OFFSHORE ENERGIES MAGAZINE

Issue 63 July 2025

Cloud cover

Exploring scalability, accessibility and flexibility with web and cloud based solutions for industry

Features

The magazine for the UK offshore energy industry
Published by Offshore Energies UK

Deloitte.

How do we *finance*

the UK energy transition?

To find out what a range of investors told us would increase their confidence to invest in low carbon energy technology and infrastructure in the UK, visit our web page:

Issue 63 | July 2025

Welcome to *Offshore Energies UK* #63

We open this issue with a sincere note of thanks to our outgoing editor, William Powell, who has stepped down from his role at Offshore Energies UK to pursue new opportunities. Over the past four years, William has guided this magazine through numerous editions and special reports with dedication and insight. We are grateful for his contributions and hope you, our readers, have appreciated the quality and consistency of his work as much as we have.

With that, you may be wondering how this latest edition reached you. We're pleased to say that with new arrivals to the OEUK marketing team, we continue to work diligently to produce a member magazine that informs, inspires and reflects the priorities of our sector. In this issue, we look ahead to the future of our industry, with features on cybersecurity, cloud technology and artificial intelligence. While these may seem like buzzwords, they are fast becoming essential tools across our traditionally grounded sector in continuously enhancing safety, improving efficiency and supporting our people.

You'll also find highlights from key events earlier this year, including our Annual Conference and the Offshore Safety Awards. Both brought together industry leaders to share knowledge and strengthen collaboration. Looking ahead, we hope to see many of you at the Offshore Decommissioning Conference in St Andrews and at our Annual Awards evening, where we celebrate the outstanding achievements of our sector. As we move into the second half of 2025, OEUK remains focused on shaping the UK's energy future. We continue to represent our members' interests in policy discussions, particularly around the North Sea, a region central to the UK's energy transition and resilience

Recent government consultations on environmental assessments and pricing mechanisms have seen OEUK advocate for the removal of the Energy Profits Levy and the introduction of a new fiscal framework to support long-term investment. These efforts align with our contribution to the UK's £275 billion 10-Year Infrastructure Strategy, which includes developments in CCUS, hydrogen and nuclear. You can read more in our Industrial Strategy publication, available on the OEUK website.

Our leadership team, including David Whitehouse (CEO), Katy Heidenreich (Supply Chain and People Director), and the LOGIC MD, has also featured in recent media coverage on BBC Scotland and STV News, reinforcing the sector's role in energy security and economic growth. We regularly share updates on our social media channels, where you'll also find more from across the OEUK team. Please follow us and share this magazine with your colleagues. It exists to support our members, and we welcome your stories and suggestions for future editions.

You can submit ideas via the member area of our website (registration takes just 30 seconds) or email us at editorial@oeuk.org.uk.

Thank you for reading, and we wish you a productive and enjoyable summer.

Editorial Team

Published by
Offshore Energies UK

Contact the editorial team on
editorial@oeuk.org.uk

ISSN 2053-5392 (Print),
ISSN 2053-5406 (Online)

Offshore Energies UK
Cannongate House
Cannon Street
London EC4N 6AE
Telephone: 020 7802 2400

www.oeuk.org.uk

Editorial & Design:
Ross Jackson
David Jeffree
William Powell
Tanisha Ramgoolam

Contributors:
Caroline Brown, Lucy Gordon, Enrique Cornejo, Laura Moyle, Laure Mora.

Cover picture:
Ole Jørgen Bratland/ ©Equinor

www.OEUK.org.uk

Piper Alpha Memorial rose garden

37th anniversary of Piper Alpha

Marking the 37th anniversary of the Piper Alpha accident on Sunday July 6 David Whitehouse, Chief Executive, OEUK said:

"In remembering the 37th anniversary of the Piper Alpha accident, our thoughts are with everyone affected—families, friends, and loved ones. The lessons learned from Piper Alpha brought about crucial changes to how our industry operates and continues to drive our commitment to making offshore work as safe as it can be.

The Piper Alpha Memorial Service in the North Sea Memorial Gardens in Hazlehead Park in Aberdeen marks a significant point in an ongoing journey. Our industry upholds its relentless focus on delivering safe offshore operations, but there is no room for complacency.

We reaffirm our commitment to ensuring that the lessons of 37 years ago are never forgotten, and that the memory of those who lost their lives endures with dignity and honour for generations to come."

