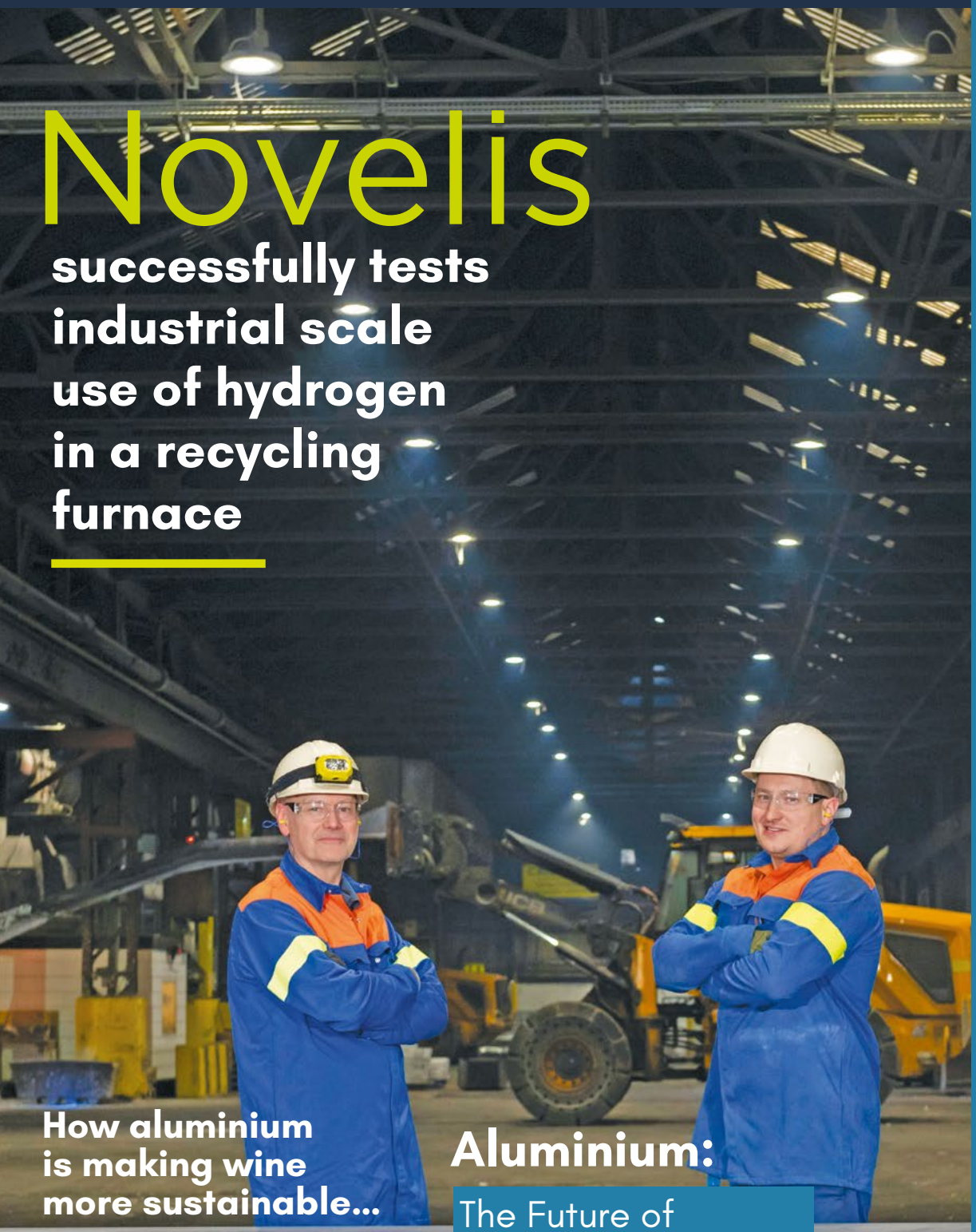
Inside: ALFED Announce Launch of 2025 Awards

Novelis

successfully tests industrial scale use of hydrogen in a recycling furnace



How aluminium is making wine more sustainable...

in the heart of North Wales

Aluminium:

The Future of UK Manufacturing

ALFED
ALUMINIUM FEDERATION

THE VOICE OF THE UK ALUMINIUM INDUSTRY

ALUMINIUM NEWS

ISSUE 22 MAY 2025

w.h.tildesley ltd

Drop Forging Specialist

CELEBRATING 150 YEARS EST 1874

ALUMINIUM FORGINGS

2000, 5000, 6000 & 7000 SERIES ALUMINIUM

ENGINEERING SOLUTIONS SINCE 1874

- SPECIALIST MATERIALS
- COMPLEX FORGING SHAPES
- SMALL BATCHES A SPECIALITY

LRQA CERTIFIED ISO 9001

LRQA CERTIFIED AS 9100

LRQA CERTIFIED ISO 14001

midlands aerospace alliance member

MEMBER OF BVAA

ALFED ALUMINIUM FEDERATION

www.whtildesley.com | tel: +44 (0)1902 366 440 | sales@whtildesley.com

ABOUT US

Chief Executive Officer
Nadine Bloxsome
e: nbloxsome@alfed.org.uk

Marketing and Communications Executive
Emily Foster
e: efoster@alfed.org.uk

Membership Account Executive
Sophie Allen
e: sallen@alfed.org.uk

Technical Manager
Jan Lukaszewski
e: jlukaszewski@alfed.org.uk

Office/Admin Manager
Sharon McBride
e: smcbride@alfed.org.uk

Events Manager
Jacquey Parker
e: alfedevents@alfed.org.uk

CONTACT US

Bragborough Hall Business Centre
Welton Road, Braunston
Daventry, NN11 7JG

Tel: 0333 240 9735

www.alfed.org.uk

FOLLOW US

linkedin.com/alfed-aluminiumfederation

twitter.com/alfedaluminium

Aluminium Federation (@aluminiumfederation)
• Instagram photos and videos

CONTENTS

Front cover image kindly supplied by Novelis.
Image shows:
Left - Jeff Sleeman, Project Engineer
Right - Robert Madden, EMRA Manager (Engineering, Maintenance, Reliability and Automation)

Online now!
for the latest news, events & features.

ALFED ANNOUNCES THE 2025 ENVIRONMENTAL SUSTAINABILITY STRATEGY DAY –

A DEFINING MOMENT FOR THE UK ALUMINIUM INDUSTRY

Thursday 5th June 2025 – British Motor Museum, Gaydon, Warwickshire

The Aluminium Federation (ALFED) is proud to announce its **EnvironmentAl Sustainability Strategy Day**, a landmark event set to take centre-stage at the British Motor Museum in Warwickshire. This event marks a critical step in shaping the future of aluminium within the UK's industrial, sustainability, and trade policies.

A UNITED STRATEGY FOR ALUMINIUM'S FUTURE

The UK aluminium sector is facing significant challenges – from the drive towards net zero to increasing global competition and evolving regulatory landscapes. The ALFED Sustainability Strategy Day will bring together key stakeholders, including industry leaders, policymakers, and innovators, to establish a clear and coordinated roadmap for aluminium's role in sustainability, decarbonisation, and the circular economy.

WHY ATTEND?

This is more than just another industry gathering – it's an opportunity to actively influence the strategic direction of aluminium in the UK. By attending, participants will:

- Shape the UK Aluminium Strategy – Play a key role in ensuring aluminium is embedded in national industrial policy.
- Engage with Key Policymakers – Contribute to discussions informing the Back British Metals (BBM) agenda and UK government priorities.
- Drive Investment & Innovation – Discover new opportunities in aluminium recycling, low-carbon production, and circular economy innovations.
- Strengthen Industry Collaboration – Join forces with manufacturers, recyclers, investors, and major end-users.

KEY TOPICS & SESSIONS

- **UK Aluminium Strategy Framework** – ALFED's vision for a coordinated, future-proof industry.
- **Sustainability & Circular Economy** – Addressing scrap exports and building a net-zero aluminium sector.
- **Government & Policy Engagement** – Working closely with key stakeholders.
- **Investment & Infrastructure** – Unlocking funding to enhance domestic aluminium recycling and remelting capacity.
- **Industry Collaboration** – Strengthening aluminium's role across automotive, aerospace, construction, and defence sectors.
- **Future of Low-Carbon Aluminium** – Exploring breakthrough technologies and sustainability policies.

JOIN THE CONVERSATION – SECURE YOUR PLACE

Be part of this crucial event and contribute to shaping the future of aluminium in the UK. To learn more and book your place, contact the ALFED team at alfed@alfed.org.uk.

ALFED ALUMINIUM FEDERATION
ENVIRONMENTAI
UK ALUMINIUM: NET ZERO REALITY

ALUMINIUM: THE FUTURE OF UK MANUFACTURING

BY NADINE BLOXSOME, CEO, ALUMINIUM FEDERATION (ALFED)

As the UK embarks on a new era of industrial innovation, aluminium stands as a beacon of opportunity, driving the transition towards a sustainable, high-value manufacturing economy.

Current Market Challenges and ALFED's Response

The recent imposition of 25% US tariffs on aluminium imports has presented significant challenges for the UK aluminium sector. These tariffs have led to a notable shift in market dynamics, particularly around scrap exports, with rising US premiums incentivising the export of UK aluminium scrap. This trend risks undermining the UK's recycling infrastructure and long-term circular economy objectives. Additionally, there are concerns about potential trade diversion, with semi-finished products originally destined for the US potentially entering the UK market and increasing competitive pressures.

ALFED is actively engaging with policymakers and industry stakeholders to mitigate these risks and support the sector's resilience. Through close collaboration with the Department for Business and Trade (DBT) and other government bodies, ALFED is ensuring that the implications for the UK aluminium sector are fully understood and addressed. Advocacy efforts focus on implementing export monitoring systems, supporting domestic recycling infrastructure, and considering proportionate trade defence mechanisms to safeguard the sector.

The Backbone of UK Manufacturing

Aluminium is more than just a metal; it is a cornerstone of British industry. From aerospace and automotive to construction and packaging, aluminium's versatility and sustainability make it one of the UK's most valuable industrial materials. The UK aluminium sector currently contributes £2 billion in GDP annually, supporting over 120,000 jobs across the entire supply chain. With demand for lightweight, durable, and recyclable materials increasing, aluminium is positioned as a critical enabler of modern industry.

