bound contamination long after C8 usage has ceased.

Work undertaken by ProDecon has identified unprecedented concentrations of PFAS contamination

within sprinkler systems containing 1% foam solutions. In several cases, the levels of PFAS bound to internal pipework were found to exceed contamination levels typically associated with systems containing pure AFFF concentrate.

The findings demonstrate that dilution alone should not be assumed to reduce long-term contamination risk. Even low AFFF concentrations can accumulate substantial PFAS mass on internal surfaces, particularly where systems have remained in service for many years or where repeated testing and discharge events have occurred.

One of the key challenges facing asset owners is that residual PFAS contamination can remain undetected without detailed assessment and sampling. Surface-bound PFAS may continue to leach into replacement foams if not properly identified and treated.

For this reason, undertaking a comprehensive PFAS assessment prior to system modification, decommissioning, or foam transition is becoming increasingly important. Early identification of contamination levels allows operators to better plan decontamination strategies and compliance with emerging PFAS regulations.

As regulatory scrutiny increases globally, proactive assessment and decontamination of sprinkler and foam suppression systems is a critical component of responsible PFAS management.

ADAPT™

ProDecon's latest innovation, ADAPT™ (Advanced Decontamination and PFAS Treatment), offers clients an alternative solution to treating PFAS contaminated waters, including decontamination waste to reduce overall project costs. At the heart of ADAPT™ is a multi-stage treatment process engineered to deliver greater than 95% reduction in PFAS concentrations in the aqueous effluent, including regulated short and long chain compounds.

The system has undergone extensive R&D, demonstrating consistent performance on waste streams with very high PFAS concentrations, a challenge has pushed existing technologies to their limits.

PFAS contamination in soil, resulting in further pollution of waterways and the wider environment, has become an

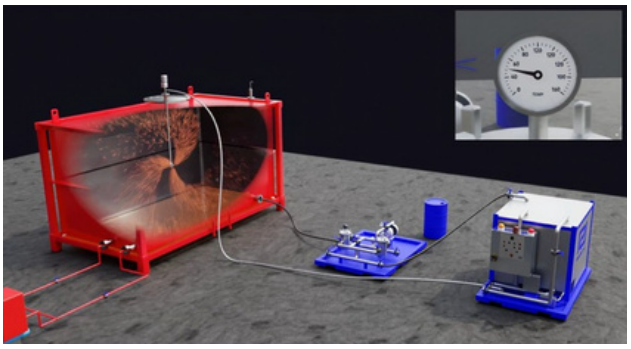


Image 1: *ProDecon's Spray Head PFAS Decontamination Methodology*

increasing environmental concern. A number of high-profile cases are driving enhanced monitoring requirements and the tightening of regulations governing PFAS discharges[1].

As regulatory pressure increases, demand for effective treatment solutions is growing with many technologies coming to market. Recognising the need for flexibility in industrial operations, ProDecon® has designed ADAPT™ as a fully mobile treatment solution. The system can be deployed directly on customer sites, avoiding unnecessary transport of contaminated materials, and can treat high-risk effluent at source, including wastewaters and leachates.

By dramatically minimising waste output, ADAPT™ not only reduces logistical and disposal burdens but also enhances the overall sustainability profile of decontamination projects. For operators facing tightening ESG requirements, ADAPT™ delivers a compelling environmental and commercial benefit.

As AFFF transition deadlines approach, treatment train technologies like ADAPT™ will be instrumental in helping industries achieve compliance responsibly, efficiently, and sustainably.

1. House of Commons Environmental Audit Committee (2026) *Addressing the risks from Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS): Ninth Report of Session 2024–26*. HC 852. London: House of Commons.

Contact us:
Matt Calveley
Business Development Director
Email: Matt.Calveley@prodecon.com
Tel: : +44 (0) 1270 446601

Sprinkler ID	Initial Pre- Decon		Verification Post Decon		% Reduction	Estimated Rebound Pre-Ox (ppb)	Regulation ppb	Pass	Estimated Rebound Post-Ox (ppb)	Regulation ppb	Pass
	Pre-oxidation (µg)	Post-oxidation (µg)	Pre-oxidation (µg)	Post-oxidation (µg)							
TOTAL PFAS											
Sprinkler System 1	67,611	32,216,377	12,584	732,636	98%					N/A	
Sprinkler System 2	502,346	22,895	17,847	5,062	96%					N/A	
PFOA (example compound)											
Sprinkler System 1	19,639	3,873,276	1,012	35,938	99%	0.16	25ppb	✓	7.35	1000 ppb	✓
Sprinkler System 2	9,026	31,763	376	431	98%	7.60	25ppb	✓	12.25	1000 ppb	✓

Table 1: *TOP Assay Results Confirming Surface-Bound PFAS Pre & Post Decontamination, Including Elevated Contamination Identified*

Driving Sustainability Through Pump Efficiency and Electrification

Amid ongoing global instability and unprecedented volatility in energy markets, manufacturers are facing increasing pressure to control operational costs while accelerating decarbonisation efforts. Improving the efficiency of fluid-handling systems plays a critical role in reducing operational energy use, lowering costs, and achieving wider sustainability goals.

Pumping systems are among the most energy-intensive assets in many manufacturing environments. For years, air-operated double diaphragm (AODD) pumps have been widely used across industrial applications because of their versatility and reliability. However, traditional AODD technology is inherently inefficient and energy-intensive. Operating at just 10-15% efficiency, these pumps rely heavily on compressed air systems that consume large amounts of energy, increase operating costs, and contribute unnecessarily to plant emissions. Additional operational challenges such as icing (caused by moisture in the pump), noise and complex maintenance requirements further impact efficiency.

By replacing compressed air-driven systems with high-efficiency electric alternatives, businesses can make measurable progress towards sustainability and net zero targets while simultaneously improving operational resilience and profitability.

QUANTM: The Smarter Alternative
The electrically-operated QUANTM diaphragm pump has become an important enabler of this transition – eliminating the need for compressed air entirely and dramatically improving energy efficiency **by up to 80%.**

This transition away from compressed air systems directly supports decarbonisation strategies, reducing CO_2 emissions and helping manufacturers reduce their overall carbon footprint. The removal of compressed air systems also simplifies operations, reduces maintenance requirements, and extends equipment life. With quieter operation, integrated control systems, automated priming, and plug-and-play installation within existing footprints, QUANTM technology supports both sustainability and operational efficiency goals.

Demonstrating the Impact of Electrification
CDR Pumps has demonstrated the scale of energy savings achievable through the electrification of pumping systems. We recently supported a major UK corrugated packaging manufacturer to replace the compressed air-driven pumps used in their starch applications with electric QUANTM pumps. Following a pilot trial where energy consumption was monitored and validated for both systems, we supported the installation of over 100 QUANTM pumps across eleven sites nationwide.

The project delivered a significant reduction in energy consumption, with a single electric pump consuming approximately 5,880 kWh annually, compared to 47,813 kWh for the compressed air-driven system. When scaled across the multi-site implementation, this translated into annual energy savings of almost £1 million, while also delivering a major reduction in associated carbon emissions.

The results demonstrate how considerable energy inefficiencies can exist within pumping systems widely accepted as standard practice and highlight the wider opportunity for electrification across comparable chemical processing and industrial fluid-handling applications.

Improving Efficiency Without Compromise
The electrification of fluid-handling systems offers a clear route to reducing energy consumption and cutting carbon emissions without compromising process performance. For plants still relying on traditional AODD technology, the transition to QUANTM pumps is both practical and straightforward, with electric pumps designed to fit within existing footprints and requiring minimal infrastructure changes. The result is immediate, measurable and scalable improvements in pump efficiency, sustainability performance and operational resilience.

Improving pump efficiency represents a significant and often overlooked opportunity to reduce emissions, lower operating costs and strengthen long-term competitiveness. QUANTM technology is helping manufacturers achieve these goals through smarter, more efficient fluid handling. In an environment of unpredictable energy pricing and supply uncertainty, reducing dependence on compressed air systems also strengthens long-term operational resilience.

If you're evaluating opportunities to improve pump efficiency, reduce energy consumption and meet sustainability goals, CDR Pumps can help identify where QUANTM pumps could deliver measurable operational, energy and carbon-reduction benefits.

To discuss your application, contact the CDR Team on 01933 674777 or at sales@cdrpumps.co.uk

CDR Pumps UK Ltd | Making the right choice...

Artificial Intelligence in patenting inventions

Artificial Intelligence or "AI" is a hot topic in the modern world. It is used in everything from day-to-day activities, like summarising the results of a web search, to more specialised tasks like conducting drug discovery trials. With this rise in the availability of powerful but affordable tools, WP Thompson is often asked how much of patent drafting and prosecution can be conducted by applicants using their AI tool of choice, which we discuss in this article.

Protecting the future

In our experience, a well-prompted AI tool can produce a document with the appearance of a complete patent specification. However, this resemblance is often surface-deep. A well-drafted patent application anticipates future developments, rather than solely protecting what has already been done to develop an invention. It presents fallback positions to address potential objections that might be raised during examination and discloses "future-proofing" statements to cover changes that might be made to the invention over time. Anticipating hypothetical changes that might be required is a skill that often falls beyond the capabilities of AI tools without extensive and specific prompts that themselves can only be contemplated by drawing on experience of patent prosecution.

AI tools have also been known to "hallucinate", where they output seemingly legitimate information that is in fact incorrect or fabricated, in an effort to "fill in the blanks". Again, one way to limit the occurrence of such hallucinations is to provide more details and data on which these tools can base their outputs. However, certain AI tools, under certain settings, might employ user inputs as training data, on which future outputs are based. This raises the untested possibility that confidential information could be output in some form to other users, risking making technical features of an invention publicly available before a patent application is filed. Caution should therefore be exercised in using AI tools to draft patent applications, with the knowledge that they will often still fall short in providing meaningful protection.

Agile thinking

Once filed, a patent application enters one or more rounds of examination to determine its invention's patentability over existing public disclosures This often requires extensive analysis of this "prior art" to identify which features of the invention render it novel and inventive, whilst balancing the need to include one or more such limiting features in the claim to the invention against the applicant's commercial requirements. Occasionally, a third party might request that a granted patent be revoked, in which case arguments and/or amendments would also need to be drafted to address the issues raised.

This is where the limitations of AI become more readily apparent. AI tools cannot produce novel arguments; they can only give the appearance of producing them, based on the training data available to them. They are not yet capable of real ingenuity and agile thinking. Conversely, humans can consider matters and produce original and nuanced arguments to address an examiner's objections, whilst also considering what will be of commercial benefit to applicants. Case law develops for the simple reason that humans question the boundaries of the law in original ways that are beyond current AI tools. In fact, the perils of relying on tools that can "hallucinate" are well-documented, with patent case law in the UK and US demonstrating the dim view judges take on submissions unwittingly containing false assertions of fact.

Striking a balance

Despite their limitations in preparing and prosecuting patent applications, AI tools of course have a place in the development of inventions themselves. For example, AI tools allow screening in materials science, drug discovery and personalised medicine trials on scales that would previously have been too time-consuming or costly to have been considered. Once a target has been identified, AI tools can also facilitate different aspects of further trials, with the experimental data borne of those trials potentially being useful in sufficiently demonstrating the plausibility of an invention in a patent application.

There is a balance to be struck then between the processing power of AI tools and the expertise and ingenuity of humans when considering how to protect your invention. Both can play a role, but it is important to understand the limitations of AI tools from the outset, as remedying their deficiencies can be difficult further down the line.

To find out more from WP Thompson, including how to protect your IP, please visit https://www.wpt.co.uk or contact us at london@wpt.co.uk

Engineering Procurement and Construction (EPC) vs. Engineering Procurement and Construction (EPCm)

by Ian Crummack

Understanding the difference between EPC and EPCm is important because it directly affects risk allocation, cost certainty, and contractual responsibility. In an EPC model, most project risk—such as cost overruns, delays, and design coordination—sits with the contractor under a typically lump-sum, turnkey arrangement. In contrast, under EPCm, the client retains much of that risk because trade contracts are usually placed directly with the purchaser (also known as "Client" or "Employer" depending on the form of contract used). If you misunderstand the model, you could incorrectly assume who is responsible for managing risk, resolving design clashes, or absorbing additional costs—potentially leading to disputes or financial exposure.

EPC

In accepting such a high level of risk, EPC contractors typically charge a premium for the service delivered. This would usually be in the order of 20-25% for a larger project. For a project where the value is relatively low, but the risk of failure still carries some weighty potential penalties, the mark-up could be even higher.