The Reverend Michael Mair, chaplain of the UK Oil & Gas Chaplaincy officiated at the Piper Alpha Memorial Service. The Chaplaincy provides pastoral and spiritual care to those who work or have worked in the industry, past and present, and their dependants. The Chaplaincy welcomes everyone, regardless of faith, or none. More information is available at www.ukoilandgaschaplaincy.com/

bp appoints Simon Henry as Non-Executive Director

bp has announced the appointment to its board of Simon Henry as a non-executive director with effect from 1 September 2025.

Simon has wide-ranging expertise and experience in global finance, strategy, governance and management, gained across the energy industry internationally. In a career of 35 years with Shell, he held senior finance and management roles internationally, was chief financial officer and a member of the board from 2009 - 2017.

"I am delighted to welcome Simon to bp. The board will benefit from his deep and broad experience of the global upstream and downstream energy industry and his financial and commercial understanding of global markets, together with his extensive and varied board experience."- Hedge Lund, Chair of bp

Message from our CEO

David Whitehouse
CEO,
Offshore Energies UK

Firstly, thank you for your continued support and engagement during these busy and uncertain times, our efforts continue to be in the best interests of our industry and you, our members.

Over the past quarter our engagements with government and policy makers have been focused on championing our homegrown industries and advocating for the prioritisation of homegrown energy over imports.

The North Sea, for over 50 years, has powered our country, created high quality jobs in industrial areas, created value in our economy and delivered energy security – and through supportive and pragmatic policy, it can do so for 50 more. It is that homegrown dividend that we need to unlock.

In the coming months, the UK government will make choices that will shape the future of the North Sea. The role that our domestic oil and gas will play, how we build out our renewable energy and unlock opportunities in carbon capture and storage and hydrogen. The implications of those choices will impact the economic future of the country and be felt by communities not just here in the North-East of Scotland but across the UK and in our industrial hubs.

This should not be a choice between tackling our emissions versus economic growth. We can deliver both. This should not be a choice of renewable energy versus domestic oil and gas. We need both.

We have work to do - let us keep going and please reach out. These are important times.

Europe

EU to fully turn off Russian energy

The European Union will end its dependency on Russian oil and gas in just a few years, it said June 17. This includes pipeline gas and LNG, oil and nuclear energy. At the same time, the proposal will ensure stable energy supplies across the EU, limiting any impact on prices and markets, although high energy prices have damaged industries across Europe.

EC president Ursula von der Leyen said the previous month that Europe had to completely cut off its energy ties with Russia and stop funding its war on Ukraine.

New contracts with suppliers of Russian gas – by both pipeline and LNG – will be prohibited from next January and imports under existing short-term contracts will be stopped by June 17, 2026. Imports under long-term contracts will be stopped by the end of 2027. All Russian oil imports will also come to a complete stop then.

The EU imposed sanctions on Russia in response to its war on Ukraine but last year gas imports rose compared with the year before. In its May statement it said its over-dependence on Russian energy imports was a security threat.

While Russian gas did not flow to the UK physically by pipeline, there was a lot of it within the European Union and so it kept the continental pipeline system supplied more cheaply than it has been since the exports shrank and wholesale prices rose. UK imposed trade sanctions against Russia in December 2022 which covered LNG and related technical and financial assistance.

EU member states will be asked to prepare national plans by the end of this year setting out how they will contribute to phasing out imports of Russian gas, nuclear energy and oil.

The REPowerEU Plan, introduced in May, sealed the EU's determination to wean itself off Russian energy while accelerating the rollout of renewable energy and improving energy savings and energy efficiency.

Not all EU countries want to stop buying Russian gas: Slovakia and Hungary have resisted the energy security plan which enjoys the support of the other 25 countries. They called energy policy a 'national competence.'

Independent power experts investigate Iberia's black-out

The causes of the 10-hour Iberian blackout of April 28 were still being investigated by a panel led by neutral experts, as of mid-June. The outage also affected a small area in France, close to the border with Spain. But the French grid quickly disconnected, keeping supplies safe. Miraculously, the very few deaths reported during the Iberian outage seem to have been due to the misuse of back-up small-scale generating equipment or poor ventilation.

In the immediate aftermath, the finger of blame was pointed variously at a shortage of grid inertia as most of the power was coming from wind and solar – often the case in Spain – or a transmission problem or a cyber-attack. However Spain's ecological transition minister Sara Aagesen, who manages the nation's energy policy, ruled the latter out, telling journalists June 17 that the cause was small grid failures setting off a chain reaction among larger grids.