With the government's recent recognition of aluminium as a critical mineral, ALFED has intensified its advocacy efforts to ensure policy frameworks support its continued success. The UK cannot afford to be complacent in securing domestic supply chains and fostering the investment required to enhance production capabilities. This recognition is an important step, but it must be matched by strategic policy actions that enable long-term growth.

ALFED's Mission: Advocacy, Growth, and Sustainability

For over a century, ALFED has been at the heart of industry discussions, working tirelessly to ensure that aluminium remains integral to the UK's industrial strategy. From engaging with policymakers to delivering member-driven initiatives, ALFED is committed to ensuring that businesses operating in the aluminium sector can thrive in a competitive global market.

One of our most significant recent undertakings has been our role as a founding member of the Back British Metals initiative (BBM). This movement is a defining moment for the UK metals industry, seeking to ensure that metals like aluminium are prioritised in government decision-making. By highlighting aluminium's essential role in infrastructure, transport, and manufacturing, BBM is driving forward the national agenda for a stronger and more self-sufficient British metals sector.

A Strategic Approach to Aluminium Policy

ALFED's advocacy efforts are focused on securing a robust, long-term industrial strategy for aluminium in the UK. As an affiliate partner of Make UK, ALFED is working to contribute to shaping industrial and trade policy discussions, ensuring that the aluminium industry remains a priority in national conversations.

ALFED's key policy asks focus on trade and market access, enhancing recycling infrastructure, securing energy stability, and promoting investment in skills and innovation. These priorities form the foundation of a UK Aluminium Strategy, a long-term roadmap to guide policymakers and industry leaders in securing the sector's future. The UK must position itself as a global leader in ultra-low carbon aluminium production, ensuring sustainable manufacturing aligns with net-zero ambitions.

A National Aluminium Strategy: Driving Growth and Innovation

ALFED's UK Aluminium Strategy Framework, developed in collaboration with key industry stakeholders, aims to secure a resilient, low-carbon aluminium supply chain that supports British industry and advances Net Zero manufacturing. This strategy will strengthen aluminium's role as a critical material in industrial and defence applications while ensuring domestic processing capacity aligns with growing demand.

Encouraging investment in green aluminium technologies is essential to making the UK a leader in sustainable metal production. Moreover, reducing scrap exports and retaining high-value aluminium within the UK could address the estimated £3.7 billion annual economic loss due to material exports.

The Role of Foundational Industries in the UK's Industrial Future

Aluminium, as part of the UK's Foundational Industries, plays a vital role in supporting economic resilience, infrastructure development, and sustainability. Foundational Industries – such as metals, ceramics, chemicals, and glass – are essential to delivering the materials that underpin all manufacturing in the UK. As a key component of this industrial backbone, aluminium provides the material solutions needed for a low-carbon future, from energy-efficient buildings and electric vehicle components to aerospace advancements.

The UK must invest in the modernisation and decarbonisation of these industries to ensure global competitiveness. Supporting UK-based primary and secondary aluminium production can reduce reliance on imports, strengthen industrial supply chains, and create thousands of skilled jobs. ALFED continues to work with government and industry leaders to advocate for greater funding, R&D incentives, and sustainable manufacturing initiatives that will drive growth across the Foundational Industries and beyond.

Continued on page 6.....

Tom Martin & Company:

Established over 75 years ago, recycling aluminium and creating a circular economy has long been part of our company's ethos! It's nothing new for us. We take our part in the aluminium supply chain seriously and believe in helping our customers for their scrap materials through improving segregation at source and investing in processing equipment on their sites. We service contracts throughout the UK and believe in a partnership approach with all of our customers.

Speaking on the company's decision to become a member of ALFED, Director of Tom Martin & Company, Mark Perkins commented: "I have attended a few events that ALFED have hosted and have always found them insightful and useful. I believe working with ALFED will help keep us up to date with the news in such a fast changing industry whilst also helping strengthen ties with our existing customers who are already members".

To find out more about Tom Martin, please visit: **Tom Martin & Company**: Your Trusted Partner in Scrap Metal Solutions

www.tom-martin.co.uk

Tom Martin & Company Ltd
Non-Ferrous Metal Specialists since 1948

Pyrotek

Pyrotek has 4 entities in the UK; EMP Technologies Limited (Burton upon Trent), TAB Refractory Construction & Maintenance Co. Ltd (Warrington), Pyrotek Engineering Materials Ltd (Milton Keynes) and Pyrotek European Research & Development Centre (Milton Keynes).

These entities supply a wide range of equipment, materials and engineering to provide solutions for the treatment and handling of Aluminium both up and down stream of the melting furnace. In addition to this we provide world leading expertise on furnace refractory, linings and installation as well as metallurgical support for metal quality analysis.

Pyrotek aims to help its customers and partners around the world improve their competitiveness. We provide access to the latest engineered technology from a company that has consistently been at the forefront of innovation.

www.pyrotek.com

Pyrotek

Continued from page 5.....

Aluminium: The Heart of the Circular Economy

As sustainability climbs higher on the global agenda, aluminium's role in the circular economy has never been more important. With over 75% of all aluminium ever produced still in use today, it is one of the most sustainable materials available. Its ability to be infinitely recycled without losing quality makes it a critical asset in reducing industrial waste and emissions.

The UK's aluminium recycling industry is already world-class, but to maximise its potential, further investment is needed in infrastructure and policy support. ALFED is calling for greater incentives to retain high-quality aluminium scrap within the UK rather than exporting valuable resources overseas. Enhancing domestic recycling capacity will not only reduce carbon footprints but also strengthen the UK's supply chain resilience.

Building a Resilient Future for UK Aluminium

A strong aluminium sector contributes not only to economic growth but also to national security. The ability to produce and process aluminium domestically reduces reliance on external supply chains, ensuring that UK industry can meet future demands. ALFED is leading discussions with government and industry stakeholders to secure a resilient, low-carbon aluminium supply chain that supports UK manufacturing, infrastructure, and defence.

"The UK aluminium industry has shown incredible resilience, but the current trade environment underscores the need for decisive action and strategic investment," said Nadine Bloxsome. "Through ongoing engagement and robust policy measures, ALFED is dedicated to protecting and advancing the sector for the benefit of the UK economy and future generations."Through continued advocacy, research, and collaboration, ALFED is not just shaping the conversation on aluminium - we are leading the charge for a stronger, more sustainable industry that benefits businesses, workers, and the UK economy as a whole. We believe that the future of UK manufacturing is bright, and aluminium is at its core.

Welcome new ALFED knowledge partner: Go M.A.D Thinking

Go M.A.D. Thinking (Make A Difference) has spent over 28 years pioneering innovative thinking methodologies that help leaders and teams unlock their potential and enable their teams to achieve extraordinary results. With a purpose-driven mission of "improving your world through better thinking," Go M.A.D. has become a trusted partner for 440+ organisations looking to drive change, improve results, solve complex challenges, maximise efficiency and inspire action.

For ALFED members, this translates to stronger leadership pipelines, streamlined processes, and a culture of accountability that drives sustainable success, and improved results.

Why Demand for Our Services is Growing

In today's fast-paced environment, businesses face unprecedented challenges—from supply chain complexities to evolving sustainability targets. Companies across all sectors, including manufacturing, are turning to Go M.A.D. Thinking to:

- **Solve critical challenges** with actionable, scalable strategies.
- **Equip leaders and teams** with tools to navigate change confidently.
- **Align operational goals** with emerging industry standards, including net-zero initiatives.

Exclusive Offer for ALFED Members

To celebrate our partnership, we're offering **25% off all Go M.A.D. programs booked in 2025.** Use code **ALFED25** when enquiring to unlock this discount and start transforming your business outcomes.

www.gomadthinking.com

Go MAD Thinking

Envantage Ltd

Envantage specialises in helping manufacturing and industrial processing businesses buy and use energy in the most cost-effective way. As high energy users, the financial burden of energy prices weighs heaviest for these companies, and, as specialist advisers to the sector, Envantage understands the pressure and risk this adds to ever-tightening margins.

The UK aluminium industry is under increasing pressure to reduce energy costs and carbon emissions while ensuring compliance with regulatory obligations. Envantage is well placed to support ALFED members with its energy & carbon challenges, including: compensation schemes, optimising compliance, reducing energy and carbon, buying energy effectively, and net zero goals.

www.envantage.co.uk.

envantage

TOMRA PIONEERS A NEW DEEP LEARNING-BASED SOLUTION TO UPGRADE WROUGHT ALUMINUM

TOMRA Recycling, a global leader in sensor-based sorting solutions, has expanded its portfolio of advanced metals recycling with a groundbreaking AI-based solution to upgrade wrought aluminum scrap.

This development represents the first application of GAINnext™ – TOMRA's revolutionary deep learning-based sorting technology – in the metals industry. This AI innovation enables aluminum scrap processors and recyclers to upgrade their wrought aluminum scrap and produce exceptionally high purity fractions by instantly recovering low alloy cast from the wrought fraction and reducing alloying elements such as silicon. GAINnext™ complements TOMRA's X-TRACT™, which separates based on atomic density.

TOMRA's X-TRACT™, featuring X-ray Transmission (XRT) technology, is the industry standard for sorting aluminum from heavy metals based on atomic density. X-TRACT™ initially sorts shredded mixed non-ferrous metals (Zorba) to produce high-purity aluminum scrap (Twitch), then removes high alloy aluminum cast and high-density wrought aluminum to further refine the Twitch. This process yields a high-quality fraction, containing both wrought aluminum and minor amounts of low alloy cast, which other currently available sorting methods cannot fully separate.

Now, by integrating GAINnext™ into the sorting process after X-TRACT™, a pure wrought fraction can be achieved. GAINnext™ leverages the power of deep learning and artificial neural networks. Using RGB cameras, it rapidly processes tens to hundreds of thousands of images per millisecond, 'perceiving' and 'classifying' materials by shape, size and dimension with exceptional accuracy. This advanced system, trained over years by TOMRA's experts, mimics human vision but with superior speed, facilitating high throughput sorting of up to 2,000 ejections per minute. In its first metals industry application, by precisely detecting and removing low alloy cast from the wrought fraction that TOMRA's X-TRACT™ produces, GAINnext™ delivers an exceptionally high purity wrought product that commands premium market prices.