EPC, whilst costly, does offer the clients some advantages, namely simplicity in the contracting structure and the security of being able to chase a single party should there be a failure in the delivery of the equipment. Notwithstanding this, there have been several very large failures in EPC contracts and the market for viable EPC contractors, who could stand by their guarantees, has shrunk markedly. Debt funders tend to prefer EPC contracts wherever possible.

EPCm

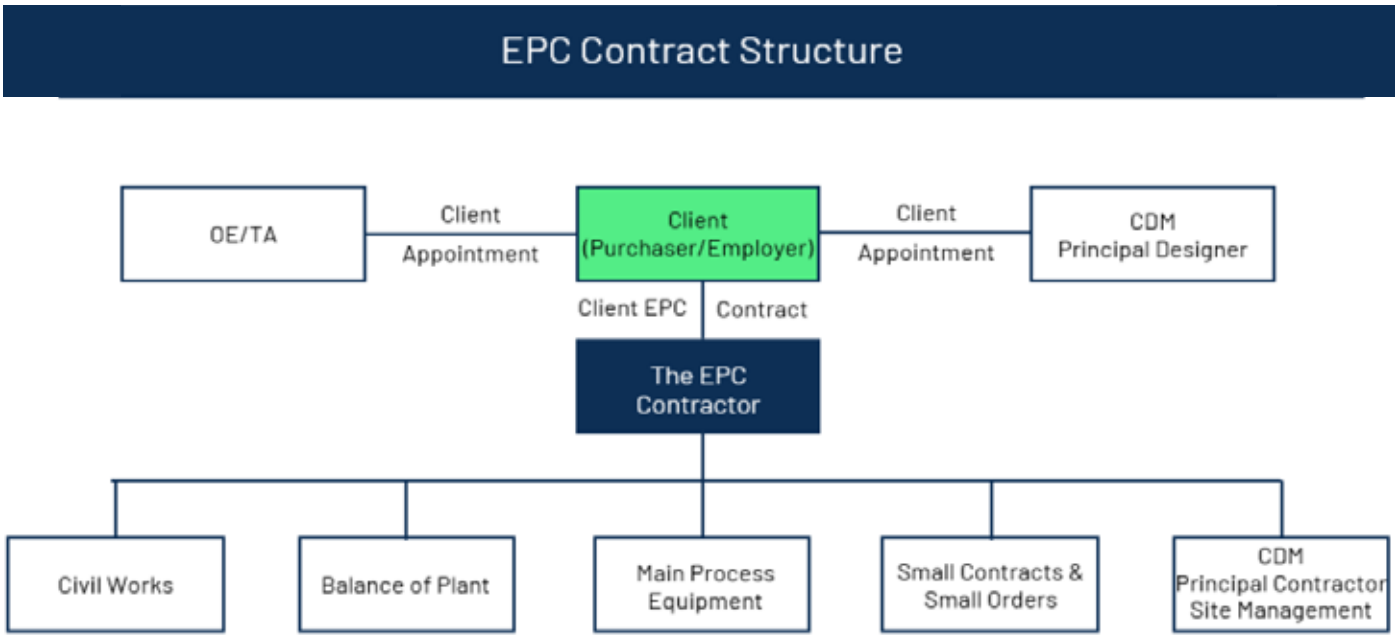
The EPCm model offers a different approach to achieving similar outcomes at a reduced cost to the purchaser. The purchaser would contract with a professional services company to provide the management of the delivery of the project. This is the 'm' in EPCm. All the orders for equipment are placed directly by the purchaser with the suppliers with the EPCm providing a range of services including technical specification etc. The interfaces between equipment would typically be managed by the EPCm.

Under this model the purchaser retains a single point of contact for the project but also retains greater control, flexibility and visibility in what is delivered.

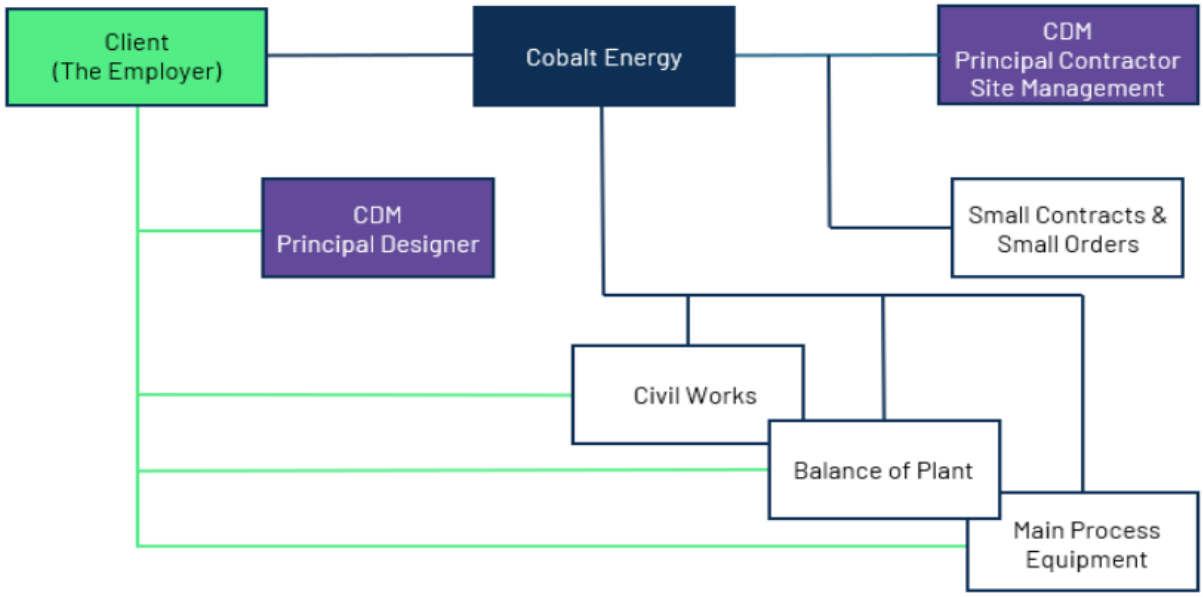
Under EPCm, there is no single party who has to accept the overall risk for the project, and no party must guarantee the performance of third-party equipment. As a result, the project would be expected to be delivered without the 20-25% markup which could be expected under a true EPC, but consequently, with additional risk falling on the purchaser.

Cobalt Energy EPCm approach

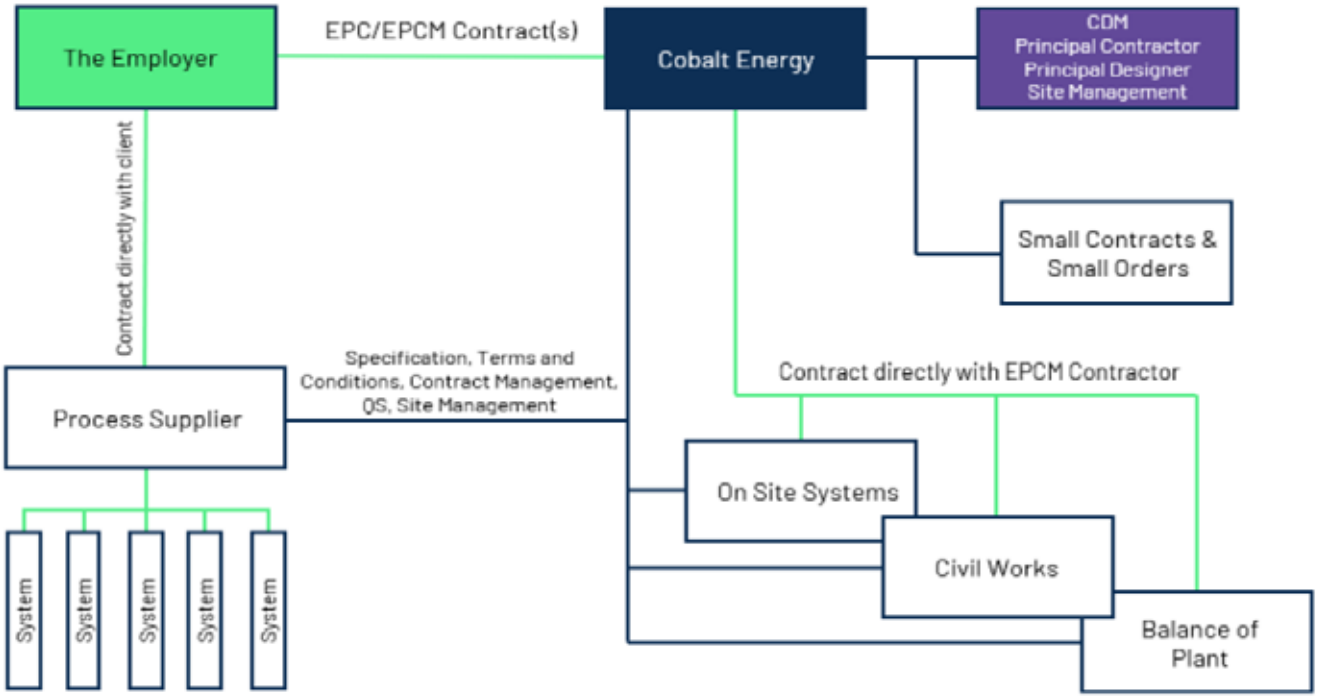
The Cobalt Energy approach to EPCm contracting is to place the main items of plant and equipment (defined as those which can be set out in defined specifications and discreet supply packages) as direct suppliers and subcontractors to the purchaser; with the complete management and interfaces being managed by the EPCm. This prevents needless margin and contingency being added to the project cost, thus establishing a 'best value' position for the Investors.



EPCm Model 1



EPCm Model 2



Cobalt Energy builds up the EPCm project on the following basis:

- Scope and define the complete engineering & project management input;
- Identify major equipment suppliers and draft appropriate specifications and contracts;
- Identify direct suppliers and draft appropriate specifications and contracts;
- Identify and make allowance for minor balance of plant items;
- Scope and estimate the required site establishment and management.

Cobalt Energy

Cobalt Energy operates through a group structure with multiple specialist subsidiaries:

- CEL (Cobalt Energy Limited) ➔ consulting & engineering
- CEPSL (Cobalt Energy Project Services Limited) ➔ project delivery arm
- CEOSL (Cobalt Energy Operational Services Limited) ➔ operations & asset management

CEL will be happy to assist any discussion on a relevant EPC/EPCm structure for your next project. For further details contact - businessdevelopment@cobaltenergy.co.uk

Big deliveries, small mistakes - a check before you connect can prevent a very bad day

In an industry full of tightly controlled processes, one of the highest-risk yet often under-managed activities is road tanker offloading. Tank storage areas and the operations within them often lack the clear ownership typically applied to process plants or equipment. However, with many variables to consider, the level of unpredictability - and therefore risk - must be carefully assessed before the road tanker arrives on site.

In this article, John Butcher, a Principal Consultant and member of the Chemical Industries Association (CIA), and Alex Brady, Associate Director Sales and Marketing at Carbis Loadtec, unpack those variables and provide a practical, site-ready checklist for tank farm operators based on established guidance (Solvent Industry Association GN52).

These considerations align with established industry guidance covering layout, equipment, operation and emergency preparedness - but in practice, failures often occur at the interfaces between them.

“Start with the information,” says John. “Before you accept a delivery, ensure you understand the product hazards - flammability, toxicity, reactivity and environmental impact. The SDS is essential, but it is not the whole story. Provide clear unloading information, agree on how the offload will be done, and be explicit about what would trigger a stop to the operation. Any uncertainty should be resolved before the delivery arrives, especially after plant changes.”

Alex adds, “If you’re handling flammables, ignition control needs to be obvious and practical. Check the hazardous area classification around the delivery point and ensure everything used during transfer is suitable, inspected and in good order. Alongside this, ensure the fundamentals are applied consistently: clear signage, vehicle immobilisation, access control, and proper earthing/bonding to deal with static.”

John continues: “Your receiving tank is one of your biggest safeguards - but only if you check it properly. Before you start, confirm you’ve got enough space (ullage) for the full compartment or tank volume, and that the level gauge is correct. Be clear how overfill is prevented - by procedure and by independent alarms/interlocks. Remember vents, pressure/vacuum protection and isolations need to be fit for purpose, and the bund/drainage is there to keep any spill on site, out of surface drains or foul sewer.”

“These are significant volumes,” says Alex. “An ISO tank can be over 20,000 litres, and a road tanker can be up to 40,000 - so treat the transfer as a controlled operation. Check the route in, turning space, and safe parking, and ensure people and vehicles are kept well separated. The point should be easy to reach, well-lit, and set up for a secure connection, with provision for controlled drain-down at the end of the transfer. Ensure loading arms or hoses, gaskets, and couplings are compatible, pressure-rated where required, and inspected or replaced on a defined schedule. Finally, emergency arrangements should be present and correct - spill kits, fire protection, eyewash, communications, and a clear ‘stop the job’ authority for both the driver and the site.”