The European National of Transmission System Operators -Electricity (ENTSO-E), their overall regulator Agency for the Co-operation of Energy Regulators (ACER) and national energy regulators have set up a joint panel of experts, led by representatives from TSOs that were not directly affected. In a June 6 post, ENTSO-E said: "The investigation is focusing on a number of questions, including on determining what triggered the initial generation trips in southern Spain and why the Spanish and Portuguese system defence plans were unable to halt the process that led to the full blackout of both countries."

First the panel will reconstruct the events and determine the causes. These insights will be completed and published in a factual report. Then it will establish recommendations to help prevent a recurrence, which will be published as a final report. At the moment of the incident, there were no oscillations and the power system variables were within normal operation range, according to the ENTSO-E initial findings.

NSTA, CES to harness the UKCS resources jointly

The North Sea Transition Authority (NSTA) and Crown Estate Scotland (CES) signed a Statement of Intent (SoI) May 16. It commits the two organisations to work together to realise the tremendous energy and carbon storage potential of the North Sea.

The SoI, which includes a pledge to progress net zero targets by helping different technologies share space, confirms that both bodies are focused on enabling sustainable North Sea business through a coordinated approach to managing the seabed.

The two organisations have distinct but complementary roles in relation to offshore energy and the use and management of the seabed and its resources, and will work together while recognising individual remits.

The SoI highlights common priorities such as working towards coordinated leasing and licensing of carbon storage, enabling carbon capture and storage projects to be developed effectively in Scottish waters in support of the delivery of net zero, and helping to meet UK and Scottish governments' net zero and decarbonisation targets.

NSTA includes wind in Pathfinder portal

The North Sea Transition Authority (NSTA) has relaunched its Energy Pathfinder portal following backing from by two trade associations Scottish Renewables and RenewableUK.

The industry groups have started encouraging members to promote contracting opportunities for wind energy projects on the platform.

NSTA CEO Stuart Payne said in a June 17 statement that: "The UK's offshore supply chain has the skills and expertise to service all areas of the UK energy sector, and make the transition a reality. That's why it's such good news that Pathfinder now has more opportunities in the wind sector, creating a one-stop shop for upcoming contracts."

NSTA said, Pathfinder hosted information for more than 20 offshore wind projects, which, following the upgrade to the portal, are now clearly categorised as floating or fixed-bottom

The initiative also enjoys the support of joint government and industry bodies, the Offshore Wind Industry Council and the Scottish Offshore Wind Energy Council.

Pathfinder answers the supply chain's calls for a clearer picture of upcoming work both onshore and in the North Sea, which enables them to invest in skills and technologies with confidence and ensure that resources are available when needed.

Originally launched in 2010 to help offshore service companies target opportunities for work on oil and gas field developments, Pathfinder has expanded in recent years. It now also hosts details of well decommissioning campaigns, operations and maintenance programmes and increasing numbers of energy transition projects, including carbon storage.

Pathfinder is a free, one-stop-shop for valuable information about opportunities to support scores of energy projects in the UK.

CCS

Government promises funding for Acorn

One of the UK's earliest CCS projects has come a step nearer, as the government promises a £200mn injection, which National Gas will use for infrastructure related to CCS projects

The government's Spring Spending Review included a major commitment to carbon capture and storage (CCS) technologies. Among the headline announcements was £200mn in funding for the Acorn Project.

Acorn said June 12 it looked forward to "developing the next phase of the project which will require both short-term and sustained long-term commitment from government to enable final investment decision."

NG will design and deliver a key onshore pipeline, SCO2T Connect which will transport CO2 from sites such as Grangemouth. It is expected to unlock billions in economic value, support nearly 18,000 jobs and secure the future of key sectors in Scotland and beyond.

NG CEO Jon Butterworth said in a June 13 statement that projects such as Acorn are key to decarbonising the economy, "securing Britain's energy and creating the jobs of the future. As Britain's national gas network, we're looking forward to working together with government and industry to deliver these important projects and realise the opportunity of a cleaner, more secure energy future for the whole country."

Secretary of State Ed Miliband visited St Fergus to announce the £200mn, while National Gas' head of stakeholder and business development Luke Rowlands represented NG.

As part of the visit, National Gas and the Acorn partners held a roundtable with the Secretary of State, who reiterated his desire for the project to be delivered at pace and expressed his commitment to helping achieve this.