For TOMRA customers seeking to achieve even higher granularity levels in aluminum sorting, the wrought fraction recovered by GAINnext™ can be further refined using TOMRA's AUTOSORT™ PULSE system, which employs dynamic laser-induced plasma spectroscopy (Dynamic LIBS) for precise identification and sorting of different alloy types. Launched in 2023, AUTOSORT™ PULSE, TOMRA's breakthrough innovation, leverages precise elemental composition analysis and advanced dynamic laser detection to accurately distinguish between different alloy types e.g. 5xxx and 6xxx aluminum.

This combination of X-TRACT™, GAINnext™ and AUTOSORT™ PULSE represents the pinnacle of sorting innovation, delivering the highest levels of material separation available on the market today.

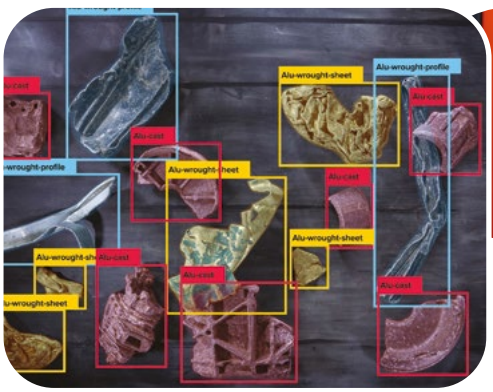
Tom Jansen, Head of the Metals Segment, Sales at TOMRA Recycling, comments: "We are excited to launch this new deep learning-based application to upgrade wrought aluminum. Deep learning is a powerful addition to our traditional sensor-based technology, and expanding our GAINnext™ ecosystem aligns with our broader AI strategy. Building on our proven success and the significant results our customers have achieved with GAINnext™ in the waste segment, we are confident in delivering similar value to our metals customers.

"This latest application enhances dry mechanical sorting of mixed metals, offering a cost-effective solution with a low cost per ton thanks to its high throughput and significantly reduced manual sorting requirements. Our customers will be able to consistently produce smelter-ready, premium-grade aluminum with exceptional purity levels. This is a significant enhancement to our metal recycling solutions portfolio, and we anticipate wide adoption by recyclers seeking to refine scrap and generate high-quality feedstock for circular manufacturing."

TOMRA pioneered deep learning technology in 2019, and GAINnext™ has been proven in the field across various complex recycling streams, including waste, plastics, paper, metals and wood. In 2024, TOMRA introduced a groundbreaking GAINnext™ application to separate food-grade from non-food-grade plastics for PET, PP and HDPE. This latest expansion of the GAINnext™ ecosystem is part of TOMRA's broader AI strategy. Further GAINnext™ applications are due to be announced in 2025.

Tom Jansen, TOMRA Recycling: "Deep learning technology is a significant enhancement to our metal recycling solutions portfolio."

- *Below:* TOMRA_GAINnext belt: GAINnext™ enables aluminum scrap processors and recyclers to upgrade their wrought aluminum scrap.



- *Left:* TOMRA_GAINnext_Wrought aluminum upgrade: Deep learning technology perceives and classifies materials by shape, size and dimension.

TOMRA

WORKER PROTECTION (AMENDMENT TO EQUALITY ACT 2010) ACT 2023

On 26 October 2024, the Worker Protection (Amendment to Equality Act 2010) Act 2023 established a new proactive legal duty on employers to take reasonable steps to prevent sexual harassment in the workplace. The new 'reasonable steps' duty applies emphasis on the significance of prevention rather than addressing incidents after allegations are made.

Types of Sexual Harassment

Section 26 of the Equality Act 2010 identifies two types of sexual harassment:

1. **Traditional Sexual Harassment:** Unwanted conduct of a sexual nature that violates a person's dignity or creates an intimidating, hostile, degrading, humiliating, or offensive environment. Examples include unwanted physical touching, sexually explicit comments, overheard sexually offensive banter, and sexual images seen in the workplace.
2. **Less Favourable Treatment:** Occurs when a person is treated less favourably because they rejected or submitted to unwanted conduct of a sexual nature. Examples include disciplinary action or denial of promotion/pay increase due to rejecting sexual advances.

New Legal Duty

[1]The Equality Human Rights Commission (EHRC) provides extensive guidance on how employers should comply with the new 'reasonable steps' duty. Mirroring other statutory employer duties, there is no 'one-size-fits-all' approach, and what constitutes 'reasonable steps' will depend on the size, resources available and sector of the workplace. Employers must:

- **Anticipate Risks:** Identify situations where sexual harassment may arise and mitigate these risks (e.g., lone working, social events).
- **Implement Preventative Measures:** Develop and enforce policies, provide training, and establish reporting mechanisms to create a safe working culture.
- **Address Incidents Effectively:** Ensure managers take action to prevent future incidents if harassment occurs.

Spotting Sexual Harassment

Sexual harassment can occur in person or virtually and it includes:

- **Verbal Harassment:** Inappropriate comments about someone's body, clothing, or appearance; offensive jokes or remarks about sexual orientation or gender identity; inquiries about someone's private or sexual life.
- **Non-Verbal Harassment:** Displaying or sharing explicit images or sexual content.
- **Physical Harassment:** Unwanted physical contact, such as hugging without consent; acts of sexual violence, including assault or rape.

Vicarious Liability

Employers are liable for the acts of their employees done in the course of employment, including sexual harassment. Victims can bring legal claims against both the perpetrator and their employer. Employers can only avoid vicarious liability for harassment by demonstrating they took reasonable steps to prevent it. 'In the course of employment' includes activities and communications outside of the workplace if they are related to work (e.g., online work communications, work-related social gatherings).

Consequences of Non-Compliance

If an employer fails to comply with the preventative duty and a claim for sexual harassment is successful, the Employment Tribunal can increase compensation by up to 25% as a penalty. There is no cap on compensation for sexual harassment, so serious cases can have financially disastrous outcomes. Employers must also consider the reputational impact of a successful claim, as Employment Tribunal decisions are public records.

Resources

For more detailed guidance, refer to:

- Sexual harassment and harassment at work: technical guidance
- Advisory, Conciliation and Arbitration Service (Acas) Guidance

[1]*Sexual harassment and harassment at work: technical guidance https://www.equalityhumanrights.com/guidance/sexual-harassment-and-harassment-work-technical-guidance#when-are-employers-liable-for-harassment*

Contact us

Liz Burley is a Director at Burley Law and an employment law specialist who provides legal advice to individuals and broader HR support to businesses. If you need further guidance for your business or training for your staff, contact Liz Burley via email at **liz@burleylaw.co.uk.**

BURLEY LAW

NOVELIS SUCCESSFULLY TESTS INDUSTRIAL SCALE USE OF HYDROGEN IN A RECYCLING FURNACE

Novelis Inc., a leading sustainable aluminium solutions provider and world leader in aluminium rolling and recycling, have announced that it has successfully tested using hydrogen fuel to power a recycling furnace at its UK plant in Latchford, Warrington.

The tests were carried out as part of a UK government decarbonization programme and in collaboration with Progressive Energy, an independent UK energy company, and required the installation of new burners, regenerators, and furnace lining material. Using hydrogen instead of the same amount of natural gas when operating a melting furnace can reduce CO2e emissions by up to 90%.

"Exploring renewable energy sources, such as hydrogen, making first mover investments, and reducing energy intensity are part of our 3×30 vision to advance aluminium as the material of choice with circular solutions", says Emilio Braghi, Executive Vice President, Novelis Inc., and President, Novelis Europe. "With the significant expansion of our local recycling capacity, we are transforming the Latchford site into a prototype for high-recycled content and decarbonized aluminium production."

With safety as the top priority of the hydrogen pilot project, several series of tests were conducted by blending different percentages of hydrogen with natural gas (30%-100%) to evaluate the impact on existing infrastructure, and equipment compatibility. During the trial campaign, several hundred tonnes of 3000 series scrap aluminium alloy were remelted and cast into sheet ingots. In addition, all relevant parameters were measured to assess any impact on the product, process, operating environment, and environmental emissions.

Further downstream processing, including rolling and finishing, will be now completed at other Novelis plants in Europe to establish the real 'end-to-end' parameters of a hydrogen-based, recycled alloy production process. Following the full post-trial evaluation and assessments, a report will be released as part of the UK government's Industrial Fuel Switching programme later this year.

"The use of hydrogen is not common in the aluminium industry today and we are very proud to be one of the pioneers to have tested this new fuel at an industrial scale and in a real-world environment," says Allan Sweeney, Plant Manager, Novelis Latchford. "The results from Latchford will drive further research into the potential deployment of hydrogen in our recycling operations worldwide."

The demonstration project at Novelis Latchford is part of the UK government's Industrial Fuel Switching Competition programme. Supported with a grant of £4.6 million, as part of the £1 billion Net Zero Innovation Portfolio and the wider regional HyNet project, the programme is designed to support industry to decarbonise their operations through a switch from natural gas to low carbon hydrogen. As the UK's leading industrial decarbonisation cluster, HyNet will decarbonise industry across the North West and North Wales through the production, transportation and storage of low-carbon hydrogen, and through capturing industry's carbon dioxide emissions through Carbon Capture Solutions. Novelis has been a partner in the HyNet project since 2017 and is supporting the development of the regional infrastructure project.

Continued on page 10.....

DECARBONISING THE ALUMINIUM INDUSTRY – DRIVING THE UK'S INDUSTRIAL FUEL SWITCH

As the aluminium industry faces increasing pressure to de-carbonise, the spotlight is shifting towards alternatives to natural gas. The UK, through its government backed Industrial Fuel Switching programme is leading the exploration of Hydrogen as a potential solution to heavy industry's high carbon content fuels. Among the UK's pioneering companies enabling this transition is Mechatherm International Limited, bringing decades of furnace design expertise to support the aluminium sectors sustainable evolution.