In practice, many of these risks arise not from design intent but from the interface between the tanker, operator, and transfer equipment.

Bulk offloading readiness checklist

Pre-delivery & planning
- Pre-delivery: assess before the first delivery; recheck after a change, near miss, or incident.
- Who does what: named contacts, supervision plan, clear stop-work rules.

Site & access
- Access & segregation: route, parking/immobilisation, traffic controls, barriers, signage.

Product & process
- Right product: confirm ID, hazards/compatibility, method, PPE.
- Tank & containment: ullage, working level gauge, overfill protection, bunding, protected drains.

Ignition & transfer systems
- Ignition/static: zoning OK, suitable kit, earthing/bonding in place.
- Loading arms, hoses & connections: correct point, compatible couplings, inspected/tested, controlled drain-down.

Emergency preparedness
- Emergency: spill kit, fire protection, eyewash, comms, escalation.

Close-out & assurance
- Close-out: record actions, owners, and dates, then confirm done.

John and Alex have combined experience of over 50 years in this field and have worked together on several upgrade projects. John has worked in chemical distribution and process safety consulting, while Alex initially focused on electrostatic control and hazardous area instrumentation and now specialises in tanker access and transfer systems at Carbis Loadtec.

Ultimately, safe offloading is achieved not through equipment alone, but through the consistent alignment of information, site design, and operator behaviour.

For further information please contact
alex.brady@carbisloadtec.com

CHEMICAL INDUSTRIES ASSOCIATION

CARBIS LOADTEC GROUP LTD

Beyond the Specification: Why Lining Integrity Is a Commercial Risk

By Dominic Marshall, Group Managing Director, Corrous Industrial Group

A lining can meet specification and still fail in service. That is the uncomfortable reality in protective coatings — and one that is often only discovered months or years after handover, when a tank is taken offline, production is interrupted, and remediation costs exceed the original installation.

For operators handling aggressive products, this is not a technical nuance. It is a commercial risk.
In today's climate, that risk is amplified. The UK chemical sector continues to operate under sustained pressure, with declining output, site closures, and cautious forecasts across much of the industry. In that environment, avoidable failures are more than operational setbacks — they directly impact profitability, uptime, and asset value.

Urea Ammonium Nitrate (UAN) storage is a clear example. UAN is highly aggressive in service, and its failure mechanism in lined concrete is well documented. Once product penetrates through a defect — whether a pinhole, void, or weak interface — it can permeate the substrate, crystallise, and generate internal pressure. The result is cracking, spalling, and progressive deterioration, often requiring the asset to be taken out of service.

The commercial implications are significant. A localised defect left unresolved at installation can lead to a full repair campaign within two years — bringing downtime, specialist access requirements, and costs that can exceed the original lining package.

In this context, the margin for error at handover is effectively zero.
A defect that appears minor during inspection can represent the starting point of a failure mechanism that develops over time. By the point it becomes visible, the contract is closed, the contractor has demobilised, and the operator carries the cost.

This is where the role of the applicator must extend beyond compliance. A specification defines the minimum acceptable standard — it does not account for every real-world condition encountered on site. Competent delivery requires judgement: understanding the substrate, recognising risk, and acting to protect long-term performance, even when the work technically meets the brief.

Corrous encountered this on a recent project for a valued repeat client at Portbury Docks, Avonmouth. Four new-build bulk fertiliser storage tanks required a chemical-resistant epoxy lining system applied over blast-cleaned concrete bases, inspected to ICorr Level 3. The tanks are destined for UAN service.

During final inspection of the first tank base, substrate protrusions were identified beneath the applied lining film. The system had been installed in accordance with the agreed specification. From a contractual standpoint, the works could have been signed off.

However, a compliant coating applied over a protrusion creates a localised stress point and a potential pathway for chemical ingress. In UAN service, that represents a credible long-term failure risk.

The decision was made not to close out the works. The programme was resequenced, and an additional topcoat was applied to mitigate the issue — at no additional cost and without impacting overall delivery. All four tanks were completed on time and on budget. One was delivered beyond specification.

That decision was commercial as much as technical. Addressing a risk during installation — while the asset is empty and access is already in place — is a marginal cost. Rectifying a failure in service is not. It involves downtime, lost production, reputation damage, and significantly higher mobilisation and repair costs.

There is also a governance dimension. Site culture determines whether these risks are challenged or passed on. If success is measured purely by programme and contractual sign-off, the incentive is to complete and move forward. If success is measured by long-term asset performance, decision-making changes.

For operators, the takeaway is straightforward. Specification compliance should be treated as the baseline, not the objective. When selecting contractors for aggressive service environments, the key question is not whether they can meet the specification — it is how they respond when conditions fall short of ideal.

That response ultimately defines asset life.
In high-consequence environments, the right standard is not what is achieved at handover, but what continues to perform years later.

Dominic Marshall BA, MCMI is Group Managing Director of Corrous Industrial Group, a UK multi-discipline industrial services contractor delivering integrated asset integrity solutions across Industrial Cleaning, Protective Coating, Asset Inspection, and Scaffolding.

For further information visit www.corrous.co.uk

The project delivery specialists

Sweating Assets Safely: The Brownfield Challenge in the UK Chemicals Sector

The UK chemicals industry faces a growing infrastructure challenge. Many facilities were built decades ago. They remain critical to production but are under strain. Assets are ageing. Capital is tight. Regulations are stricter.

Reactive maintenance is no longer enough. The real challenge is not just investment. It is making better decisions about how to manage existing assets.

The Challenge

Most UK chemical plants sit on brownfield sites. These environments are complex. Space is limited, and systems are tightly linked. Ageing infrastructure increases maintenance needs and raises the risk of downtime and environmental issues.

Key issues include:

Asset condition and knowledge gaps

Many assets are beyond their design life. Records are often incomplete. Materials may not meet current standards. As experienced staff retire, valuable knowledge is lost.

Operational constraints

Shutdown windows are short. Access is difficult. Systems are interconnected, so failure in one area can disrupt the whole site.

Regulatory pressure

Environmental rules are tightening. COMAH compliance must be maintained, even where documentation is limited. Operators must prove asset integrity without stopping production.

Financial pressure

Large investments are hard to justify. Payback periods are long. Emergency repairs and downtime increase hidden costs.

Operators must balance risk, cost, and performance to decide the best way forward.

Better Decisions, Better Outcomes

Sustainability is not always the main driver. But it often follows better decisions. Extending asset life helps maintain output while new low-carbon infrastructure develops.

Refurbishment and reuse offer clear benefits:

- Lower material use and less waste
- Reduced embodied carbon
- More efficient use of resources over time

These benefits support, not replace, core priorities such as safety, reliability and cost control.

> Sustainability isn't a trade-off against safety or reliability—it's the outcome of getting both right, alongside environmental performance.

Barry McDermott,
PM Group Director of Environment & Sustainability Services

How PM Group Can Help

PM Group helps clients to take a structured approach to asset decisions. This focuses on data, engineering insight, and long-term value.

Support includes:

- Optioneering studies to compare upgrade, rebuild, or replacement
- Detailed condition assessments across all systems
- Capture of at-risk knowledge into digital formats
- Phased upgrade strategies to minimise disruption.

Cost, schedule, and risk modelling help to guide decisions. Early engineering input helps to shape the right approach from the start.

Key Takeaway

Ageing infrastructure requires more than routine fixes. It demands clear thinking and strong technical leadership. With the right approach, operators can turn these challenges into opportunities. Smarter decisions lead to safer, more efficient, sustainable operations.

Get in touch for support with your brownfield challenges:

Call: +44 1928 752 500
Email: Environment-sustainability@pmgroup-global.com
www.pmgroup-global.com

Ageing Plants, Missing Information and Growing Project Risk

Why ageing plant data is becoming one of the biggest hidden risks in UK process industries.

Across the UK process industries, many manufacturing and COMAH sites are operating assets that were originally designed and constructed decades ago. While production demands, regulatory expectations and operational pressures have evolved significantly, the engineering information supporting these facilities has often failed to keep pace.

The result is a growing but frequently underestimated challenge: poor brownfield information.

For many operators, inaccurate drawings, undocumented modifications, disconnected datasets and legacy records are now creating substantial hidden costs across projects, maintenance activities and operational risk management.

In many cases, the issue is not that information does not exist - it is that nobody can confidently say whether it is correct.

Over time, facilities naturally evolve. Equipment is replaced during shutdowns, pipework is rerouted to accommodate operational needs, temporary modifications become permanent, and projects are delivered under increasing time pressure. While management of change procedures are designed to maintain accurate records, the reality across many ageing facilities is that engineering documentation gradually diverges from the physical plant.

This creates challenges that extend far beyond simple drawing discrepancies.

During brownfield projects, inaccurate or incomplete information can significantly increase design risk, procurement uncertainty and construction delays. Engineering teams may discover clashes only once installation begins. Pipework or structures assumed to exist may be absent, while previously unknown assets can appear unexpectedly during intrusive works. Shutdown durations can increase as site teams are forced into reactive decision-making.

In high-hazard environments, the implications are even greater. Poor visibility of existing conditions can introduce safety risks during tie-ins, isolations, lifting operations and confined construction activities. In some cases, ageing or inaccessible infrastructure may not be fully understood until late in project execution, when options become limited and costs escalate rapidly.

These issues are not uncommon. They are becoming one of the defining challenges of delivering successful brownfield projects in the modern process sector.

At the same time, operators are under increasing pressure to improve efficiency, extend asset life, reduce downtime and deliver capital projects with greater certainty. This is driving renewed focus on practical digital engineering approaches that improve confidence in engineering information before work reaches site.

Technologies such as high-definition laser scanning, intelligent 3D modelling and digital asset verification are helping organisations establish a far more accurate understanding of existing facilities. Rather than relying solely on historical records, project teams can now validate real-world site conditions early in the design process.

The benefits are substantial.

Accurate digital representations of existing assets allow multidisciplinary teams to identify clashes earlier, improve constructability, optimise layouts and reduce uncertainty during installation planning. Access, maintenance and operational considerations can also be reviewed in far greater detail before physical works commence.

For shutdown-intensive industries, this can significantly reduce programme risk and improve installation efficiency.

Importantly, the value of digital engineering is not simply the production of sophisticated models or visualisations. The greatest benefits are realised when digital tools are applied pragmatically to solve real operational and project delivery challenges.

A well-executed brownfield survey and modelling strategy can improve procurement confidence, reduce rework, support modularisation opportunities and strengthen communication between operations, engineering and construction teams. It also creates a more reliable information foundation for future projects, maintenance planning and asset management activities.

As the industry continues to balance ageing infrastructure with increasingly ambitious operational and regulatory expectations, the quality of engineering information is becoming a strategic issue rather than simply a technical one.

Facilities with reliable, verified asset information are better positioned to deliver projects safely, efficiently and predictably. Those relying on fragmented or outdated records may increasingly find themselves exposed to avoidable cost, delay and operational risk.

The challenge facing the sector is not necessarily the age of the assets themselves. Many facilities will continue operating successfully for decades to come. The greater challenge is ensuring that the information used to manage, modify and maintain those assets remains aligned with reality.

For organisations investing in brownfield projects, digital engineering is no longer simply about innovation. It is becoming an essential tool for reducing uncertainty, improving delivery confidence and enabling safer, smarter decision-making across the full project lifecycle.

For further details visit - https://dmd-design.net/

Beyond Compliance: Why Environmental Product Declarations Are Your New Market Passport

Environmental Product Declarations (EPDs) have rapidly evolved from voluntary technical documents into decisive factors for market access. Driven by global regulatory shifts and corporate procurement demands, verified environmental data is no longer optional—it is a standard requirement for products to remain competitive in global supply chains.

For manufacturers across the chemical, construction, and electronics sectors, understanding the EPD landscape is critical.

Understanding EPDs
An EPD can be defined as a type III ecolabel, determining the environmental performance of a product. It relies on a combination of well-established environmental quantification methodologies (Life Cycle Assessment (LCA) Methodology), additional standards depending on the product or market plus third-party verification.

Under procurement requirements from US "buy clean" laws to European tendering specifications, buyers increasingly demand environmental insights based on EPDs.

In the European Union, regulations like the revised Construction Products Regulation (CPR) and the Ecodesign for Sustainable Products Regulation (ESPR) will soon require verified life-cycle data.

Sector-Specific Opportunities
1. Construction Products: The Established Standard
The construction sector remains the primary driver of EPD adoption. With over 200,000 EPDs published worldwide, this sector treats EPDs as a decision-making tool.

Green Building Programs such as LEED and BREEAM foster the requirement for verified data, making EPDs essential for project certification.