The announcements at Spending Review represent major steps forward in enabling the decarbonisation of industry and delivering the infrastructure needed for a clean, secure energy future, NG said.

NSTA seeks bidders for more CCS projects

Carbon capture and storage becomes more urgent as the aspirational goal of clean power by 2030 and supply-side problems will require plenty of decarbonised gas-fired power plant

Upstream regulator North Sea Transition Authority (NSTA) has launched a bid round for more potential carbon storage locations.

Clean power generation depends on reliable, despatchable electricity which in turn depends on combined-cycle engines – or open-cycle gas turbines which start up even faster. Blue hydrogen also needs CCS to become carbon neutral.

NSTA has already issued permits for Eni in Liverpool Bay, the Northern Endurance Partnership off Humberside and Acorn off St Fergus. The round is due to close July 31.

The government has pledged up to £21.7bn of funding over 25 years to make the UK a global leader in carbon capture and storage, an industry estimated to support 50,000 skilled jobs in the long-term.

The technology is proven, although in the US it is used mainly as a means of enhancing oil production rather than sequestering CO2. Norway has operational projects and the Netherlands is hoping to start injecting into the Porthos project next year. The Dutch government took final investment decision in late 2023, about a year before the UK.

Companies submitting nominations will be required to submit spatial data and a high-level project description. This will allow the NSTA, Crown Estate Scotland (CES) and The Crown Estate (TCE) to consider any spatial planning interactions and opportunities.

The NSTA previously offered 21 licences in the world's first large-scale carbon storage licensing round, which concluded in September 2023.

The NSTA awarded its first storage licence in 2018, to the Acorn project. It will store emissions 100 km offshore, in geological formations 2.5km below the seabed. Hoever since then the project has been waiting for the government's next move.

A spokesperson for Acorn said: "These extensive areas of subsea acreage are key elements in Acorn's long-term strategy. The NSTA's award of these carbon storage licences is welcome news, as we continue to respond to the government's track-2 process.

The UK Continental Shelf has the potential capacity to store up to 78bn tonnes in depleted reservoirs and saline aquifers, so it is expected that industry will be able to nominate good quality sites for a prospective licensing round.

NSTA CEO Stuart Payne said: "Carbon storage is a crucial part of the energy transition and an essential element of the path to net zero. We've been talking about carbon storage for many years, but now we have reached the milestone of having permitted two projects which will turbocharge the UK's drive to unlock investment, jobs and economic growth and reach net zero emissions by 2050.

"We are pleased by the ongoing enthusiasm from industry, and aware that pace is needed as we help to effect the transition, and that is why we are calling for nominations now."

Ithaca buys more of Cygnus field

- The company's appetite for low-risk assets remains strong
- Seller to focus on CCS, extends Norwegian imports

A few months after buying the Seagull stake from Japex, independent producer Ithaca Energy has more than doubled its stake in the southern basin Cygnus gas field, it said May 20. Centrica-controlled Spirit Energy parted with the 46.25% stake with an effective date of January 1 for a headline figure of £116mn. Subject to regulatory approval, Ithaca Energy's operated interest will go up to 85%. "This is the type of deal we like," the company said.

Centrica owns 69% of Cygnus and said it expects to receive £80mn from the sale. Cygnus is also in line for £99mn in decommissioning liabilities, making about £215mn in all.

Ithaca's proven plus probable reserves will grow by 23mn barrels of oil equivalent (boe) and pro forma production by about 13,000 boe/d. Ithaca said the deal enhanced the balanced production mix with the addition of high-quality assets. And the 2P reserves worked out at less than $7/boe, "which we believe is good value for equity in a producing field that we know and understand."

Centrica said the deal was "strongly aligned with its strategy to maximise value from Spirit's remaining reserves, delivering attractive upfront cash consideration and provides further value by transferring long-term liabilities."

Ithaca's executive chairman Yaniv Friedman said that the deal "further demonstrates our growth strategy in action. By increasing our stake in Cygnus we add incremental reserves and production to our portfolio at attractive valuation metrics that ticks all of our investment criteria, without adding any complexity."

Centrica CEO Chris O'Shea said: "Through this disposal we are taking another step in reducing our exposure to gas production while accelerating the delivery of enhanced value to shareholders, allowing the Spirit team to further focus on delivering the largest carbon storage project in Europe at Morecambe Net Zero."