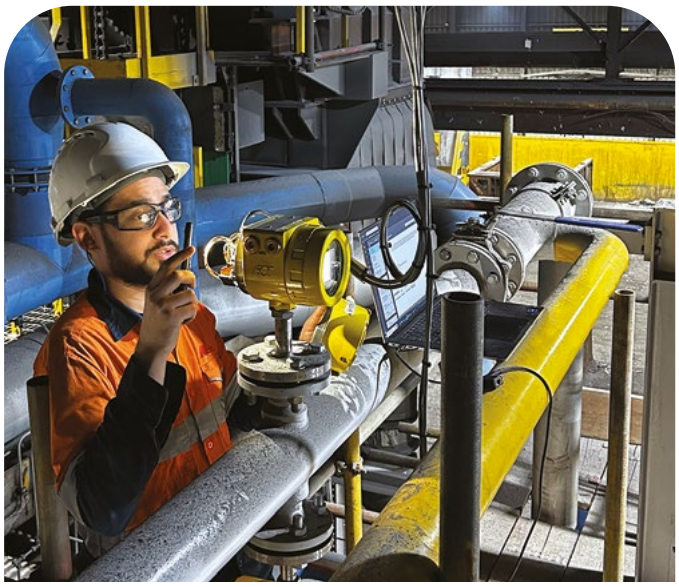
Aluminium recycling is already an energy efficient process when compared to primary production but remains heavily reliant on natural gas for furnace operations. Hydrogen, when burnt, produces predominantly water vapour as the key exhaust component so aligns perfectly with global net-zero targets. However, hydrogen integration poses significant technical and safety challenges, requiring specialised knowledge and expertise to ensure an efficient and safe transition.

Mechatherm, with over 50 years of furnace design experience is well positioned as a key partner in the UK's hydrogen fuel switching initiatives. With hydrogen combustion differing significantly from natural gas, aluminium furnaces require extensive modifications and feasibility studies to handle the fuel safely and efficiently.

For the recent fuel switch trials at Novelis, Latchford; Mechatherm conducted extensive feasibility studies to upgrade an existing furnace to hydrogen fuel, these included advanced CFD modelling to predict how hydrogen would react under these conditions, DSEAR assessments to eliminate the risks associated with fires and explosions as well as the potential risks associated with gasses under pressure.

With hydrogen presenting many different qualities to the traditional natural gas including a lower density and higher flame temperatures several upgrades were made to ensure safety and efficiency are maintained. Mass flow meters were installed to accurately measure and support fuel blending, UV sensors for flame safety and control as the flame on 100% hydrogen is not easily visible to the naked eye, and pipes and valves were resized to ensure reasonable velocities were achieved.

The project successfully tested hydrogen blends of up to 100% demonstrating its potential to power the sector's future. And



Mechatherm

while early trials have been promising, the widespread adoption of hydrogen across aluminium production will require further investment, research, and collaboration. Challenges such as hydrogen supply, infrastructure development, and cost must be addressed to enable a smooth transition.

The UK government has set out a £1 billion Net Zero Innovation Portfolio supporting projects that accelerate the adoption of low carbon technologies. Through initiatives like the HyNet Project the UK aims to build a scalable hydrogen infrastructure, providing industry with a long-term, sustainable alternative to natural gas.

Continued from page 9.....

Novelis is also conducting its own technical feasibility studies into the use of hydrogen as a direct replacement for natural gas, and more generally, Novelis research and development teams worldwide continue to investigate the possibility of using plasma and electricity to supply energy to its production plants.

As announced in July 2024, Novelis is investing approximately $90 million to double the recycling capacity for used beverage cans (UBCs) at its plant in Latchford. The project will increase the facility's UBC recycling capacity by 85 kilotonnes per year and decrease Novelis Europe's CO_2e by more than 350,000 tonnes annually. The project is expected to begin commissioning in December 2026.

Furthermore, as part of its new Novelis 3x30 vision, the company has set new ambitious sustainability targets to achieve by the end of 2030, including increasing recycled content to 75% from today's 63%, reducing carbon emissions to less than 3 tonnes CO_2e per tonne aluminium shipped, and continuing to lead the industry to circularity through first-mover investments. These are in addition to the company's goal to be carbon neutral by 2050 or sooner. Along with using higher amounts of recycled content, decarbonization of the company's melting processes and energy sources are important levers to delivering lower-carbon, highly sustainable aluminium solutions.

Novelis

TOP 3 INNOVATIONS SET TO DISRUPT THE ALUMINIUM INDUSTRY

BY HIND MOULOUE

The aluminium industry is undergoing rapid transformation as technological advancements drive efficiency, sustainability, and performance. While much of the innovation remains behind closed doors, several key developments are emerging that promise to reshape the landscape. Here are three innovations poised to disrupt the aluminium sector.

1 ADVANCED ALUMINIUM ALLOYS FOR LIGHTWEIGHT APPLICATIONS

A major focus across the industry is the development of advanced aluminium alloys that deliver superior strength-to-weight ratios. These innovations are driving changes in manufacturing processes, including refined casting and extrusion techniques to achieve improved mechanical properties. This focus on process enhancement allows manufacturers to produce lighter components while maintaining structural integrity, supporting the industry's broader push toward more efficient and durable materials.

2 GREEN ALUMINIUM PRODUCTION TECHNIQUES

Sustainability is a driving force behind recent innovations, particularly in the development of low-carbon aluminium. Traditional smelting processes are energy-intensive, but new technologies aim to reduce the industry's carbon footprint. One significant breakthrough is inert anode technology, which replaces carbon anodes with non-consumable materials during electrolysis. This eliminates carbon emissions generated by conventional methods, reducing the environmental impact of primary aluminium production. Additionally, the industry is addressing challenges related to aluminium recycling, including quality degradation. Advances in refining and separation processes are improving the recovery of high-purity aluminium, enhancing the recycling rate while maintaining the performance of the recycled metal. Closed-loop recycling systems are also becoming more sophisticated, enabling the efficient reuse of aluminium without compromising material quality.

3 SMART MANUFACTURING AND DIGITAL INTEGRATION

Digital transformation is revolutionising aluminium production through smart manufacturing techniques. Advanced data analytics, machine learning, and IoT (Internet of Things) are being integrated into production lines to improve efficiency and product quality. Predictive maintenance systems reduce downtime by identifying potential equipment failures before they occur, while real-time monitoring enhances precision in alloy composition and material properties. This level of digital integration offers manufacturers greater control over production variables, improving yield and reducing waste.

LOOKING AHEAD

These innovations represent a significant shift in how aluminium is produced and utilised. As the industry continues to evolve, the intersection of advanced materials, sustainable practices, and digital technology will play a crucial role in shaping its future. While the details of many advancements remain proprietary, the broader trends suggest a dynamic period of change that will redefine possibilities for aluminium applications across multiple sectors.

LEYTON

CELEBRATING EXCELLENCE IN THE ALUMINIUM INDUSTRY – 2025 ALFED AWARDS

The ALFED Annual Dinner is the premier event in the UK aluminium industry's calendar, offering an unparalleled opportunity to celebrate excellence, network with peers, and honour outstanding contributions to the sector. **Scheduled for 13th November 2025 at Carden Park Hotel, Cheshire,** this year's dinner promises to build upon the successes of previous years, delivering an unforgettable evening of recognition and camaraderie.

REFLECTING ON LAST YEAR'S SUCCESS

The 2024 ALFED Annual Dinner was a landmark event, highlighting the aluminium sector's pivotal role in driving innovation, sustainability, and collaboration. The evening was marked by the presentation of the inaugural Apprentice of the Year Award, which celebrated the achievements of emerging talent within the industry. The award not only highlighted the individual successes of the apprentices but also underscored our community's commitment to nurturing the next generation of professionals.

The 2025 ALFED Awards will take place on the 13th November as part of the ALFED Annual Dinner. This prestigious evening will celebrate the achievements of companies and individuals who have made significant contributions to the aluminium industry.

MEET THE HEADLINE AWARDS SPONSOR: HYDRO WREXHAM

Sponsored by ALFED Member, Hydro Wrexham, HR & CSR Manager Tracy Jones commented on their motivations for supporting this year's awards: "The ALFED awards are a fantastic initiative that really drive innovation, inclusion, and excellence in the aluminium industry. By supporting these awards, we are helping to create a platform that encourages continuous improvement and showcases the remarkable contributions of our industry's talent. Additionally, our involvement underlines our dedication to community engagement and promoting inclusive practices that ensure everyone has the opportunity to thrive. Last year's inaugural Apprentice of the Year Award was a testament to the incredible potential of young professionals in our industry. It was inspiring to see the dedication and skill of the apprentices recognised on stage. This experience underlines our belief in the importance of nurturing and supporting emerging talent, which is why we are proud to support the ALFED awards this year."

THE 2025 AWARD CATEGORIES ARE:

- **Diversity and Inclusion Champion (Company Award)**
  Recognising a company that has excelled in promoting diversity, inclusivity, and a strong sense of belonging within the aluminium sector.
- **Community Engagement Award (Company Award)**
  Celebrating a company that has made a significant positive impact on its local community through outreach, partnerships, or charitable work.
- **Rising Star Apprentice Award (Individual Award)**
  Honouring an apprentice who has demonstrated exceptional dedication, progress, and contribution to the industry.
- **Lifetime Achievement Award (Individual Award)**
  Recognising an individual who has made a lasting and meaningful impact on the aluminium industry over the course of their career.

NOMINATION PROCESS

Each award category will have an official nomination form allowing individuals to nominate themselves or others. The forms will include key sections such as nominee details, company information (if applicable), and supporting evidence.

SUBMISSION REQUIREMENTS:

- Diversity and Inclusion Champion (Company Award): Outline of diversity initiatives, evidence of impact, and future commitments.
- Community Engagement Award (Company Award): Details on engagement efforts, partnerships, and testimonials.
- Rising Star Apprentice Award (Individual Award): Highlights of apprenticeship journey, achievements, and endorsements.
- Lifetime Achievement Award (Individual Award): Summary of career impact, contributions, and industry influence.

To be in with a chance of taking home the crown, all nominations must be made by Friday 12th September 2025.