Regulations formalizing the dissemination of sustainability information mean EPDs will become a standard requirement, not just a differentiator.

2. Electronics and Appliances: The Emerging Frontier
Electronics are an emerging market where EPDs are transitioning from "nice-to-have" to strategic tools.

Global buyers now require clear, comparable information on environmental footprints to support ESG strategies and mitigate greenwashing risks.

The upcoming Digital Product Passport (DPP) and ESPR will make life-cycle data mandatory for many electronic products sold in the EU.

3. Chemical Industry: Expanding Horizons
The Chemical industry is poised for widespread adoption of EPDs. As downstream industries face scrutiny, the suppliers of their chemical raw materials will come under increasing pressure to certify their environmental credentials.

The Path Forward: Digitalisation and Trust
The future of EPDs lies in digitalization. Machine-readable EPDs connected to Building Information Models (BIM), LCA tools, and platforms like LEED are becoming the next major step. This evolution supports the regulatory frameworks of CPR, ESPR, and DPP.

For manufacturers, the message is clear: EPDs provide transparent, trustworthy, and comparable data that builds brand credibility. Whether you are navigating the strict requirements of the construction sector or preparing for the digital mandates of the electronics industry, an EPD is your passport to market access.

At knoell, our Sustainability Experts can guide you through these frameworks, from Organizational and Product Carbon Footprints to Safe and Sustainable by Design (SSbD) and environmental certifications like the EPD, we've got you covered!

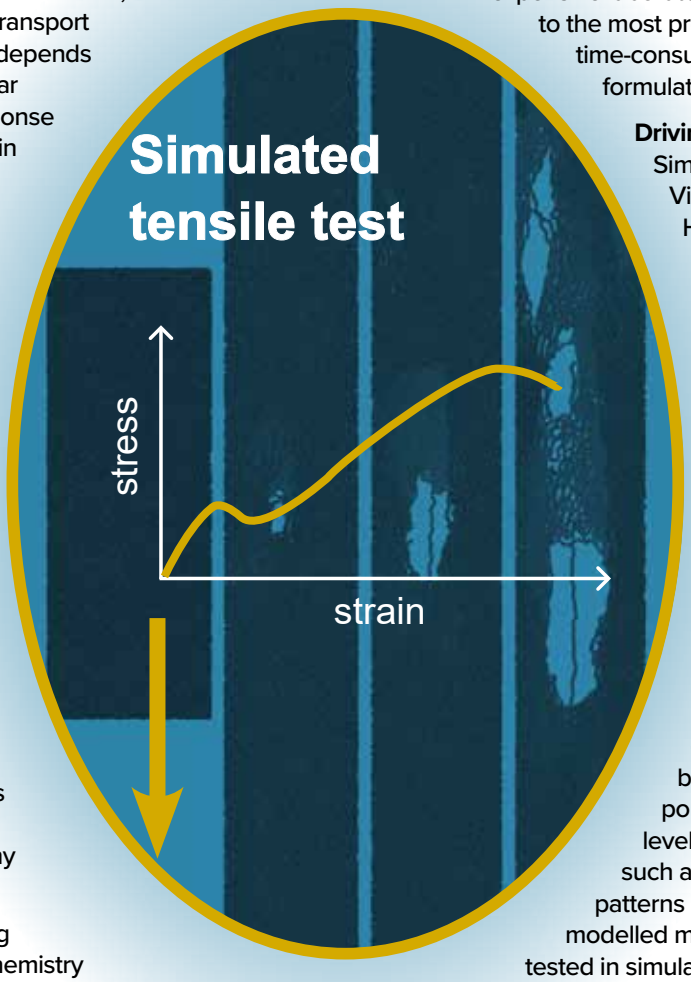
Joan Berzosa Corberá
Scientist – Sustainability Assessment
knoell Iberia SL
Sustainability | knoell

Feature	Life Cycle Assessment (LCA)	Environmental Product Declaration (EPD)
Nature	A methodological framework for quantifying performance.	A standardized procedure for reporting performance.
Flexibility	Tailored to specific project goals; flexible details.	Specialised regulation defined by Product Category Rules (PCRs); minimizes subjectivity.
Verification	Third-party review is not mandatory.	Third-party verification is mandatory.
Validity	No fixed expiration.	Generally valid for five years.
Target Audience	Internal or specific stakeholder analysis.	Primarily B2B market communication and public transparency.

How can digital materials testing improve polymer performance?

The Science and Technology Facilities Council (STFC) Hartree Centre is building capability and know-how in this area, developing new solutions and applying them to industry challenges, making a big impact on sectors from everyday packaging products to rocket propellants.

Chemical formulation and materials development, specifically of complex polymers, are central to modern lifestyle, with applications ranging from construction, coatings, and personal care, to transport and textiles. Their performance depends on complex relations of molecular structure, composition, and response to their environment. Advances in polymeric materials are driven not only by performance and cost, but also by the choice of starting materials, synthesis routes, and end-of-life management. The Hartree Centre works towards raising the standard of these materials, focusing on those expected to perform in manufacturing and operation in demanding environments like aerospace.



The digital-first approach

Laboratory testing for new formulations is often slow, expensive and can pose safety risks due to the toxicity or the energetic nature of the materials involved. Specialist facilities are often required, limiting how many candidates can be explored.

The Hartree Centre is pioneering applications of computational chemistry simulations to predict the properties of novel formulations, generating strong, reproducible insights into product development. These tools enable digital pre-screening of formulations, guiding which candidates should be prioritised for laboratory testing.

Enhancing polymers in action

Falcon Project Ltd partnered with the Hartree Centre to find a safer, faster way to assess and refine new material formulations without relying solely on physical testing. These workflows use computer simulations to model material behaviour at a molecular level, providing insight into properties such as strength, flexibility, compatibility between components, and surface adhesion. The project is developing reusable tools to generate realistic digital representations of polymer systems and simulate how they behave under different conditions. These digital assets have wider relevance across sectors such as aerospace, automotive and advanced manufacturing, where performance, safety and sustainability are critical.

A winning formula

Another example is the Hartree Centre's work with Johnson Matthey to automate and accelerate the process of identifying properties of novel chemical formulations. In this project, Johnson Matthey needed to develop digital tools to pre-screen and predict the properties of novel formulations. This digital workflow was used to support decision-making, allowing new formulations to be prioritised ahead of expensive laboratory testing. Effort is dedicated to the most promising candidates, avoiding time-consuming production of unproven formulations.

Driving manufacturing innovation

Similarly, a collaboration with Victrex and IBM through the Hartree National Centre for Digital Innovation (HNCDI) programme developed a computational workflow, enabling rapid screening of high-potential candidate materials for electric motor applications.

During electric motor manufacturing, wire-bending processes were causing wire insulation coatings to crack, which may compromise motor reliability and lifespan. The team developed a computational workflow to build digital representations of polymer structures at a molecular level, varying characteristics such as molecular size, branching patterns and chain compositions. These modelled materials were then stress-tested in simulation, replicating the conditions experienced during real-world wire-bending.

Digital underpinnings for a resilient chemical industry

Computational chemistry is no longer emerging, but becoming a foundation on which the future of UK materials development is built. By reducing costs, material wastage and time to market, and by increasing accuracy and decision-making power, computational chemistry is changing the way UK companies think about materials development.

STFC Hartree Centre, part of UK Research and Innovation, works directly with companies of all sizes to support the adoption and embedding of advanced digital technologies such as AI and the supercomputer-enabled modelling and simulation work featured here.

Learn more: https://www.hartree.stfc.ac.uk/knowledge-opinion/research/chemistry-and-materials/

Engineering a Better Future: How adi Group is Redefining Skills, Opportunity and Community Impact

As the UK continues to face a persistent skills shortage, adi Group has taken the lead in expanding opportunities for young people to explore engineering at the earliest stages. For the Midlands-based engineering group, corporate social responsibility is not a side project. It's a strategic commitment – one the company has spent many years shaping into a model of early skills access and community engagement that continues to earn national recognition, including this year's Chemicals Northwest CSR Award.

A Pipeline that Starts Early
While many employers focus their efforts on recruitment for 16-year-olds and onwards, adi Group begins much earlier. In 2016, the company launched a pre-apprenticeship programme for 14 to 16-year-olds, offering students a weekly afternoon inside a working engineering environment.

The idea is simple: give young people hands-on experience before they make GCSE and post-GCSE decisions. Over two years, participants rotate through electrical and mechanical tasks, gain a formal qualification and build confidence in a setting that is usually off-limits to their age group.

Over the course of the programme, 17 students have since progressed into full-time apprenticeships at adi Group, with many others moving into technical roles elsewhere. For a programme that offers just 12 places a year, the conversion rate is notable - and reflects a broader shift in how employers are thinking about early engagement.

A Culture Built Around 'Earn and Learn'
The pre apprenticeship scheme feeds into a wider apprenticeship structure that has grown steadily over the past decade. adi Group pledged in 2014 to ensure 5% of its workforce were apprentices; by 2025, that figure had reached 11%.

The company now employs 59 apprentices across its divisions, with 17 joining in 2025, with more roles now open in 2026 as the business continues to invest in early career talent. The growth has been accompanied by investment in development, including an Apprentice Academy and an annual two day Away Day that brings learners together from across the business.

Last year's event saw 58 apprentices work in mixed teams to develop proposals, present to senior leaders and set 90 day goals aimed at turning learning into measurable progress. It's a format designed to build confidence as much as competence, reflecting the broader shift towards soft skills development in technical industries.

Community Work with Measurable Reach
Alongside its skills programmes, adi Group has built a community agenda that focuses on local needs, particularly young people, education and health.

Its partnership with Birmingham Children's Hospital has become one of its most visible initiatives. Since 2023, employees have raised more than £236,600 for the charity, including over £93,000 in 2025. Fundraising ranges from large scale challenges to smaller, regular activities such as coffee mornings and survey linked donations, as well as pro bono professional support.

Volunteering is another area where the company has scaled its efforts. Every employee receives one paid volunteering day per year, and in 2025 the business delivered 223 days, with a further 110 days in 2026, across STEM outreach, employability support, homelessness initiatives and food poverty programmes.

A Responsible Employer, Inside and Out
adi Group's commitment to community begins with its own people. The business regularly runs programmes encouraging open conversations alongside peer-recognition initiatives to support health & wellbeing. Its safety culture remains one of the strongest in the sector, with the Group achieving a Gold RoSPA Health and Safety Award for the eighth consecutive year in 2026, securing the Gold Medal for the fourth year in a row - recognition of a consistent performance year-on-year.

A Joined-Up Approach
What emerges across the business is a model that is unusually cohesive. Rather than a collection of separate CSR projects, adi Group's approach forms a pathway that begins at age 14, continues through apprenticeship and early career development, and extends into community engagement and employee wellbeing.

In a sector where skills shortages remain a defining challenge, adi Group's long game approach offers one example of how employers can build capability while strengthening the communities around them.

For more information on adi Group, visit:
adi Group | Quality Engineering Solutions.

BASF and Great Science Share for Schools: Turning curiosity into capability for the future workforce

For UK industry, the long-term challenge around STEM skills is well documented. What's less widely recognised is how early that challenge begins—and how powerful the right partnerships can be in addressing it.

For BASF, one of the world's leading chemical companies, its collaboration in the UK with Great Science Share for Schools (GSSfS) offers a practical and scalable model for how businesses can play a meaningful role in building the future talent pipeline while delivering real community impact.

In the UK, BASF's flagship ScienceXperience and Stockport STEM Ambassador programmes see employees volunteering to deliver a range of hands-on activities for schools in communities close to its operations. Working with Great Science Share for Schools, therefore, fits squarely within its UK societal engagement strategy and amplifies its impact by focusing on increasing science capital and supporting social mobility—particularly in communities with limited access to STEM opportunities.

Great Science Share for Schools, founded in Manchester and now a UNESCO-supported campaign, encourages pupils aged 5 to 14 to ask their own scientific questions, investigate them and present their findings. It's a simple idea—but one that's proven highly effective in building confidence, communication skills and genuine engagement with science.

The scale is already significant. In 2025, GSSfS reached more than 800,000 young people globally, with BASF supporting through sponsorship and hands-on involvement.

But it's at local level where the impact becomes tangible.

In 2025, BASF helped deliver the first Stockport Great Science Share for Schools event, bringing together eight schools and 64 pupils to present eight student-led investigations. Projects ranged from testing materials for skate ramps to modelling ocean warming—practical, creative work that connected directly to real-world challenges.

What differentiates BASF's involvement is the role of its people. STEM Ambassadors from across the business were on hand throughout, engaging with pupils, asking questions and helping them explain not just what they did—but why it mattered.