Production from Cygnus started in 2016 with 11 wells now producing and three more infill wells approved and expected onstream over the next nine months. Beyond those wells, Ithaca said it saw "significant upside potential through further infill drilling beyond the next three approved wells."

More Norwegian gas

Centrica also extended a 20-year gas purchase contract with Equinor, committing it to 5bn m^3/yr to 2035.

The contract also allows for gas sales to be replaced with hydrogen at some point. Centrica is planning to convert the Rough storage site into a hydrogen facility. Both the Norwegian Langeled gasline and Rough deliver gas to the UK through the Easington terminal.

The deal represents a significant investment in the UK's future, showing that Centrica will make bold investments that drive forward the energy transition while delivering value for our shareholders, Centrica said.

Jersey's 'year of 2 halves'

Independent producer Jersey Oil & Gas (JOG) is "financially secure and funded for execution of the 70mn-barrel Greater Buchan Area redevelopment programme," it said May 28 as it announced its results for 2024 – which it called 'a year of two halves'.

Farm-outs with NEO and Serica Energy mean that JOG is carried for its 20% share of the costs to take Buchan through to field development plan (FDP) approval. Working on the field development plan took up the first half of 2024 and the second half was dedicated to responding to three government consultations about the UK North Sea.

"It is likely that a positive outcome from the consultations would lead to FDP approval being targeted during 2026," it said.

CEO Andrew Benitz said: "Given the significant contribution that the industry can make to UK economic growth, jobs, tax revenues and both the energy transition and energy security, all of which are priorities for the current government, we are optimistic that such consultations will provide sensible answers to the issues being considered.

"The company remains in a solid financial position and we continue to evaluate opportunities to enhance the long-term value of the business," he said

These comments were echoed by Serica's CEO Chris Cox. In the producer's own trading update May 22, he expressed excitement about the potential for the conversion of a material portion of its 2C resources and the progression of other prospects. But "committing to invest in such growth opportunities will only be possible with an appropriate regulatory and fiscal environment." He said today's commodity prices "very clearly do not represent windfall conditions."

British gas demand rises as coal goes offline and wind proves less reliable

Total National Transmission System (NTS) demand for last winter (2024/25) was up 3% year on year. Gas exported to the continent was down 78%, according to the grid operator national Gas in its Winter Review.

But NTS demand for power was up by 18% as there were more days of very low wind and the last coal-fired station also came off line. Gas exports to Ireland were also up 13% and non-daily metered sites took 1% more on a weather-corrected basis but by 5% in real terms (1.3bn m³ more). While not a particularly cold winter, it was colder than 2023/24 which was the second warmest winter since 1960.

Supplies in winter 2024/25 were diverse, with the UK and Norwegian continental shelves providing "the steady supplies we would usually expect," NG said.

Flexible supplies came predominantly from higher year-on-year deliveries of liquefied natural gas (LNG) and storage but imports from continental Europe also provided some supply when it was needed.

The average share of power generation from gas rose year on year, as has the peak level (65%) of electricity generation from gas on a single day. NG also saw the peak half-hourly share of electricity from gas go up, to 73% last winter.

Weather can cause wide variations in demand for gas-fired power generation over short spaces of time. November 2024 was very much a tale of two halves: in the early part, wind output was low and as a consequence demand for gas was high. During that period gas peaked at 24 GW which accounted for 63% of the electricity generation mix.

Then Storm Bert led to more wind and gas dropped as low as dropped to as low as 2.5 GW and only accounted for just 8% of generation at times. At least 60% of power was generated from gas for 267 half-hour periods.

Storage stocks for the first half of winter were comparable to the range seen over the previous four winters), the cold weather in January drove some very high storage withdrawals for a number of days which meant that stocks depleted to a much lower level. From February onwards, storage tended to cycle with periods of injections and withdrawals and, by the end of winter, stocks were comparable to previous years.

Storage withdrawals seem to have been used in preference to LNG during parts of the winter, particularly during January. This does not appear to have been caused by a shortage of LNG but more of a market decision.

During the summer period when demand is typically lower, NG will carry out significant levels of asset maintenance on 900 km of pipe and all our 21 NTS compressor sites and also undertaking inspections on over 700 km of pipe.

Some of the work is being done to bring compressor stations to lower emissions in line with the Industrial Emissions Directive: Huntingdon, Peterborough and Hatton. New units at Peterborough and Huntingdon are now complete and operationally accepted.