To find out more about the 2025 Awards, how to nominate, or how to book your tickets for the Annual Dinner itself, please visit: **www.alfed.org.uk/alfed-awards/.**

THANK YOU TO THE 2025 ANNUAL DINNER SPONSORS

DIAMOND SPONSOR

Novelis

PLATINUM SPONSOR

BOAL EXTRUSION

HEADLINE AWARDS SPONSOR

Hydro

GOLD BRIEFING SPONSOR

ALUMINIUM INTERNATIONAL TODAY

GOLD DINNER SPONSOR

ALUMINIUM SHAPES

SILVER SPONSORS

LME An HKEX Company

SWAN ALLOY THE ALUMINIUM RECYCLING SPECIALISTS

JMS JONAS METALS SOFTWARE

BRIDGNORTH ALUMINIUM LIMITED

BRONZE SPONSORS

metsource

ALTEK A HARSCO COMPANY

AVON

Avon Metals Ltd Your Allies in Alloys for over 50 Years

RICHARD AUSTIN ALLOYS

BASF We create chemistry | Chemetall expect more

mypower SOLAR PROFESSIONALS

For more information or to book, please visit:
www.alfed.org.uk/event/alfed-annual-dinner-2025/

ALFED ALUMINIUM FEDERATION

HOW ALUMINIUM IS MAKING WINE MORE SUSTAINABLE...

In the heart of the North Wales countryside sits the multi-award-winning Gwinllan Conwy vineyard, a business which has earned an enviable reputation for the quality of its white, red, sparkling, rose and dessert wines.

But the wines aren't the only thing that make this vineyard such a great success, it's also the owners' innovative thinking and use of sustainable materials that captures the imagination.

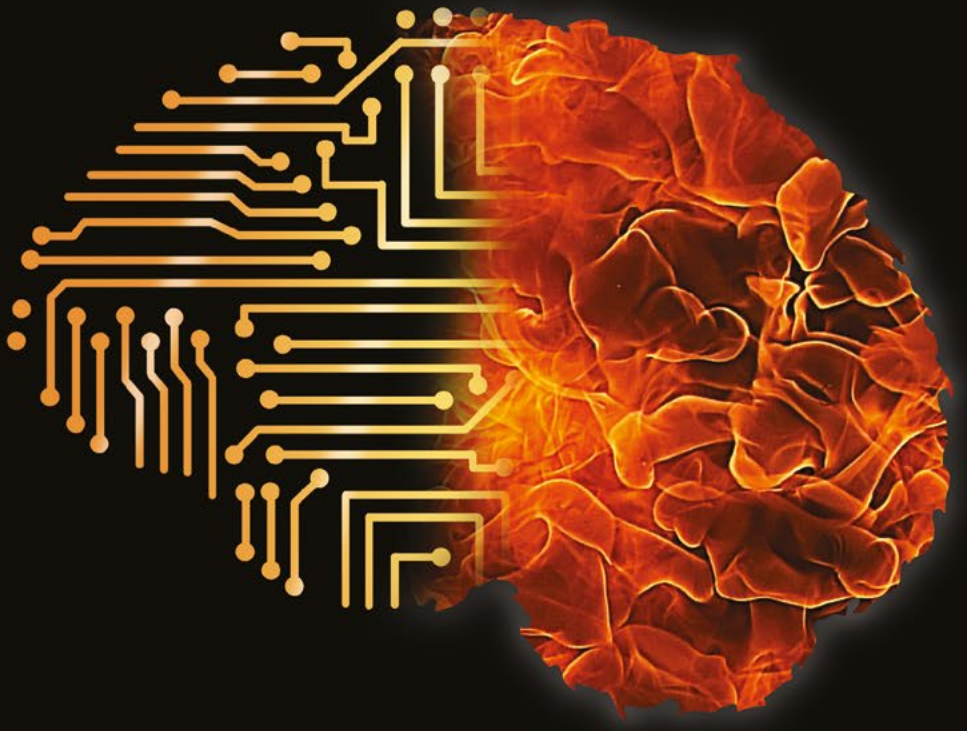
As anyone who has visited or driven past a vineyard will know, vines grow up trellising, with the trellis structure traditionally held in place by a series of wooden posts driven into the ground. These posts need to be sturdy enough to withstand the heavy loads from row upon row of foliage- and fruit-laden vines, as well as the wind loadings exacerbated by their often-exposed locations.

It's therefore not uncommon for wooden posts to rot and break, particularly as they become weaker over time. Steel posts are sometimes used as an alternative, but these too are not without their problems as they can twist and bend, and rust if driven into the earth and/or exposed to wet conditions.

So the owners of Gwinllan Conwy turned to aluminium posts which are proving to provide the perfect solution. Not only will they never rot or rust, but the strength of the aluminium posts mean they can be driven through stone and shale under the surface of the soil to provide a strong durable, long-lasting, low-maintenance solution.

As vineyards are the fastest growing agricultural sector in the UK, covering over 4,200 hectares of land (with this forecast to rise to over 7,500 hectares by 2032), there's great potential for other growers to adopt aluminium as part of their process.

smart



Intelligence to burn.

Boost your reverb furnace performance with the Transient Heating oxy-fuel burner.

Achieve even heating throughout your furnace, maximising melt rates and avoiding overheating. Air Products' patented Transient Heating burner is the only Smart Burner Technology in the world that uses a sensor-driven control strategy to direct energy down toward the melt—sequentially to all areas of your furnace.

This innovative and highly intelligent burner can help you:

Improve productivity , fuel efficiency and yield

The Transient Heating burner also features air-oxyfuel capabilities for use in holding furnaces, and hydrogen-air and hydrogen-oxygen capabilities for a lower carbon footprint.

Contact us to see how you can get even more out of your reverb furnace!
NFMETALS@airproducts.com

AIR PRODUCTS

airproducts.co.uk/transient

Launching the UK Aluminium Alliance (UAA)

Buy 1, Get 1 Free for Standard ALFED Members!

Join us for the Annual

House of Lords Lunch

Why Attend?

This event is a vital opportunity for ALFED members to be part of the official launch of the UK Aluminium Alliance (UAA), shaping the future direction of the sector. Members will gain valuable insights from industry leaders and policymakers on critical issues such as trade, sustainability, and policy advocacy.

26th June 2025 | House of Lords, London, UK

Scan to book your tickets!

ALFED
ALUMINIUM FEDERATION

CRU Communities

World Aluminium Summit

London, UK // 13 - 15 May 2025

30 Years

ALFED members save 10% quoting ALFED10

Join the conversations that matter at the industry's strategic annual meeting for our 30th Anniversary

www.worldaluminiumsummit.com

PRIVATE HEALTHCARE IS PEACE OF MIND

No matter how fit and healthy we are, it is inevitable that at some point in our lives we will fall ill and need medical care. And when illness does strike it is to the NHS that most people will turn in seeking a diagnosis, treatment and recovery.

The NHS has for some years been showing signs that it, too, is not in the best of health. A growing and ageing population is putting an ever-increasing strain on staff and services. A problem exacerbated by the coronavirus pandemic.

Reports of underfunding, a shortage of medical staff, noisy and overcrowded wards, cancelled operations and long waiting times will be familiar to everyone.

In England, hospital waiting lists are longer than ever before, with a total waiting list of 7.53 million people.* This is the highest number since records began and illustrates the severe pressure that the NHS is under.

Quick, private and convenient

Understandably, these lengthy delays are causing additional stress for patients, undermining their health and quality of life even further. How many people do you know whose physical health and mental well-being has deteriorated f`rom the anxiety of having to wait months for a hospital appointment?

All this can be avoided by taking out private health insurance. Seeing a doctor in private practice used to be only for the wealthy, but not anymore as the cost of private medical cover is becoming more affordable.

A private medical plan delivers prompt access to hospital consultants, thus avoiding lengthy waiting lists. Patients can choose from an extensive list of hospitals throughout the UK; if they need to be admitted, they will have their own private room equipped with TV and telephone, and visiting is arranged to suit patient and family. A quick, private and convenient service that removes many of the anxieties associated with NHS hospital stays.

Taking control of your healthcare

However, those interested in taking out health insurance should not leave it too late. As we get older our healthcare needs increase. Therefore, as only some of the best health insurance companies provide cover for pre-existing conditions, the best time to invest in getting private treatment for illnesses you may suffer tomorrow – is today.

By acting now you can ensure your future healthcare will not be dictated by NHS bureaucracy and, just as importantly, you will be able to benefit from the widest possible cover.

Private health insurance cannot guarantee good health, but it can ensure that when you are feeling unwell you will quickly receive the best possible care, when and where you want it. The peace of mind that comes with that knowledge cannot be underestimated and is often the most important factor for people deciding to take control of their healthcare provision and "go private".

For further information and a no obligation quotation contact HMCA by telephone on 01423 799949 or visit the exclusive HMCA Aluminium Federation website here:
https://www.hmca.co.uk/alfed

*The Telegraph, 9th May 2024
https://www.telegraph.co.uk/news/2024/05/09/nhs-waiting-lists-will-take-685-years-to-clear-current-rate/

ENVIRONMENTAL SUSTAINABILITY STRATEGY DAY

Date: 5th June 2025

Venue: British Motor Museum, Warwickshire

The ALFED Sustainability Strategy Day is not just another industry event – it is a pivotal moment for shaping the future of aluminium in the UK. This year, we are bringing a bold, refreshed approach that moves beyond fragmented discussions to a unified, strategic vision. Under this new framework, ALFED is ensuring that aluminium takes centre stage in the UK's industrial, sustainability, and trade policies.

To book tickets, please visit:
www.alfed.org.uk/event/environmental-sustainability-strategy-day/

HOUSE OF LORDS LUNCH

Date: 26th June 2025

Venue: House of Lords, Westminster, London, UK

The Aluminium Federation (ALFED) is proud to host a pivotal industry event that will officially mark the launch of the UK Aluminium Alliance (UAA). This strategic initiative is designed to position aluminium as a critical material within the UK's industrial policy framework, highlighting its role in supporting national security, sustainability, and industrial resilience.

To book tickets, please visit:
www.alfed.org.uk/event/house-of-lords-lunch/

UK METALS EXPO 2025

Date: 10th – 11th September 2025

Venue: Hall 12 – NEC, Birmingham

UK Metals Expo 2025 is the leading event that brings together the entire metals supply chain, from primary metal manufacturing to the forefront of engineering, manufacturing, and construction. With a comprehensive focus on metal processing, metalworking, fabrication, CNC machinery, surface finishing, recycling, supply chain management, design, and policy, UK Metals Expo 2025 is the definitive meeting place for advancing the metals industry. Come and meet the ALFED team on Stand B30!