That interaction had a measurable effect. Teachers involved in the programme consistently highlight the difference exposure to industry professionals makes. One described the experience as having "a massive impact... pupils got to experience things they normally wouldn't; Ambassadors were inspirational." Another pointed to the credibility BASF brings into the classroom: "Knowing scientists from a global company would be there raised the level of questioning." And from a regional perspective, the programme has been recognised as "one of the best examples of employer engagement across our region."

These aren't just positive anecdotes—they speak to a broader shift in how young people perceive science. Teachers report clear improvements in confidence, communication and aspiration, particularly among pupils who would not normally put themselves forward.

Just as importantly, the programme is designed to be inclusive. By delivering events locally and working closely with schools in disadvantaged areas, BASF and GSSfS removed common barriers to participation. Some partner schools have significantly above-average levels of free school meal eligibility, making access to real-world STEM experiences particularly valuable.

For employers, the benefits are twofold.

First, it helps build a more diverse and capable future workforce by showing young people—early on—that science and industry careers are accessible and relevant to them.

Second, it develops BASF's own people. Employees involved in the STEM Ambassador programme gain experience in communication, leadership and engagement, strengthening both capability and connection to the company's purpose.

Crucially, this isn't a one-off initiative. BASF's approach is built for the long term, with ongoing school partnerships and plans to expand the Stockport Great Science Share for Schools model further—bringing in more schools, more pupils and more opportunities to showcase pupil-led science.

For a sector focused on innovation and growth, the message is clear: building the skills pipeline starts early—and it works best when industry shows up, participates and collaborates.

BASF's partnership with Great Science Share for Schools demonstrates that when business engagement is done well, it delivers value across the board—from classrooms to communities to the future workforce.

For further details please visit the websites below.
BASF – United Kingdom
The Great Science Share for Schools

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John Hogg Backs SwitchDye's CO_2-Responsive, Drop-In Dyeing Technology

Strategic equity investment and technical partnership to scale CO_2-responsive dye innovation that cuts energy and water use.

A Strategic Investment in SwitchDye
John Hogg Technical Solutions has announced a significant minority equity investment in SwitchDye Limited, a University of Leeds spin-out.

SwitchDye has developed a CO_2-responsive, drop-in dyeing system that reduces chemical intensity, energy use and water consumption in dyeing polyester and other synthetic fibres. The partnership will support SwitchDye's scale-up and industrial validation across real-world mill environments.

Professor Nick Plant, Pro-Vice-Chancellor: Research and Innovation at the University of Leeds, said: "Switchdye's pioneering approach to polyester dyeing will help to drive a more circular and sustainable textile industry. This is another example of the outstanding talent that exists within our research community and our strength in nurturing and supporting innovation in new technologies."

Through this partnership, John Hogg will provide technical input, manufacturing and stewardship expertise, and access to customer networks to help SwitchDye move from lab to mill at pace.

Technology and Impact
SwitchDye has redesigned dye chemistry to enable commercial-scale textile dyeing using carbonated water. Its CO_2-responsive system drives colour into the fibre while minimising the need for auxiliary chemicals. Tests show it can remove additives that typically account for up to 90% of total chemical mass, without compromising standard performance. The technology is designed as a drop-in for common dyehouse equipment, allowing mills to keep using existing machinery.

It may also streamline operations by reducing rinse stages and shortening machine time. This in turn lowers resource use versus conventional polyester dyeing, including around 40% less water and meaningful energy savings. And because the process is reversible, colour can be removed more easily at end of life, supporting genuine textile-to-textile recycling.

Sam Walton, Chief Technical Officer at John Hogg commented "the partnership with SwitchDye marks the start of an inspiring journey with the potential to improve the future of textile manufacturing for many years to come."

"At John Hogg, we have always taken pride in understanding our customers' needs and the evolving demands of the market. Being part of an innovation that delivers a true step forward in sustainable dyeing technology is something we are genuinely excited about. We also see clear alignment between our businesses, with John Hogg's wider capabilities helping to accelerate SwitchDye's path to commercialisation". He added.

For John Hogg, this partnership builds on the 2024 acquisition of Avocet Dye & Chemical Company Limited, reinforcing commitment to sustainable textile chemistry and performance additives.

Harrison Oates, Chief Technology Officer at SwitchDye spoke on the partnership, saying "Partnering with John Hogg gives us the technical expertise and industry reach to move from lab success into consistent, real-world application. Over the coming months, we'll be working closely with dyehouses and brands to demonstrate how the technology integrates into existing equipment and delivers measurable savings."

Next Steps
SwitchDye will run a structured pilot with selected dyehouses and brand supply chains over the coming months. The trials will validate performance at mill scale, confirm drop-in integration with existing equipment, and quantify reductions in auxiliary chemicals, water, energy and cycle time against each mill's current process. They will also assess colour quality, fastness and reproducibility, and capture operator feedback to inform training and standard operating procedures.

John Hogg will support throughout scale-up with on-site technical assistance, process optimization, product stewardship and regulatory guidance, and commercial onboarding where appropriate.

Dyehouses and brands interested in future pilots can register their interest via contact@switchdye.co.uk

SWITCH DYE

Lakers Joins Groupe M

A New Chapter for a UK Industrial Leader — By Tom Ventre, CEO, Laker-Vent Engineering Ltd (Lakers)

A 60+ Year Legacy of Engineering Excellence

Founded in 1962, Lakers has built a strong reputation for quality, reliability, and technical expertise in the UK industrial sector. Today, the business employs around 400 staff across two UK sites, with a culture shaped by practical problem-solving and high standards.

Core Capabilities That Set Lakers Apart

Lakers is recognised for piping services, precision welding, and mechanical solutions. Its strength lies in delivering complex industrial work with a hands-on approach and consistent focus on safety, quality, and execution.

Introducing Groupe M

Founded in 1999, Groupe M has grown to 3,000 employees and annual turnover of €450 million. With 32 sites in France and 11 international locations, it offers a strong platform for Lakers next stage of growth while preserving the company's UK identity.

Why This Partnership Makes Sense

The partnership is based on shared values, complementary capabilities, and a joint ambition to grow responsibly. Both organisations prioritise technical excellence, customer commitment, and long-term stewardship, creating clear synergies for industrial clients and complex engineering projects.

Key Priorities for the Road Ahead

The immediate focus is continuity: maintaining dependable service and quality for customers. The partnership will also support staff development, protect company culture, and create opportunities in nuclear, international expansion, and innovation.

A Forward-Looking Future

Lakers move into Groupe M marks an important milestone and a continuation of its long-term story. With Groupe M's backing, the business is positioned to grow its reach, strengthen its expertise, and create new opportunities while preserving what has made it successful.

Eastgate Engineering aims to expand further into the UK's energy sectors after a period of strong growth and industry recognition

Eastgate has strengthened its presence in the North West by opening a new office in Warrington to support rising project activity within the region. This new office location will support project delivery and regional recruitment, as well as improve supply chain engagement, enabling Eastgate to respond efficiently to demand and support local economic growth.

This expansion supports Eastgate's role in major projects like the Lostock Sustainable Energy Plant, a leading waste-to-energy development in the North West, where almost 200 of Eastgate's workforce are currently based. The facility will soon be able to generate 69.9MW of electricity from 600,000 tonnes of residual waste each year, powering 125,000 homes and reducing landfill emissions. It replaces fossil fuel energy, complies with strict environmental regulations, and is exploring direct heat and electricity supply to local businesses.

Eastgate currently employs over 500 people across its operations and anticipates significant growth, with plans to increase turnover as demand rises in the energy and industrial sectors.

"The level of investment taking place across the UK's industrial and energy sectors is creating huge opportunities," David Brennan, CEO and Founder of Eastgate Engineering, said. "There is real momentum behind projects linked to energy transition and sustainability, particularly in regions like the North West, where there is already a strong industry base."

Eastgate has received several industry accolades over the past year, including CEO David Brennan being shortlisted for the EY Entrepreneur of the Year Ireland awards, which recognise exceptional business leaders.

Additionally, Eastgate was also crowned Tees Business of the Year at the Tees Business Awards 2026 for outstanding achievement and regional economic contribution, reflecting the significant impact the company has made across Teesside and marking a strong foundation as it now looks to replicate that success and deliver the same level of excellence within the North West.

Eastgate continues to prioritise its collaborative culture, even with their current rapid expansion.

"Our business has grown quickly, but we've worked hard to retain a strong team-focused culture throughout," Anthony Fiske, Commercial Director at Eastgate Engineering, added. "Whether people are site-based, office-based or supporting projects remotely, everyone plays an important role in providing for our clients".

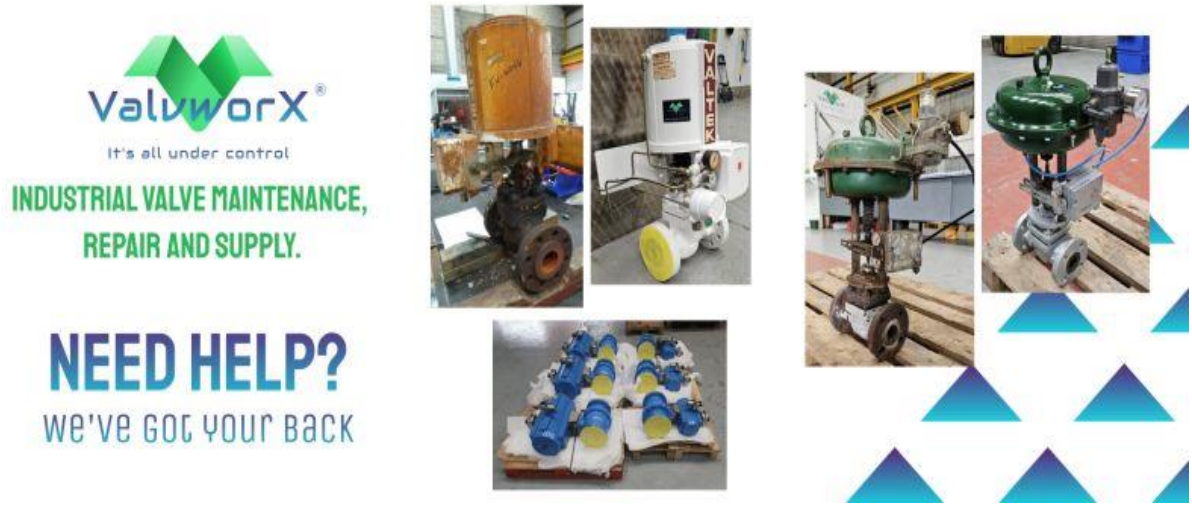
Eastgate also supports community and inclusion initiatives, such as Eastgate in Bloom, an annual International Women's Day event celebrating women in engineering and energy, and Vicky's Legacy, which promotes cervical cancer awareness in memory of activist Vicky Phelan.

The company hosts annual charity golf events and sponsors local grassroots sports teams and charitable organisations.

With accelerating investment in renewable energy, Eastgate believes its experience with complex projects positions the business for continued growth in the North West and beyond.

For further information please contact Katie Brennan - kbrennan@eastgateengineering.com

VALVWORX complete Valve Surveys at North-West Chemical Plants



Valvworx, with a workshop and office based in Warrington, have recently completed site surveys to determine Control Valve Numbers on two local Chemical Plants.

Following a sweep of several areas of the sites, all valves have been tagged with an individual number, and all visible information including valve size, class, serial number, manufacturer make and model, was obtained from each of the tag plates, along with photographs of each valve and their plant locations.

All this information was then uploaded into DATAWORX, our asset management database.

Customers can be given external access to our database, so the Engineers can view all information gathered from their own offices, in support of their corrective and preventive maintenance plans

This has already assisted with outages planned later this year, and as valves run through the workshop for overhaul, the history is updated to include the work undertaken, any parts used or required in the future, and test certification.

If we can support you with valve management, valve maintenance or valve supply, get in touch with the team at Valvworx.

sales@valvworx.co.uk
☎ 01925 982804

Valvworx Ltd®: Overview | LinkedIn

DataworX
Asset Management System

KPM Analytics & Metrohm UK Join Forces

KPM Analytics and Metrohm UK announce a new distribution partnership for the United Kingdom, covering **KPM Analytics' wet chemistry solution,** including the **SmartChem® discrete analysers** and **NexaFlo® continuous flow analysers.**

Under this partnership, Metrohm UK will be responsible for sales and after-sales service activities related to KPM Analytics' wet chemistry equipment across the UK.

The partnership aims to strengthen local market presence and ensure continuity of service for UK laboratories, combining KPM Analytics' analytical expertise with Metrohm UK's strong local organisation, application know-how, and service capabilities.