Min, max and average daily winter NTS demand for power (mn m³/d)

	Max	Avg	Min
2020-21	93.30	57.50	18.00
2021-22	92.20	51.80	15.30
2022-23	100.80	51.10	11.10
2023-24	102.60	42.80	11.60
2024-25	107.40	50.70	15.40

Source: National Gas

bp and Libya's NOC Sign MoU to Explore Redevelopment of Major Oilfields

Bp has signed a Memorandum of Understanding (MoU) with Libya's National Oil Corporation (NOC) to explore potential redevelopment opportunities in the expansive Sarir and Messla oilfields located in Libya's Sirte basin; this exploration may extend to neighbouring areas to further the understanding of wider unconventional oil and gas potential.

The agreement includes an outline for bp to assess a variety of technical data and measures for effective collaborative work with the NOC to evaluate occurring opportunities and determine the viability of future developments and further exploration initiatives.

"This agreement reflects our strong interest in deepening our partnership with NOC and supporting the future of Libya's energy sector. We hope to apply bp's experience from redeveloping and managing giant oil fields around the world to help optimize the performance of these world-class assets."- William Lin, bp Executive Vice President - gas & low carbon energy

bp Divests Dutch Retail and EV Charging Business to Catom

Bp has agreed to sell its mobility & convenience and bp pulse business in the Netherlands to Catom, a fast-growing player in the arena of trade, distribution and fuel sales within the region. As part of bp's wider $20 billion divestment strategy, this transaction aligns with aims of reshaping and streamlining its downstream operations to focus on integrated energy solutions. The deal includes approximately 300 bp-owned retail sites throughout the Netherlands, plus 15 existing EV charging hubs with an additional 8 currently in development. This strategic divestment is reflective of bp's continued efforts to reposition its downstream portfolio to be better aligned with its long-term energy transition goals. While for Catom, the acquisition marks a notable milestone in expansion efforts to strengthen its position in the Dutch fuel and energy market.

National Gas sees H2 as its flexible friend frilinepack sub

National Gas has secured £500,000 from the regulator Ofgem to develop a new underground hydrogen storage system. Designed to provide resilience through the siting of hydrogen storage facilities at key points in the network or next to major energy users, it could lead to a pilot project next year, NG said June 11.

Energy storage specialists Gravitricity's system H2FlexiStore is designed to hold up to 100 tonnes of green hydrogen in purpose-built underground lined shafts. . Salt caverns by contrast – the usual sort of gas storage facility, formed by hollowing out a cavern using steam, require a naturally-occurring thick seam of salt,

It uses lined geological shafts to store up to 100 tonnes of pressurised hydrogen at 200 bar, equivalent to 3.3 GWh of energy (*see diagram below*).

A consortium includings Southern Gas Networks, Guidehouse, Edinburgh University, Energy Reform and Premtech will use the funding to design and model a working system over the next six months, ahead of a potential demonstration phase next year.

Last year, National Gas led a feasibility study, which found that H2FlexiStore would be the best technology to provide locationally flexible hydrogen storage.

Strategically located nodal storage would improve the system's resilience, in the same way that linepack – a large concentration of natural gasin the pipeline network – does today.

If all goes well, the team could deliver a technical demonstration project supported by multi-million-pound funding from the Strategic Innovation Fund.

This would in turn help realise Project Union, the repurposing of the existing gas grid for hydrogen.

Gravitricity's co-founder and executive chairman Martin Wright said that with Ofgem's support, it could prepare technically and commercially for a demonstration project and early commercial projects. He said that many regions in the UK, particularly Scotland, have no alternative or existing geological storage solutions.

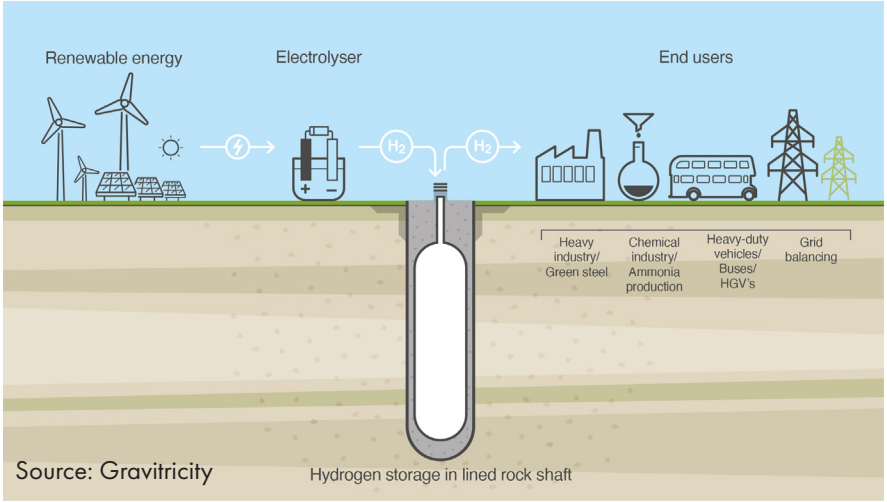
NG's innovation analyst Kelvin Shillinglaw described the project as a critical step towards a hydrogen-powered future using the gas network with no loss of operational flexibility and at lower costs for consumers.