To learn more:
www.alfed.org.uk/event/uk-metals-expo-2025/

ALFED ANNUAL BUSINESS BRIEFING & DINNER

Date: 13th November 2025

Venue: Carden Park Hotel, Cheshire

Mark your calendars for an evening of elegance, camaraderie, and celebration set against the exquisite northern backdrop of the Carden Park Hotel in Cheshire on Thursday 13th November 2025! This exclusive black-tie affair is more than just a dinner—it's a premier networking and socialising opportunity, bringing together industry leaders, innovators, and visionaries under one roof. Engage in meaningful conversations, forge new connections, and celebrate the strides made within the aluminium sector.

To learn more and book tickets:
www.alfed.org.uk/event/alfed-annual-dinner-2025/

50 YEARS IN THE ALUMINIUM INDUSTRY:

AN EXPERT INTERVIEW WITH PROF. GEOFF SCAMANS

With a distinguished career spanning five decades, Professor Geoff Scamans has been at the forefront of research, innovation, and sustainability within the aluminium industry. Still a key figure in the industry, Geoff is dedicated to his role as Chief Scientific Officer at Innoval Technology, as well as being the Professor of Metallurgy at BCAST, Brunel University London. His extensive contributions, ranging from corrosion studies to advancing circular economy principles, have shaped the industry's evolution. In this exclusive interview, Prof. Scamans reflects on his journey, key breakthroughs, and the future of aluminium technology and what he hopes his legacy to be as the UK aluminium industry progresses.

• Professor Geoff Scamans

1. So, looking back on your five-decade career in the aluminium industry, what initially drew you to this field, and what has kept you engaged for so long?

After completing a metallurgy degree and PhD at Imperial College London, I worked for a year on a post-doctoral contract to study the role of hydrogen in the stress corrosion cracking of high strength aluminium alloys. This resulted in my being employed by Alcan at their Banbury Research Laboratories i n November 1974 as they were interested in following this line of research to support aluminium alloy plate production at Kitts Green in Birmingham. This continued until the early 1980's when there was a major change in emphasis to new opportunities for aluminium in transport and energy applications and the beginnings of sustainability and environmental concerns for the aluminium industry.

2. What do you consider to be your most significant achievements or contributions to the aluminium industry, whether in research, innovation, or sustainability?

I was lucky to be around during the early days of the UK's major investment in high voltage electron microscopes and in-situ reaction cells that provided detailed insights into the mechanisms of oxidation and corrosion of aluminium alloys that enabled me to establish a strong track record of publications and to develop a strong network of international collaborations that persist to this day. This opened the door to a long R&D career and multiple collaborative projects each with their own challenges and technology developments that have encouraged and expanded the use of aluminium in construction and transport applications. I have also had the opportunity to be involved in determining the cause of failure of aluminium planes, boats and trains in a series of legal battles.

3. Over the last 50 years, what have been the most groundbreaking innovations you've seen in aluminium processing, recycling, or applications that have transformed the industry?

The most creative and innovative time initiated from the challenge to view aluminium corrosion as a positive rather than a negative attribute. This became "surface engineering of aluminium" that supported the development of durable adhesive bonding for aluminium automotive body sheet first to make six Austin Metros with technology that is now used to build more than 1.5 million vehicles/year including the Ford F150. Other projects included aluminium-air batteries, aluminium membranes based on stripped anodic films that introduced Alcan to the world of biotechnology and indirectly resulted i n the purchase of both a high-performance electric motor company, Uniq mobility in Denver, and the brief ownership of a lithium battery company Moli Energy in Vancouver. However, none of these projects resulted in significant business develops for Alcan or the aluminium industry.

The new technology phase was swiftly followed by a return to core business, and I had the opportunity to secure EU funding for a collaborative R&D project to control the filiform corrosion resistance of aluminium rolled products. This resulted in a

Continued on page 20.....

Continued from page 19.....

detailed understanding of deformed surface layers on all rolled aluminium sheet and their control both corrosion under coatings and the durability of adhesive bonds and valuable insight into the cleaning and pre-treatment of aluminium surfaces. This work has had major ramifications for all aspects of aluminium surface treatment and corrosion control. The EU project was the first of multiple collaborative R&D proposals that have enabled a wide variety of innovations for the aluminium industry over the years.

4. How have you seen the use of aluminium evolve across industries like automotive, aerospace, and packaging, and what do you think has been the most impactful application?

Aluminium remains underexploited in automotive applications although it is now holding its own in aerospace applications and is a major force in the world of single use drink packaging. Aluminium beverage cans have probably been the most impactful application and largest revenue generator for the aluminium industry to date. This application points the way for aluminium to be considered in future where sustainability and circular economy considerations are vital. Circular Economy thinking requires all aluminium to be used in the most efficient way, to have the longest possible life in all applications and to have that life extended as many times as possible and only then to be recycled and is the cornerstone of the work at BCAST at Brunel University. Primary aluminium should only be considered to top up loss from the circle or for new or expanding applications. This will eventually turn the aluminium industry on its head with the secondary industry being more important than the primary industry.

5. As you reflect on your career, what do you hope your legacy will be in the aluminium industry? And looking ahead, what do you see as the next big challenge or opportunity for aluminium technology?

Aluminium can change from being a major consumer of the world's energy reserves and a major carbon emitter, polluter and source of red-mud and spent pot-line waste to being a Circular Economy exemplar metal. However, this challenge, recognised many years ago, has only started to be addressed as the industry is still dominated by primary aluminium production that shows no sign of having peaked yet. Today, far too much of the world's primary aluminium production is based on fossil fuel burning to make the electricity required by the reduction cells.

Primary aluminium should be made using clean electricity in cells eventually with inert electrodes when this technology matures. Electrolytic technology should be switched to refining secondary aluminium casting alloys using either the solid state technology developed in Japan, or the ASTREA process developed in the US by Arconic. This is critical to avoid the so called "dead" aluminium scrap from the switch to electric vehicles that arises from all the aluminium secondary casting alloys used in the present vehicle fleet. It has been estimated that this could arise to about 9 million tonnes of secondary casting alloy scrap by 2040. There is also the opportunity for rechargeable aluminium-ion batteries to be developed and exploited as an alternative to lithium-ion batteries without supply chain issues.

The challenge for the UK is to make this transition and to develop the aluminium manufacturing capacity to make aluminium rolled, extruded and cast products required for transport, construction and packaging applications using the end-of-life and manufacturing scrap available in the UK that is mainly exported today due to lack of this capability. This is why I am still working and supporting the ambitions of companies like BACALL, Constellium and EMR who are leading the drive for new UK manufacturing capability for aluminium. This has become of paramount importance for UK manufacturing as world trade shifts to carbon taxes, protectionism, and tariffs.

For more about Prof. Geoff Scamans, scan the QR code to connect with him on LinkedIn:

Brunel University London | BCAST

INNOVAL

ALFED
ALUMINIUM FEDERATION

DIRECTORY

2025

MEMBERS SUPPLIERS KNOWLEDGE PARTNERS

3o LTD
Kent 07906 974 640
https://www.3olimited.com/

A

AALCO
West Midlands 0121 585 3600
https://www.aalco.co.uk/

ABL ALUMINIUM COMPONENTS LTD
West Midlands 0121 789 8686
https://www.ablcomponents.co.uk/

ACT GROUP
Greater London 0204 579 6715
https://www.actgroup.com/

AERO METALS ALLIANCE
Derbyshire 01246 263 300
https://www.aerometalsalliance.com

AES METALS LTD
Hampshire 01256 886 499
https://www.aesmetals.co.uk

AIR PRODUCTS PLC
Surrey 0800 389 0202
https://www.airproducts.co.uk/

AKZO NOBEL POWDER COATINGS LTD
Tyne and Wear 0121 555 1500
https://www.akzonobel.com/

ALCAS METAL UK
Greater London 0203 576 0617
https://alcas.co.uk/

ALIDECK LTD
Kent 01622 534 044
https://www.alideck.co.uk

ALLOY HEAT TREATMENT
West Midlands 01384 456 777
https://www.alloyheat.co.uk

ALMETRON LTD
Clwyd 01978 660 297
https://www.almetron.co.uk/

ALTEK EUROPE LTD
Derbyshire 01246 383 737
https://www.altek-al.com

ALUBEND LTD
Shropshire 0333 305 0690
https://www.alubend.com/

ALUK (GB) LTD
Monmouthshire 01633 810 440
https://uk.aluk.com/

ALUMINIUM FEDERATION
Northamptonshire 0333 240 9735
https://alfed.org.uk

ALUMINIUM PACKAGING RECYCLING ORGANISATION (ALUPRO)
West Midlands 01527 597 757
https://alupro.org.uk/

ALUMINIUM SHAPES
Northamptonshire 01536 262 437
https://www.alishapes.co.uk

ALUTRADE LTD
West Midlands 0121 552 0330
https://www.alutrade.co.uk/

AMAG UK LTD
Surrey 01372 450 661
https://www.amag.com/

AMARI COPPER ALLOYS (ACA)
West Midlands 01527 405 600
https://amaricopperalloys.com

AMARI METALS ENGINEERING GROUP LTD
West Midlands 0121 728 5500
https://www.a-meg.com

AMARI PRECISION TUBES
West Midlands 01527 405 618
http://www.amariprecisiontubes.com

ARCHITECTURAL & METAL SYSTEMS LTD
Gloucestershire 00353 21 470 5100
https://www.ams.ie

ARCHITECTURAL ALUMINIUM COATINGS LTD
West Midlands 01902 723 715
https://www.aac-gb.com/

ARCHITECTURAL POWDER COATINGS LTD
Tyne and Wear 0191 499 0770
https://apc-gb.com/

ARCONIC MANUFACTURING (GB) LTD - KITTS GREEN OPERATIONS
West Midlands 0121 252 8000
https://www.arconic.com/united-kingdom

ARGENTUM METAL MANAGEMENT LTD
Staffordshire 01827 726 493
https://www.argentum.uk.com/