"This partnership with Metrohm UK is a natural extension of our European distribution strategy for wet chemistry solutions," said **Andreas Bregler, Vice President Global Sales at KPM Analytics.** "Their proven expertise and strong local presence will ensure reliable support for UK laboratories."

"We are excited to broaden the range of solutions we can offer to our customers across the UK. Partnering with KPM Analytics enables us to extend our applications footprint and deliver even greater value," said **Jamie West, CEO at Metrohm UK.**

Both companies are committed to ensuring a smooth transition for customers and maintaining high standards of technical support and service.

About KPM: KPM Analytics is a global leader in scientific instrumentation, providing analytical and vision inspection solutions to laboratories and industrial operators in the food, feed, agriculture, industrial and environmental sectors. KPM products have a long history of helping companies secure product quality, optimise production processes, and make confident, data-driven decisions through reliable solutions, supported by dedicated application expertise and local service. https://www.kpmanalytics.com

About Metrohm UK: Metrohm is one of the world's most trusted names in high-precision instruments for chemical analysis. With a legacy of innovation and reliability, Metrohm is committed to delivering pioneering, sustainable solutions to customers across the globe. As a globally active company, Metrohm embraces its economic, social, and environmental responsibilities.

For further information visit https://www.metrohm.com/en_gb.html

Metrohm

Chemicals northwest

Chemicals Northwest (CNW) is a dynamic industry-led cluster that brings together chemical manufacturers, supply-chain partners, innovators, and educators across the North West and beyond to strengthen one of the UK's most important industrial regions. With a strong focus on collaboration, sustainability, and technological advancement, the organisation provides a platform for networking, knowledge-sharing, and strategic support that helps members thrive in a competitive global market. By championing innovation and fostering meaningful connections, Chemicals Northwest plays a vital role in driving growth, supporting skills development, and showcasing the region's world-class chemical expertise. Owned by the Chemical Industries Association (CIA), it serves over 110 members and has celebrated 26 years in operation.

"Great minds collaborate, lets think together"

- become a member...

www.chemicalsnorthwest.org.uk

CHEMICAL INDUSTRIES ASSOCIATION

- *Connecting the community through 'Elements' Magazine*
- *Contributing to the industry's strategic voice*
- *Promoting science and engineering*
- *Networking events & yearly awards*
- *Improving our industry image*
- *Interactive workshops*
- *Supporting projects*

spotlight *on new member*

adi Group

adi Group is a Turnkey Engineering and Construction business headquartered in Birmingham, delivering project and business solutions to manufacturing customers across the UK and Ireland.

What we do
We help chemicals and process manufacturers plan, deliver and maintain engineering programmes that keep plants safe, compliant and productive. From concept and design through manufacture, installation and commissioning, our teams support everything from targeted upgrades and reliability improvements to larger CAPEX projects and site refurbishments.

The benefit to customers
Working with adi means fewer gaps between disciplines and clear accountability from start to finish. Our in-house capability helps reduce interfaces, shorten handovers and keep decisions close to the work, so projects move faster and risks are managed earlier.

adi is used to operating in live environments where shutdown windows are tight and safety is non-negotiable. That experience translates into practical planning, strong site control and a focus on delivering right-first-time.

Commercial outcomes
Our customers come to us for delivery certainty and measurable results:

- Reduced downtime through well-planned shutdown and turnaround support
- Faster project delivery by coordinating multiple disciplines under one roof
- Improved asset reliability and performance through targeted upgrades and maintenance
- Lower project risk with clear ownership, robust site controls and dependable communication

Safety, quality and responsible delivery
Safety and quality sit at the centre of how we work. Our culture is supported by recognised standards and independent accreditations and we continue to strengthen our sustainability performance and responsible business practices.

Our people
We invest heavily in developing engineering talent, including our Apprentice Academy that helps young people take their first steps into the industry.

adi Group — Total Engineered Solutions

Contact:

Paul Smith

E: psmith@adiltd.co.uk
W: www.adiltd.co.uk

Office
66 Melchett Road
Kings Norton
Birmingham
B30 3HX
UK

DMD Design Solutions

DMD Design Solutions is a multi-discipline engineering consultancy delivering fully project-managed solutions to process industries across the UK. The company provides a seamless service from concept through to implementation, taking full responsibility for both design and delivery.

Supporting clients in the chemical, energy, and manufacturing sectors, DMD offers integrated mechanical and process design alongside project engineering and execution. By managing the entire project lifecycle in-house, the business ensures consistency, accountability, and efficient delivery at every stage.

DMD Design Solutions is particularly experienced in brownfield environments, where operational constraints, ageing assets, and complex interfaces demand practical and well-coordinated solutions. The company works closely with clients to develop designs that are not only technically robust, but also safe, buildable, and aligned with operational requirements.

A key strength of DMD lies in its ability to manage multi-discipline projects without fragmentation. By maintaining clear ownership from initial concept through to installation and commissioning, the company reduces interface risk, improves communication, and helps ensure projects are delivered on time and within budget.

Typical work includes plant modifications, process improvements, equipment upgrades, and support for larger capital projects. DMD Design Solutions adopts a flexible and responsive approach, tailoring its involvement to suit each client's needs.

With a strong focus on practical engineering and dependable delivery, DMD Design Solutions helps organisations execute projects with confidence while improving performance, safety, and long-term reliability.

DMD DESIGN SOLUTIONS

Contact:

Mike Plumb
Director

E: M.Plumb@DMD-Design.net
T: +44 (0)1928 511742
W: www.dmd-design.net

Office
Suite 501
The Heath Business & Technical Park,
Runcorn
England
WA7 4QX

Key Integrated Services (KEYIS)

Key Integrated Services is a multi-discipline engineering partner supporting manufacturing, chemical, pharmaceutical, process and industrial clients across the UK. We deliver detailed design, electrical, mechanical, control and instrumentation, building fabric, energy management, project works and maintenance support, either as stand-alone packages or as part of wider operational programmes.

Our capability covers the full project lifecycle, from design and planning through to delivery, commissioning and handover. Much of our work is undertaken in live, high-hazard and operationally sensitive environments, where safety, quality, permit control and programme discipline are critical. Our experience working under CDM 2015 and within COMAH-regulated environments is supported by our ISO 9001, ISO 14001 and ISO 45001 accreditations.

We work best as an integrated partner within our clients' teams, engaging early to share engineering knowledge, improve planning, reduce delivery risk and maintain stakeholder confidence. This collaborative approach supports clearer communication, better project control and stronger alignment around agreed outcomes.

In addition to chemicals, pharmaceuticals, process and manufacturing, we also bring proven experience across retail, rail, logistics, commercial, custodial, armed forces and public sector environments.

As one of the fastest-growing companies in our sector, our reputation is built on safe working practices, competent delivery, quality documentation, integrated programming, planning and commissioning support. We combine practical engineering capability with clear communication and disciplined delivery to help clients achieve safe, compliant and successful project outcomes.

KEYIS Engineered to deliver

Contact:

Chris Ellis
Director

For all marketing queries:

Emma White
Marketing Executive

E: chris.ellis@keyis.com
emma.white@keyis.com
T: 01925 759948
W: www.keyis.com

Office
Unit 2
First Floor
Orford Court
Greenfold Way
Leigh
WN7 2XJ

On-Site Energy Ltd

We work with energy-intensive industries across the UK and Europe to reduce energy costs, cut emissions and strengthen operational resilience through fully funded, behind-the-meter energy solutions. We own and operate the assets, delivering off-balance sheet Energy-as-a-Service.

Our approach is rooted in operational understanding, engineering expertise and data-led decision-making. A key differentiator is our technology-agnostic model, enabling us to develop the most effective and future-proof solution for each site.

We provide a complete end-to-end service, removing the need for upfront capital investment. Through our PPA and Energy-as-a-Service model, we supply power directly to the facility under long-term agreements, typically structured around a guaranteed pence-per-kWh price. This delivers immediate and sustained cost savings while transferring both technical and operational risk away from the client.

Working closely with customers, we assess energy demand, infrastructure constraints and future requirements to ensure each solution is robust, scalable and aligned with long-term decarbonisation strategies.

Backed by private capital, On-Site Energy has over £150 million of projects in operation or construction and works with repeat multinational customers. Our solutions not only reduce cost and carbon, but also enhance energy security, extend asset life and deliver benefits to local supply chains.

As a long-term infrastructure partner, we are focused on delivering reliable, high-performance energy solutions that support industrial growth and the transition to a lower-carbon future.

Contact:

Julie Gallagher
Group Business Development Manager
(Large-scale renewable energy project specialist)

E: julie@on-site.energy
M: 07350 411960
W: www.on-site.energy

Office
On-Site Energy Limited
4th Floor
1 Old Hall Street
Liverpool
L3 9GH

Stäubli (UK) Ltd

Stäubli is a global provider of innovative industrial and mechatronic solutions, operating across four dedicated divisions: Electrical Connectors, Fluid Connectors, Robotics, and Textile. The company supports customers across a wide range of industries, helping them improve productivity and operational efficiency.

With operations in 28 countries and a network of agents in 50 countries across four continents, Stäubli employs around 6,000 people worldwide. The organisation is committed to building strong, long-term partnerships with customers, delivering reliable, high-quality solutions supported by expert service.

Founded in 1892 as a small workshop in Horgen near Zurich, Switzerland, Stäubli has grown into an international group, with its headquarters now located in Pfäffikon, Switzerland.

Fluid Connectors
Stäubli's Fluid Connectors division provides advanced connection solutions for fluids, gases, and electrical power. Its portfolio includes both standard and customised products such as quick and dry disconnect couplings, multi-connector systems, safety breakaway couplings, robotic tool changers, and quick mould change solutions. These products are designed to deliver high performance, safety, durability, and reliability.

Solutions for the Chemical Industry
For chemical applications, Stäubli offers a comprehensive range of connection technologies, including dry disconnect couplings and safety breakaway systems. These solutions are designed to ensure maximum product integrity, operational safety, and secure installations across a variety of demanding environments.

Contact:

Liam Gerrard
Senior Sales Engineer -
Chemical & Pharmaceutical

E: l.gerrard@staubli.com
T: +44 1952 671918
W: www.staubli.com

Office
STAUBLI (UK) Ltd,
Staubli House,
Hadley Park East,
Telford
TF1 6QJ

Supplying to the Chemical Industry

Knowing your local supply chains is important, and suppliers of expertise, solutions and great products are right here in the northwest. CNW members have a strong association with and many years of experience supplying to the chemical industry. The companies listed in this directory cover a wide range of products and services. They have established customers in the sector, with proven track records. Many will be well known, long-standing firms and there will also be new and innovative businesses that you may not have heard about. Effective supply partnerships, delivering success for all! For more details, the websites for the listed companies and organisations can be found at:

https://www.cia.org.uk/chemicalsnorthwest/Membership/Our-Members/

Chemicals Distribution, logistics & chemical handling

2M Holdings Ltd
Chemical distribution and related services of sample management, storage and blending. Provision of AdBlue, Samsol products, packed chlorine and TRIKLONE & PERKLONE chlorinated solvents. Markets served include: automotive, precision cleaning, coating, oilfield & refineries, flavours, fragrances, surfactants for personal care, household and industrial cleaning and pharmaceuticals.

Actikem Ltd
An ISO9001 certified business, specialising in a range of chemical processes and manufacturing services, including mixing, storage and re-packaging. We provide toll and custom manufacturing services for SMEs as well as blue-chip organisations, and supply customers with on-tap production facilities, offering them potential cost-savings and greater flexibility.

Camida
Established in 1988, is a customer-focused supplier of specialised chemical products. We provide global sourcing solutions across industries, meeting strict international standards. Our expert sourcing team handles over 3,000 annual enquiries, ensuring seamless procurement. Camida simplifies your supply chain, acting as your trusted partner in sourcing and supply.

Hibiscus
Hibiscus is one of the UK's leading manufacturers of chemical labels and hazard communication compliance software. For over 40 years they have specialised in providing high-quality labelling solutions for the chemical and hazardous goods industries and are renowned for their knowledge of industry legislation and for the durability and excellent performance of their products.

Hosokawa Micron Ltd
Integrated powder processing technologies including: size reduction, air classification, mixing, drying, containment equipment such as gloveboxes and downflow booths. Contract processing services for 1kg to multi-tonne lots. Remote monitoring solutions that include: condition monitoring, analytics for improving product quality and energy efficiency and on-line diagnostics for predictive maintenance and improved plant availability.