Mr Wright said that H2FlexiStore would enable network operators to extend the life of assets as they transition to hydrogen and manage linepack swings. This would improve the resilience of the network and overall energy security.

He added that in addition to its clear application in the UK, Gravitricity's underground storage technology is likely to be deployed more widely in export markets as other countries seek to deploy their own hydrogen solutions.

More conventionally, the biggest gas retailer Centrica and Norwegian Equinor are developng plans to convert the Rough natural gas storage facility into a scalable 2.10-GW green and blue hydrogen storage facility to supply hydrogen to Humberside, where it would also be consumed. Centrica says This transition would safeguard many of the existing jobs at the terminal, whilst creating more opportunities for employment.

Diagram showing a green hydrogen facility and offtakers



NG eyes EU partners

At the World Hydrogen Summit 2025 in Rotterdam in May, National Gas announced its strategic partnership with Dutch transmission system operator Gasunie.

The state-owned company also operates a grid in northern Germany, which is an extension of it. NG called it a "pivotal step towards realising our shared sustainability ambitions."

National Gas Business Development Director Luke Rowlands and his counterpart at Gasunie Bert Kiewiet signed a memorandum of understanding that "establishes a comprehensive framework for both companies to work together to advance decarbonised energy solutions across multiple sources, including natural gas, hydrogen, biomethane and carbon capture and storage (CCS) technologies."

The MOU recognises that no single technology or pathway can address the complex challenges of climate change and the energy transition. And so the two are investing in "pragmatic research and development across various complementary routes."

National Gas has also worked with other continental pipeline operators including Gascade in Germany and Fluxys in Belgium.

From rigs to renewables, OEUK mirrors the industry

Laure Mora, OEUK Business Transformation & Growth Manager

What's the difference between working in green hydrogen, geothermal, or oil and gas? According to Laure Mora, not much – at least when it comes to the mindset. "You need to thrive under pressure, react quickly and sometimes, yes, be a little explosive," she says.

Ms Mora joined OEUK in September 2024 as the manager for business growth & transformation. But her career did not begin in a suit and heels. For the first 15 years, she was deep in the field – working on oil and gas rigs on the dusty plains of Colorado, the scorching Arabian desert and the North Sea, where she worked as a drilling engineer on the decommissioning of the Brent complex.

Her curiosity about the broader energy landscape led her to Sweden where she joined a small geothermal technology company. They were specialising in powerplant equipment, stemming from their waste heat recovery expertise and she was the only employee with drilling expertise. This made her realise the value of cross-disciplinary knowledge. "It became clear to me that the more diverse the experience within a team, the greater its potential for innovation and success," she said.

Returning to Aberdeen, Ms Mora brought her knowledge of small enterprise and innovation to the Net Zero Technology Company, where she supported start-ups by running a clean energy start-up accelerator programme. This was quite the eye-opener as she worked alongside amazing entrepreneurs and engineers to understand the technologies of the future and what was needed to grow them in the UK.

This also led her to work with an electrolyser manufacturer start-up based in Oxford. In this role, her expertise and network from her oil and gas years proved to be invaluable.

All in all, an experience that proved how transferable her oil and gas expertise truly was.

After two decades spanning traditional and emerging energy sectors, Ms Mora found a natural home at OEUK. Representing the UK's integrated energy industry, OEUK reflects the very essence of her career: a blend of legacy and innovation, tradition and transformation and above all, a curiosity and a deep passion for all things related to energy.

"At OEUK, I can use my broad experience to contribute to an organisation that truly understands the importance of a diverse and interconnected energy sector. An organisation that knows that our energy future isn't about choosing sides. It's about collaboration, shared knowledge, and building bridges between sectors," she says. "There's no divide. No need for a choice that excludes one another and more importantly so, there is no need for polarisation in the debate about our energy future."