ARGUS MEDIA LTD
Greater London 0207 780 4200
https://www.argusmedia.com/

ARUN TECHNOLOGY LTD
West Sussex 01293 513 123
https://www.aruntechnology.com

ASD LTD
West Yorkshire 0113 254 0711
https://www.asd.ltd/

ASH & LACY FINISHES
West Midlands 0121 525 1444
https://www.ashandlacy.com/

ASPECT POWDER COATING LTD
West Midlands 01384 826 115
http://www.aspectpowdercoatings.com/

AVAILS ENERGY
West Yorkshire 01274 060 847
https://www.avails.co.uk/

AVON METALS LTD
Gloucestershire 01452 874 500
http://avonmetals.com/

AXALTA POWDER COATING SYSTEMS UK LTD
Durham 01325 347 000
https://www.axalta.com/powdercoatings_gb/en_GB.html

B

BARLEY CHALU LTD
Norfolk 01953 602 771
https://www.barleychalu.co.uk/

BARNSHAWS SECTION BENDERS
West Midlands 0121 557 8261
https://www.barnshaws.com/

BENFLEET SCRAP CO LTD
Essex 01268 437 909
https://www.benfleetscrap.co.uk

BOAL EXTRUSION UK
Leicestershire 01509 600 012
https://www.boalextrusion.com

BRAD-CHEM LTD
Lancashire 01942 261 024
https://brad-chem.co.uk/

BRIDGNORTH ALUMINIUM LTD
West Midlands 01746 788 111
https://www.bridgnorthaluminium.co.uk/

BROMPTON BICYCLE LTD
Greater London 0208 232 8484
https://www.brompton.com/

C

C & O POWDER COATINGS LTD
Merseyside 01744 818 776
http://www.candocoatings.co.uk/

CAPALEX – CAPITAL ALUMINIUM EXTRUSIONS LTD
Cumbria 01946 811 771
https://capalex.co.uk/

CARBONCHAIN.IO LIMITED
Greater London 0203 576 5957
https://www.carbonchain.com/

CARLISLE FLUID TECHNOLOGIES UK LTD
Dorset 01202 571 111
https://www.carlisleft.eu/

CBAMBOO LTD
Greater London 07879 477 128
https://cbamboo.com

CHEMETALL LTD
Buckinghamshire 01908 649 333
https://chemetall.com

COLESHILL ALUMINIUM LTD
Warwickshire 01675 463 170
http://www.coleshill-aluminium.com/

COMMONFIELD SERVICES LTD
Bedfordshire 01582 697 750
https://www.commonfield.com

CONCORDIA INTERNATIONAL FORWARDING LTD
Greater London 01784 262 200
https://www.concordiafreight.com/

COUNTRYWIDE METALS LTD
West Midlands 0121 667 2007
https://countrywidemetals.com

D

DEANE ROOFING & CLADDING LTD
Northamptonshire 01604 635 831
https://deaneroofing.com/

DURBIN METAL INDUSTRIES LTD
West Midlands 019 2245 3982
https://www.durbinmetals.co.uk/

E

ECODEK
Wrexham 01978 667 840
https://ecodek.co.uk

EDMO GROUP LTD
Herefordshire 01989 768 307
https://edmolimited.co.uk/

EMPIRE RESOURCES UK LIMITED
West Midlands 0121 520 5974
http://www.empireresources.co.uk

EMR – EUROPEAN METAL RECYCLING LTD
Cheshire 01925 715 400
https://uk.emrgroup.com/

ENFIELD TUBES LTD
Cumbria 01900 601 166
https://enfieldtubes.com

ENVANTAGE LTD
Greater Manchester 0161 448 7722
https://www.envantage.co.uk/

EPWIN GROUP
West Midlands 01952 293 229
https://epwin.co.uk/

EQUITY ENERGIES
Warwickshire 02476 997 991
https://www.equityenergies.com/

EURO QUALITY COATINGS LIMITED
Glamorgan 02920 362 999
https://eqcltd.co.uk/

EXLABESA EXTRUSIONS DONCASTER LTD
South Yorkshire 01302 762 500
https://uk.exlabesa.com/en

F

FRONIUS UK LTD
Buckinghamshire 01908 512 300
https://www.fronius.com/en-gb/uk

G

GARNALEX ALUMINIUM EXTRUSIONS LTD
Derbyshire 01332 978 000
https://www.garnalex.com

GESTAMP UK
Durham 01325 329 168
https://www.gestamp.com/en/home

GSM ALUMINIUM LTD
West Yorkshire 01274 581 710
https://www.gsmltd.co.uk/

H

HEAT TREATMENT 2000 LTD
West Midlands 0121 526 2000
https://www.heattreat2000.co.uk/

HENKEL LTD
Hertfordshire 01442 278 000
https://next.henkel-adhesives.com/us/en/industries/metals.html

HITACHI HIGH-TECH ANALYTICAL SCIENCE
Oxfordshire 01235 977 900
https://hha.hitachi-hightech.com/en/

HOGANAS (GB) LTD
Kent 01732 362243
https://www.hoganas.com/

HOWTOROBOT.COM
Staffordshire 020 457 12 010
https://www.howtorobot.com/

HULAMIN OPERATIONS
Kent 01227 479 180
https://www.hulamin.com/

HUTTENES-ALBERTUS (UK) LTD
South Yorkshire 01226 760 910
https://www.ha-group.com/en/

HYDRO ALUMINIUM WREXHAM
Wrexham 01978 660 231
https://www.hydro.com/en-GB

HYDRO BUILDING SYSTEMS UK LTD
Gloucestershire 01684 853 500
https://www.hydro.com/en-GB

I

I M A SCHELLING UK LTD
West Yorkshire 07974 087 991
https://imaschelling.co.uk

IMPLEXIS CONSULTING LTD
Staffordshire 07804 730 313
https://implexisconsulting.com

INAL (2020) LTD
Greater Manchester 0161 790 0118
https://www.inal.com/

INDUSTRIAL PHYSICS
Oxfordshire 0203 936 3565
https://industrialphysics.com/

INNOVAL TECHNOLOGY LTD
South Yorkshire 01295 702 800
https://www.innovaltec.com/

ISC - INTERNATIONAL SAFETY COMPONENTS LTD
Gwynedd 01248 663 635
https://www.iscwales.com/

ISRA VISION (ATLAS COPCO LTD)
Hertfordshire 01442 261 202
https://www.isravision.com/en-en/products/metal

J

JBM INTERNATIONAL LTD
Staffordshire 07791 484 490
https://www.jbmi.com

JENKS & CATTELL ENGINEERING LTD
West Midlands 01902 305 530
https://www.jcel.co.uk/

JONAS METALS SOFTWARE LTD
Oxfordshire 0344 257 1106
https://jonasmetals.com/

JOSEPH ASH MEDWAY
Kent 0121 504 2573
https://www.josephash.co.uk/locations/joseph-ash-medway/

K

K HOME INTERNATIONAL LTD
Tyne and Wear 01642 765 421
http://www.khe.co.uk/

KEEN LTD | BACALL
Berkshire 01865 261 431
https://www.keen.biz

KESTREL POWDER COATING LTD
West Midlands 0121 380 3980
http://www.kestrelpowdercoating.co.uk

KLUTHE
Buckinghamshire 0330 1759 970
https://www.kluthe.com

L

L B L FINISHERS
Hampshire 07823 556 186
https://www.tomburn.com

LEYTON UK LTD
Greater London 0204 525 0879
https://www.leyton.com/uk/

LOCATE SUPPLIES LTD
North Lincolnshire 01724 291 040
https://www.locatesupplies.co.uk/

LONDON METAL EXCHANGE (LME)
Greater London 0207 113 8888
https://www.lme.com/

LUFFY AI LIMITED
Oxfordshire 01865 590 850
https://luffy.ai

M

M G METALS LTD
Hampshire 01794 521 070
http://www.mgmetals.co.uk

MATERION UK LTD
Hampshire 01252 375 001
https://materion.com/

MECHATHERM INTERNATIONAL LIMITED
West Midlands 01384 279 132
https://www.mechatherm.com

MET-FAB SOLUTIONS LTD
West Yorkshire 0113 232 0847
https://met-fab.co.uk/

METSOURCE LTD
Staffordshire 01543 320 755
https://metsource.co.uk

MILVER METALS
West Midlands 02476 667 098
https://www.milvermetal.com

MYPOWER
Gloucestershire 01242 620 894
https://www.mypoweruk.com/

N

NCH CHEM AQUA
West Midlands 01902 510 200
https://www.ncheurope.com/en/

NOVELIS UK LTD
Cheshire 01925 784 100
https://www.novelisrecycling.co.uk

O

OMEGA PISTONS LTD
West Midlands 0121 559 6778
https://www.omegapistons.com/

P

POWDERTECH (CORBY) LIMITED
Northamptonshire 01536 400 890
https://www.powdertechcorby.co.uk/

POWDERTECH SURFACE SCIENCE
Oxfordshire 01869 248 218
http://www.powdertech.co.uk/

PRE-TREATMENT SOLUTIONS LTD
Leicestershire 024 7509 0133
https://www.pretreatmentsolutionsltd.com/

PRESS METAL UK LTD
West Midlands 01902 498 867
http://www.pressmetalukltd.com

PRIMETALS TECHNOLOGIES LTD
South Yorkshire 01709 726 500
https://www.primetals.com/

PROFESSIONAL POLISHING SERVICES LIMITED
West Midlands 0121 555 6569
https://www.professionalpolishing.co.uk/contact

PYROTEK UK
Staffordshire 01908 561 155
https://www.pyrotek.com

R

RIA CAST HOUSE ENGINEERING GMBH
Dorset 07376 411 171
https://www.ria-che.com

RICHARD AUSTIN ALLOYS LTD
West Yorkshire 01132 240 555
https://raaltd.com

RIGHTON BLACKBURNS
West Yorkshire 0113 386 3280
https://www.rightonblackburns.co.uk

S

SCANMETALS
Staffordshire 01902 630 720
https://scanmetals.com

SDE TECHNOLOGY
Shropshire 01743 450 501
http://www.sde.technology/

SENIOR ARCHITECTURAL SYSTEMS LTD
South Yorkshire 01709 772 600
http://www.seniorarchitectural.co.uk/

All member company details up-to-date at time of printing.