Indaver Solvents Ltd
Part of the international environmental group Indaver. Indaver Solvents offers comprehensive in-house and end-to-end solutions for industrial (non) hazardous solvent waste and recycling requirements. They support with lab analysis, pilot scale trials, and recycling at commercial scale. With their Cheshire-based solvent recovery installations, combined with bespoke fine chemicals manufacturing, they provide continuous, sustainable and high-quality recovery solutions to the Chemical and Pharmaceutical industry . Find out more here - Solvent recycling - Indaver

KGS Chemicals Ltd
With over 21 years of industry experience, KGS Chemicals Ltd was established in 2023, providing high-quality chemical blending, packing, sieving, and palletising services. We supports major and reputable organisations, delivering reliable, flexible solutions tailored to customer needs.

Klüber
Global manufacturer of over 2500 specialty lubricants for virtually every industry, Klüber Lubrication high-performance speciality lubricants and effective lubrication management programs enable customers to achieve their operational efficiency goals, increase reliability, and lower the total cost of ownership across assets.

The Rhenus Group
One of the leading logistics specialists with global business operations and annual turnover amounting to EUR 8.2 billion. 41,000 employees work at 1,330 business sites in more than 70+ countries and develop innovative solutions along the complete supply chain. Whether providing transport, warehousing, customs clearance or value-added services, the family-owned business pools its operations in various business units where the needs of customers are always the major focus.

Education, training & skills

Catalyst Science Discovery Centre
An independent charitable trust playing a pivotal role in promoting science across the Northwest. Catalyst works in conjunction with industry partners to excite young people about all STEM subjects and careers available within the science sector. Companies can also sponsor a local school to visit and attend industry days.

Centre for Industry Education Collaboration
CIEC supports companies in making credible and sustainable links with primary schools, in order to inspire the next generation of scientists and engineers. We train STEM professionals to improve their communication skills, and develop industry-focused activities for use directly by teachers or by ambassadors visiting schools.

Chemistry with Cabbage
We work with students of all ages, demonstrating through practical experiments, the relevance of chemistry in solving problems. Research shows that children make career choices very early on, so capturing their imagination early is important. Chemical companies are welcome to support our hands-on work in primary schools.

IChemE
The leading professional qualifying body for chemical, biochemical and process engineers.

Engineering products & services

adi Group
Delivers bespoke engineering projects across Chemical, Petrochemical, Oil & Gas, Food & Beverage, Automotive, Life Sciences and wider manufacturing sectors. As a trusted partner to major global brands, adi also provides services through 30+ specialist divisions. With approaching 1,000 staff in the UK and Ireland, nearly 10% of whom are full-time apprentices, adi Group offers unbroken delivery accountability.

AM Technology
AM Technology are experts in continuous manufacturing solutions for the chemical and pharmaceutical industries with their patented Coflore flow reactor technology suitable for a wide range of chemical processes, including multiphasic reactions with slurries, from grams to kilotons.

CDR Pumps UK
An independent UK manufacturer of chemical process pumps and fluid handling solutions for the chemical, pharmaceutical, nuclear and manufacturing industries. We deliver an extensive range of high performance solutions for demanding applications, including magnetically-driven pumps, mechanically-sealed centrifugal pumps, diaphragm pumps, vacuum pumps and systems, side-channel pumps, thermal oil pumps, vertical pumps and turbine pumps. Our team of engineers provides bespoke solutions, tailored to meet each client's specific requirements. We focus on quality, reliability, and performance, ensuring every pump and system delivers optimal efficiency in even the most critical chemical, pharmaceutical, and nuclear processes.

Carbis Loadtec
Carbis Loadtec design, manufacture and supply safe road and rail tanker access systems and road / rail tanker, IBC and drum filling systems. Carbis Loadtec is leader in packaged solutions including loading arms, fall prevention systems, meter or blending skids and storage tank equipment.

CRP
A leading provider of Fluoropolymer PTFE/PFA lined piping and associated equipment. Suppling everything necessary to construct fully integrated piping systems, whilst also offering ongoing support and education from there experts. Their products withstand the most challenging environments, ensuring safety and reliability in even the most demanding applications.

Corrous Industrial Group
A UK-based industrial services provider delivering critical, multidiscipline support across industrial and infrastructure environments nationwide. Unlike single-discipline providers, Corrous reduces shutdown interfaces by combining access, cleaning & preparation, inspection & integrity works, and protective coating through a single, accountable partner.

Dron & Dickson
Dron & Dickson are recognised market leaders in the supply and maintenance of hazardous area electrical equipment. Our Engineering Services and Wholesale divisions offer bespoke solutions incorporating the very latest industry standard and safety legislation.

Know your supply chains

Engineering products & services

GPEC Group
Global Piping and Engineering Consultants. Made up of 4 business division including GPEC Ltd and GPEC Supply.
GPEC Ltd is the UK representative for manufacturers of valves, heat exchangers, expansion joints & other fabricated equipment for engineered and niche applications.
GPEC Supply is a supplier of valves and engineered equipment for MRO and Project specific requirements.

Laker Vent Engineering Ltd
Supply, fabrication and installation of process and utility piping systems. Project management, detailing, procurement, on and off-site fabrication and installation of pipework and coded welding. Associated steelwork supporting and mechanical installation of plant and equipment. Testing and Handover. Pipework and steelwork is fabricated to specific customer-needs and conforms to all appropriate ISO, BS EN and ASME standards and specifications.

Langfields
Langfields are specialist fabricators of process plant equipment for the Hydrogen, Waste to Energy, Pharmaceutical, Petrochemical, Chemical, Nuclear and other process industries.

Lokring UK
Lokring UK offer technical engineering support and sales for Lokring technology across the UK.

The Lokring “Cold Weld” pipe and tube joint reduces the need for hot work, NDT inspection and reduces on site resources. Code compliant with ASME B31. Lokring is a Safer, Faster, Lower Cost replacement for site welding and flanged fabrication.

Manntek AB
Supply of safety dry disconnect and safety breakaway couplings. Comprehensive range of specialist dry quick release couplings to suit 99% of known chemical applications. Bespoke solutions with a size range of ¾” to 8” nb. Dry disconnect couplings are made to NATO standard Stanag 3756.

Newson Gale
A global leader in static earthing and bonding solutions, helping chemical manufacturers mitigate electrostatic ignition risks and improve process safety.

Our certified product range includes Earth-Rite® monitored grounding systems, Bond-Rite® self-testing clamps, and Cen-Stat™ grounding equipment, backed by over 40 years of industry expertise.

O’Hare Engineering Design Ltd
Innovative, Detailed, Working Solutions.
O’Hare Engineering Design Ltd. are providers of 3D laser scanning, mechanical and pipe design solutions. With over 18 years’ experience, we know that accuracy is fundamentally the most important element in every engineering design project, so our client focused approach uses the latest technology to provide an effective solution that is sure to hit the brief, every time.

ProDecon®
Providing industrial service solutions to the Oil&Gas, Chemical, Power, Pharmaceutical and Industrial sectors. Specialising in hazardous hydrocarbon and chemical environments. ProDecon® has a unique range of technical expertise, that enables us to support customers with restoring process performance and providing maintenance risk management through bespoke industrial cleaning solutions.

Stäubli
Offering a comprehensive range of connection solutions, including dry disconnect couplings and safety breakaways, ensuring the highest level of product integrity and installation security in a wide range of applications.

Studley Engineering Ltd
A multi-disciplined mechanical and electrical engineering contractor, providing a comprehensive service to the process industries in disciplines including: steelwork, welding, maintenance, site services, pipework, tanks and vessels. Over time we have gained an enviable reputation as a reliable, responsive, motivated contractor that delivers safe, high quality, cost effective work.

Valvworx Ltd
Valve breakdowns are commonplace, and high on the list of painful problems for Chemical Plant Operators. At Valvworx Ltd, we can support you with valve maintenance & repair solutions, and offer advice, specification and supply of new valves, ensuring suitability for the process they are intended for, and lasting longer in service.

Yokogawa
Yokogawa is a leading provider of field instrumentation, safety systems, industrial automation and digital transformation solutions. IIOT, OT Cybersecurity and Alarm Management are specific areas of focus for Yokogawa’s Advanced Solutions team with a number of major projects currently being delivered across Europe.

Engineering project management & energy

Atlas Copco Rental UK
Provides temporary cost and energy efficient solutions for long- or short-term demands, planned maintenance or unexpected emergencies. Our engineers design the most suitable temporary installation, utilising our fleet of state-of-the-art equipment which includes 100% oil-free Class 0 and oil-injected compressed air at medium or high pressure, generators for power, and nitrogen. Quality of service, environmental care and personnel safety are guaranteed by our triple ISO certification.

AXIOM
A multi-award-winning, asset management solutions provider, supporting the chemical, pharmaceutical, oil & gas, bulk storage, power, renewables and related industries. With integration of their Materials, Mechanical, Inspection, Process Engineering and Process Safety Services, Axiom are uniquely positioned to identify and mitigate key through-life risks across the entire asset life cycle.

Cobalt Energy
Delivering specialist consulting, project delivery, and operational support across the waste, renewables, and energy sectors. Spanning the full project lifecycle, from technical and commercial consulting to engineering, construction, and operations, we provide practical, sustainable, and commercially viable solutions for new developments, facility optimisation, and expert due diligence.

DMD Design Solutions
A UK-based, multi-discipline engineering consultancy delivering fully project-managed solutions to process industries. We support clients from concept through to implementation, providing mechanical, process and project engineering expertise to improve safety, reliability, and efficiency across chemical, energy, and manufacturing operations.

Eastgate Engineering
An engineering and construction specialist that delivers complex, high-risk infrastructure projects without compromising safety or quality. As a trusted partner to our clients, we integrate with their teams and focus on the success of their project through collaboration, technical expertise, clear cost certainty and a commitment to safety. Eastgate combines engineering excellence with a people-first approach rooted in its Irish heritage.

Graham Hart (Process Technology) Ltd
Graham Hart Process Technology Ltd is a global leader in the design and manufacture of high integrity heat transfer and specialist pressure equipment. Their knowledge, reputation and expertise makes them the first choice for many companies desiring guaranteed mechanical and process design solutions, for their individual heat exchanger and pressure vessel needs.Providing innovative, bespoke solutions to a variety of sectors for over 50 years, they have a skilled, agile and talented team that has achieved a 100% On Time In Full delivery record for their clients since 2016.

Geosyntec
a consulting and engineering firm serving the chemicals, pharmaceuticals and wider manufacturing sectors addressing new ventures and complex problems involving land contamination, transactions, permitting and compliance, and civil infrastructure. We operate from over 130 offices located in the UK & Ireland, North America, Sweden, Spain, Middle East, and Australia.

John F Hunt Regeneration Ltd
John F Hunt Regeneration are a trusted partner for brownfield demolition, remediation, water treatment and enabling services. As part of the John F Hunt Group, we have the scale and financial stability to provide a complete works package no matter the size of the scheme.

Key Integrated Services
Key Integrated Services supports chemical manufacturers in COMAH and high-hazard environments by removing compliance ambiguity, asset uncertainty, contractor fragmentation, documentation gaps and infrastructure risk. We deliver auditable, engineering-led FM project delivery, competent local resource, controlled reporting and safer operational resilience where compliance, safety and licence-to-operate confidence are critical.

On-Site Energy
Delivers and operates fully funded, behind-the-meter energy solutions for energy-intensive industries across the UK and Europe. We design, build, own and maintain systems, providing off-balance sheet Energy-as-a-Service with guaranteed p/kWh pricing—reducing costs, lowering emissions, improving resilience, and future-proofing operational performance without capital investment.

PM Group
PM Group is an international engineering and project delivery partner offering specialist environment, sustainability and process safety services to support safe, compliant, and low-carbon project delivery. From hazard identification, risk assessment, and regulatory compliance to net-zero strategies and sustainable facility design, PM Group helps clients manage risk and achieve environmental goals across complex, high-hazard facilities.

px Engineering
Deliver expert engineering, project delivery, and consultancy services across the energy, chemicals, oil and gas, and renewables industries. As part of px Group, we combine project execution capabilities with our knowledge and skills as owner and operator of Upper Tier COMAH facilities to support all phases of a project lifecycle from concept through to FEED, detail engineering design, procurement, construction, commissioning, and handover.

Engineering, IT & process consultants

Gexcon UK Ltd
Safety and risk management and advanced dispersion, explosion and fire modelling. Unique expertise and shared knowledge on how to prevent explosion accidents. Carrying out accident investigations and dedicated facilities for physical testing. Ventilation and dispersion modelling also available. Hazardous area classification and quantitative and qualitative risk analysis and assessment.

OpenPSM
OpenPSM® is a cloud-based software solution, developed to help businesses manufacturing or handling hazardous chemicals meet the requirements of modern risk-based process safety legislation. Providing a unique framework allowing you to log and assess every aspect of your company's process safety management programme,

OpenPSM® necessarily supports engagement from shopfloor to boardroom, allowing everyone with an active part to play in process safety to have relevant information to hand.