SHERWIN WILLIAMS UK LTD
Merseyside 0151 486 0486
https://industrial.sherwin-williams.com/emeai/gb/en/general-industrial.html

SILBERLINE LTD
Fife 01333 424 734
https://www.silberline.com/

SIMMAL LTD
Lancashire 01772 324 277
https://www.simmal.com/

SKF (UK) LTD
Gloucestershire 01275 876 021
https://www.skf.com/uk

SMART SYSTEMS LTD (SMART ARCHITECTURAL ALUMINIUM)
Somerset 01934 876 100
https://www.smartsystems.co.uk/

SMITHS ADVANCED METALS
Bedfordshire 01767 604 710
http://www.smithsadvanced.com/

SMITHS METAL CENTRE'S
Bedfordshire 07730 498 282
https://www.smithmetal.com

SNELSONS LTD
Cheshire 01606 553 580
https://www.snelsons.co.uk

SOLUS ACCIDENT REPAIR CENTRES
Norfolk 07384 525 430
https://www.solusarc.co.uk

SPA ALUMINIUM LTD
Kent 01892 533 911
https://www.spaaluminium.co.uk/

SPARTAL LTD
Gloucestershire 01386 700 898
https://www.spartal.co.uk/

SPEIRA UK LIMITED
West Midlands 01902 396 630
https://www.speira.com/

STEEL & ALLOY PROCESSING LTD
West Midlands 0121 553 5292
https://www.gonvarri.com/en/

SUPERIOR PAINT & POWDER COATING LTD
West Midlands 0247 646 4676
http://www.sppcltd.co.uk

SURFACE FINISHING ENGINEERING LTD
West Midlands 01902 409 186
https://www.sfeuk.com/

SWAN ALLOY UK LTD
West Glamorgan 01792 871 000
http://www.swanalloy.com

T

TANDOM METALLURGICAL GROUP
Cheshire 01260 271 122
https://tandom.co.uk/

TECOMET
South Yorkshire 01142 855 881
http://www.symmetrymedical.com/

THE METAL CENTRE
West Midlands 0121 352 7200
https://www.themetalcentre.com/

THE SERVICE METALS GROUP
West Yorkshire 0113 252 6611
https://www.servicemetals.co.uk/

THERMSERVE LIMITED
Shropshire 01952 684 488
https://www.thermserve.com

TOM MARTIN & COMPANY LTD
Lancashire 01772 626 828
https://www.tom-martin.co.uk

TOMRA SORTING LTD
Leicestershire 01162 181 430
https://www.tomra.com/en

TOTAL METAL RECOVERY LIMITED
West Midlands 01527 368 080
https://totalmetalrecovery.co.uk/

TYROLIT LTD
Northamptonshire 01788 823 738
https://www.tyrolit.co.uk

U

UK PROFILE COMPONENTS LTD
Oxfordshire 07968 904 273
http://www.lovealuminium.co.uk

UNITED ANODISERS LTD
West Yorkshire 01484 533 142
https://www.unitedanodisers.com/

V

VERTIK-AL LTD
West Midlands 0121 608 7171
https://www.vertik-al.com/

VISION PROFILES LTD
Gloucestershire 01452 723 300
https://www.visionprofiles.co.uk

VOITH TURBO LTD
Surrey 0208 667 0333
https://voith.com/uk-en/index.html

VOSS STAINLESS UK LTD
West Midlands 01384 263 344
https://www.voss-edelstahl.com/en/

W

W H TILDESLEY LTD
West Midlands 01902 366 440
https://www.whtildesley.com/

WICKENS ENGINEERING LTD
West Midlands 01905 456 780
https://www.wickens.co.uk/

WILLIAM KING LTD
West Midlands 0121 500 4100
http://www.williamking.co.uk/

Z

ZENERGI
Hampshire 02380 286 300
https://zenergi.co.uk

UK METALS EXPO

10–11 SEPTEMBER 2025 ▼ NEC

Join the Premier Trade Show for the Entire Metals Supply chain

In partnership with ALFED ALUMINIUM FEDERATION

Sponsors, partners and exhibitors include

UK metals Council · NMIS Advanced Forming Research Centre University of Strathclyde · ALFED Aluminium Federation · BCSA · alupro · BMRA · British Stainless Steel Association · Cast Metals Federation · CBM Confederation of British Metalforming · GA · Metal Packaging Manufacturers Association · Materials Processing Institute · UK STEEL Powered by MPI · TWI

TATA STEEL · Hydro · BRIDGNORTH Aluminium Limited · BOAL Extrusion · VAN LEEUWEN · ArcelorMittal · INNOVAL

MAKE uk The Manufacturers' Organisation · MARCEGAGLIA · outokumpu · KASTO · ANGLO STAINLESS · eas aluminium · SWISSTEK ALUMINIUM

Spaces filling fast—claim your ALFED discount today!

350+ Exhibitors \ 10,000+ Participants

100+ Speakers \ 40+ Seminars across 4 Theatres

For more info, visit ukmetalsexpo.com

Forging a Sustainable Future for UK Aluminium

More tickets, more discount!

Join us for the

ENVIRONMENTAL
UK ALUMINIUM: NET ZERO REALITY

Sustainability Strategy Day

5th June 2025

British Motor Museum, Warwickshire

Scan to book your tickets!

Why attend?

The UK aluminium sector is at a crossroads. With increasing global competition, the transition to net zero, and rapidly evolving regulations, we need a strong, coordinated strategy to secure our place in the UK's long-term industrial framework. This event will bring together industry leaders, policymakers, and innovators to drive key discussions and develop a clear roadmap for aluminium's role in sustainability, decarbonisation, and circular economy principles.

ALFED
ALUMINIUM FEDERATION

Proudly sponsored by

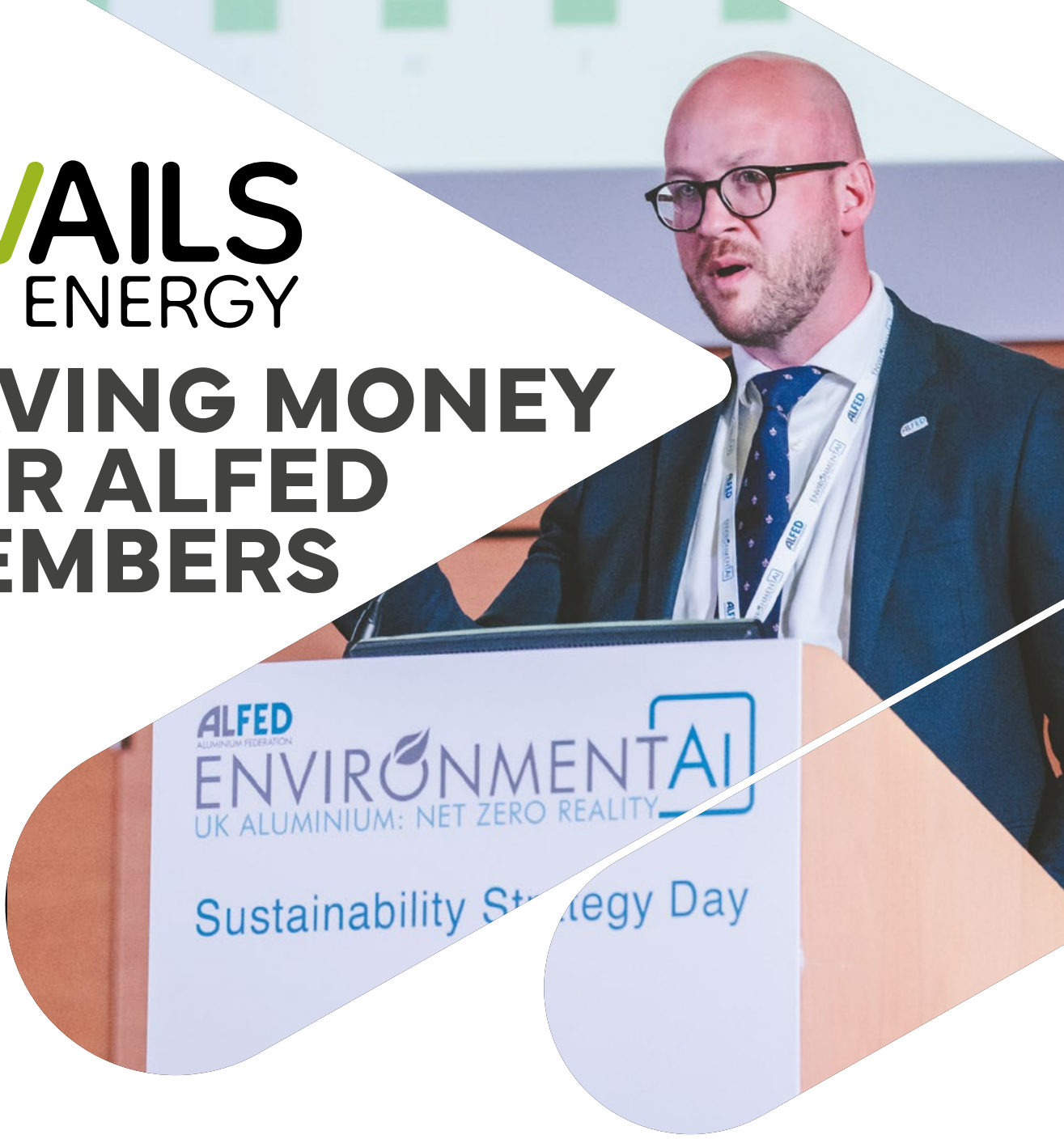
AVAILS ENERGY

LEYTON

mypower
SOLAR PROFESSIONALS

AVAILS ENERGY

SAVING MONEY FOR ALFED MEMBERS



We saved **ALFED** members over **£4million** on their gas and electricity contracts.

Can we help you? Contact us today for a no obligation quote.

- Energy contract negotiation
- Energy trading
- Energy data & monitoring
- Install of solar & LED
- Green grants & funding
- Power Purchase Agreements (PPA)

GET IN TOUCH

01274 060847
hello@avails.co.uk
www.avails.co.uk