Siemens Digital Factory & Process Industries and Drives
Siemens Digital Industries (DI) is a global leader in automation and digitalisation, dedicated to driving the digital transformation of the manufacturing and process industries. Their comprehensive Digital Enterprise portfolio offers an end-to-end suite of products, solutions, and services designed to integrate and digitalise the entire value chain. This portfolio is tailored to meet the specific needs of the Chemical Industry, enhancing productivity, flexibility and efficiency. By leveraging cutting-edge technologies and close collaboration with customers, Siemens DI helps businesses achieve greater innovation and competitiveness.

Environment, health & safety risk management

Ambipar
The global leader in environmental solutions, operating across six continents. It offers a comprehensive range of services, including emergency response to industrial accidents, hazardous spills, natural disasters, environmental management, waste disposal, sustainable recovery, and specialised training and consultancy. Ambipar supports governments, corporations, and infrastructure networks, ensuring regulatory compliance, risk mitigation, and long-term environmental stewardship worldwide.

BakerRisk Europe Ltd
Dedicated to help predict, prevent and mitigate hazards and explosions, fires and toxic releases. Specialising in process safety and risk management, we help clients understand their risks and offer cost-effective risk management solutions. Success id delivered through proven knowledge and experience, innovative research and unique engineering capabilities.

International Fire Protection
Specialises in providing fire safety solutions for high-hazard industries, including COMAH sites, power generation, and hydrocarbon processing facilities. Our expertise includes ATEX and SIL-rated Fire & Gas detection systems, as well as advanced fire detection and protection systems tailored to meet the specific safety needs of these critical sectors.

PM Group
PM Group is an international engineering and project delivery partner offering specialist environment, sustainability and process safety services to support safe, compliant, and low-carbon project delivery. From hazard identification, risk assessment, and regulatory compliance to net-zero strategies and sustainable facility design, PM Group helps clients manage risk and achieve environmental goals across complex, high-hazard facilities.

RAS Ltd
Expertise that covers the full range of risk assessment and management services across; safety risk, business risk and environmental risk. Carry out Quantitative risk Assessments and Predictive & consequence modelling, through 'softer' risks affecting an organisation's reputation.

SLR Consulting
A unique blend of leadership, management, consulting, engineering and training services is offered to the chemicals industry. A forerunner in sustainable process safety management combined with proven business improvement capabilities enables delivery of practical solutions to promote safety and efficiency in design, operation and maintenance of complex hazardous facilities.

Wareing Consulting
Roger Wareing is a business sustainability/ ESG consultant and former industrial chemist. Roger helps you navigate what ESG challenges mean for your company's future, shaping your response to growing regulatory obligations and rising expectations, and supporting delivery and reporting to drive value creation and resilience alongside wider positive outcomes.

Facilities, finance and other business services

Department for Business & Trade
Operational support for British exports as well as facilitating inward and outward investment activity. Support is given to first-time exporters or established exporters requiring more help with accessing more difficult markets or putting strategic alliances in place. Access to expert advice, trade services, training and events.

Pen Underwriting incorporating OAMPS
Specialist Insurance services to high hazard manufacturing and haulage industries. Motor fleets, property, liability and transit policies. We help clients minimise risk through proactive risk management and a range of training and response services to assist companies in planning for and dealing with incidents and emergencies.

Sci-Tech Daresbury
We are a national science and innovation campus, and enterprise zone providing a range of office, laboratory and workshop accommodation for technology companies (from a desk to large laboratory and office units). Companies have access to a range of facilities covering material analysis, virtual design & simulation, and rapid prototyping.

STFC Innovations Technology Access Centre
A unique, fully equipped space for innovation, research and development. Providing flexible access to laboratory space, "hot labs" and scientific equipment. Ideally suited to start-up companies, smaller and medium size enterprises and R&D team from established companies.

Laboratory products, testing and services

Charles River
With 30+ years of experience, Charles River offers comprehensive regulatory testing, including toxicology and ecotoxicology, environmental fate and biodegradation, regulatory consultancy, and analytical support. With innovative in vitro / New Alternative Methods (NAMs) Charles River is pioneering in the reduction of animal usage in product safety, helping streamline programs for the most efficient and ethical path to registration.

Kemea Ltd
Offering expert formulation services, from concept to creation. With 25+ years of formulation experience, we'll guide you through the development process, focusing on your project needs. We also offer packaging, labelling, and delivery, both in the UK and internationally. Partner with Kemea Ltd to bring your product vision to life.

Metrohm
one of the world's most trusted names in high-precision instruments for chemical analysis. With a legacy of innovation and reliability, Metrohm is committed to delivering pioneering, sustainable solutions to customers across the globe. As a globally active company, Metrohm embraces its economic, social, and environmental responsibilities. We don't just innovate - we act with purpose.

Scymaris Ltd
We offer high quality and cost-effective ecotoxicology, environmental fate, and chemistry services to the global agrochemical, pharmaceutical, industrial chemicals & animal health industries. Our state-of-the-art laboratory is equipped with controlled temperature rooms, freshwater and seawater testing facilities and is accredited to work according to GLP and most Global regulatory requirements.

Legal & patents

Appleyard Lees LLP
Patent and trademark attorneys. Aim to obtain the best possible patent protection for clients. Experience of product clearance against competitor patents and in due diligence for mergers and acquisitions. Advice on licensing issues and collaboration agreements relating to IP.

Squire Patton Boggs (UK) LLP
Global legal company providing legal, regulatory and advocacy assistance to the chemical and performance material industries. Expertise that emphasises areas that mean the most to industry such as environmental, mergers and acquisitions, commercial finance, construction, litigation, Ip, public policy and international expansion.

WP Thompson
Intellectual property attorneys providing high quality advice to start-ups, SMEs or FTSE 100 companies. Team of experienced IP attorneys specializing in chemistry and life sciences, with first degrees and PhDs in these fields. Securing the most appropriate, cost effective and commercially valuable protection for your intellectual investment and innovation.

Know your supply chains

REACH and chemicals services

Chemical Processing Services Ltd
[CPS] provides innovative technology and/or niche speciality polymers with a focus on an absence or reduced CMR content and regulatory compliance, sustainability, and high process or technical performance.

CIRS
CIRS Group was established in 2007 and is a leading product safety and regulatory consulting firm. It utilizes its technical expertise, resources, and international network to provide comprehensive compliance services including chemical notifications and registrations, global GHS compliance, laboratory testing, R&D, and data services across multiple industries globally.

Dr Knoell Consult Ltd
An independent service provider for the chemical and related industries. Globally the Knoell group has over 450 employees covering all aspects of regulatory compliance for industrial chemicals, agrochemicals and biocides: e.g., strategic planning, dossier preparation, exposure assessment, SDS preparation, and from REACH to K-REACH!

GlobalMSDS
A complete safety data sheet/literature and regulatory service for your entire product communications in any language, style and format required. Hazmix is a new 'pay as you go' web-browser product that is setting a new standard in SDS authoring. A Solutions service that also provides technical advice.

Intertek Regulatory Services
Health, environmental and regulatory services for implementation of chemicals management. Worldwide registration of chemicals, food contact compliance and notification, global chemicals compliance, design/optimisation of toxicological and eco-toxicological studies, hazardous substance management, EU cosmetic and biocidal products compliance, classification & labelling, SDS consulting.

WSP in the UK
Recognising that chemical companies face a wide range of regulatory challenges, WSP's centre of excellence can assist companies with chemical compliance and safety obligations. The team's role is to facilitate a company's route to compliance in areas such chemical registration (including EU and UK-REACH), supply chain management, GHS/CLP and DGSA, amongst other safety related services.

Yordas Group
Yordas Group is a leading provider of scientific, environmental, human health and global regulatory consulting services. They offer chemical regulatory support, expert scientific services and support on chemicals management and product stewardship, global hazard communication, hazard and risk assessment, analytical and (eco)tox testing.

Recruitment

Adepto Technical Recruitment
A specialist engineering, manufacturing and scientific recruitment consultancy that focuses upon the provision of permanent staff and contract resource to the Chemicals industry. Established in 2015, Adepto has quickly become the partner of choice for many blue-chip and SME manufacturers, engineering companies and consultancies due to our deep knowledge of the industry, credibility and professionalism.

Alchem Partners
Recruitment in the chemical industry shouldn't feel transactional - and at Alchem Partners, it never is.
We are a specialist recruitment business working across engineering, operations, commercial, sales, and supply chain roles within the chemical sector, supporting clients across the UK, EMEA, and North America.
Our work is built around two things: deep market knowledge and genuine human connection. Every assignment is underpinned by a fully mapped view of the market, allowing us to identify and engage the best talent - not just the most visible.
We meet every suitable candidate personally, whether on video or in person, because people don't join companies on paper, they join them in real life. Understanding what drives someone, what environment they thrive in, and where they want their career to go is at the heart of everything we do.
From ambitious start-ups to global corporations, Alchem Partners helps chemical businesses build leadership teams that actually last.

RMG
RMG is an award-winning headhunting consultancy with a difference - we make it our business to search and understand who's who in the Chemicals and STEM sectors and have the know-how to find talented people who will deliver lasting impact and add financial value to your organisation.

SRG
SRG are industry leaders in Science, Engineering and Clinical Recruitment. We empower individuals and businesses to power the future of STEM. With true specialist knowledge, we support a full spectrum of technical roles and talent solutions across the whole product life cycle, from R&D, through analysis, manufacturing, and engineering to market access.

Winsearch
Aspecialist permanent recruitment consultancy placing professionals across the chemicals, pharmaceutical, and technical engineering sectors. From site-level technical roles to senior leadership appointments, we connect organisations with high-calibre candidates who drive performance. As part of the PROMAN Group, we bring commercial expertise, sector knowledge, and a people-first approach to every search.

Hibiscus branches out into the world of DGSA Training

Following a recent UK legislation change it is a legal requirement for all companies involved in the transport of dangerous goods to have an appointed Dangerous Goods Safety Advisor (DGSA).

This has become a major blind spot for most businesses who often don't have the resource to employ a full-time DGSA or have the expertise to manage it internally within their organisation.

Right now, the need for accessible, high quality training has become increasingly evident accross the sector as regulations across ADR, IMDG, and IATA tighten.

Documentation is under greater scrutiny; digital systems are reducing tolerance for error. The result of that? Mistakes are picked up faster and are inevitably costing more.

Against this backdrop, Hibiscus PLC has expanded its capabilities beyond its established reputation in chemical labelling, seeing an opportunity to introduce a dedicated training division, aimed at solving the DGSA headache within their customer base in the chemical supply chain.

Led by experienced DGSA Trainer, Sam Pass, Hibiscus delivers structured training programmes at our central Leeds site, designed to go beyond theory and into application. Hibiscus have seen a rapid uptake in our training services as multiple tertiary sectors continue to engage us to ensure their operations remain compliant. DGSA training has shifted to become an integrated part of operational perfomance instead of a standalone requirement.

Our courses are split into 3 distinct categories -

- **Auditing and Consultancy** - The perfect option for businesses that want to become compliant, quickly. Following an on-site audit, we compile a full report and will legally act as your companies designated DGSA for 12 months, allowing the business to run smoothly and efficiently, with minimal operational impact.
- **Dangerous Goods Training** - Hibiscus offers a raft of bespoke Dangerous Goods training options, tailored to your business's needs. UK law requires that all personnel whose work involves dangerous goods are appropriately trained for their responsibilities. Our training programmes reflect this, helping you meet both legal obligations and best-practice standards.
- **DGSA Tutoring** - Our flagship 5-day classroom-based programme. This course is aimed at getting someone on your team fully certified as a DGSA through fully preparing them to take the SQA DGSA examination. Learning doesn't stop at the course either: delegates are guided through exam preparation and beyond, helping turn knowledge into long-term capability. With this qualification within your business your operation is fully compliant for 5 years.

Our 5-day DGSA Qualification course is currently available for **£995** as a limited introductory offer + includes free ADR books, normally costing £200.

For more info, check out our website and explore our vast training programmes to fit your business needs.

SLR

SLR has decades of successful experience advising clients throughout their project life cycle.

- Process Safety
  - COMAH
  - HAZOP
  - HAZID
  - DSEAR
- Environmental Management, Permitting & Compliance
- Corporate Sustainability Strategy
- Acoustics & Vibration
- Air Quality
- Planning

A global leader in full spectrum sustainability solutions, providing clients with strategic advice and on the ground support.

Making Sustainability Happen

CONTACT US

Paul Wright
pwright@slrconsulting.com
+44 (0)330 088 6631

Find out how we can make a positive change together at:

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