Industrial strategy: UK needs know-how and affordable energy

Two influential associations – IMechE and the Confederation of British Industries – have called on government for changes to attract more engineers and to lower energy prices

The Institution of Mechanical Engineers ((MechE) has responded to the government's plan for an industrial strategy – a means to boost the national economy.

Chancellor Rachel Reeves said the government had a "10-year plan to deliver the certainty and stability businesses need to invest in the high-growth sectors". The first step was to publish a green paper, Invest 2035: the UK's modern industrial strategy, setting out the plan in draft format and ask stakeholders 35 questions about the strategy.

The IMechE's policy team worked with expert member committees across the Institution to draft a response. Among the messages for the government were that engineering is a foundational sector and technology development, investment and productivity improvements are engineering-related topics that will be important to ensure growth.

Carbon emissions need a (technology neutral) price set in a manner that is stable and predictable for businesses but which rises over time to impel decarbonisation. .

Trading or taxing carbon makes cleaner technologies relatively cheaper. The UK's independent emissions trading scheme (ETS) will need to evolve and cover more sectors. At the moment it is at a discount to the European ETS. A carbon border adjustment mechanism is another way to ensure that imported goods reflect the emissions produced as a by-product of their manufacture.

The low-carbon energy sector will need 400,000 new workers by 2050, the majority of whom will require engineering skills. In addition to driving domestic sustainability, the UK can position itself as a global leader in green technologies. By exporting engineering innovations, the country can bolster its competitiveness in global markets.

Mechanical engineers are already playing a leading role in clean energy technologies, such as wind turbines, hydrogen fuel cells and electric vehicle (EV) powertrains. By 2050, the energy sector must fill 400,000 roles, 65% of which are new jobs.

Investing in infrastructure and clusters has helped to speed up high-integrity engineering solutions, especially when co-located with industry clusters. These sites are places where innovative ideas and approaches can be introduced and showcased to validate and support scale-up. This proximity enables faster, more efficient development by bringing together all players in the value chain; an approach IMechE believes should be prioritised.

Sustainable growth and productivity increases need long-term strategic policy decisions.

Government procurement, financing mechanisms and education and skills development are among the levers that government can pull to create a supportive ecosystem. This alignment is essential for providing stability and direction to industry sectors, enabling businesses to plan confidently for the future and ensuring that the UK remains competitive on a global stage.

CBI anniversary speech draws on historical parallels to make point about need for industrial growth

In a mostly thoughtful speech that compared the 1960s with today, the Confederation of British Industries CEO Rain Newton-Smith reminded guests at the annual dinner June 5 of the concerns of 1965 when the CBI was set up. Then, the country faced low growth, a balance of payments crisis and what was then the European Economic Community. Harold Wilson's Labour government said there could be only one answer: a mission for growth. The UK faces similar problems today but with the addition of war in Europe and an isolationist US president.

Today's Labour prime minister, she said, was putting our country's prosperity ahead of politics, negotiating trade deals with India, the EU and the US. But trade deals abroad are only part of the picture. The lion's share is the strength and resilience of our economy at home and "a serious plan for competitiveness.... An industrial strategy that helps every business… to shine."

However she also said "affordable, reliable, low-carbon energy" is the road that gets us to economic security, powering our future "using our own, independent, renewable resources" and "free from volatile prices and hostile actors." This is similar to the view of Ed Miliband (*see opposite page*) and the solution to this trilemma seems as remote as ever.

The CBI has launched a national Industrial Strategy as business is straining under £24bn/year in extra costs resulting from higher National Insurance and the higher National Living Wage. And on top of that, UK firms pay the highest electricity bills in the world. No business was untouched by that.

New survey data shows over the past three years almost 90% of UK firms have seen their energy bills rise – a third by more than 50%. "What we need is a serious plan alongside the industrial strategy to cut energy costs, manage the shift from fossil fuels and boost efficiency, storage and flexibility," she said.

Bringing more renewables too fast on to the grid without storage can push electricity prices up. That's why we're calling on government to remove policy costs from electricity bills, especially for energy-intensive industries. Metals and chemicals are bedrock industries and bear the heaviest load. They need fair prices and targeted support to decarbonise now.

Joint UK-IEA energy security conference

Energy security is national security – and a fundamental duty of government

L-R: Fatih Birol, Ursula von der Leyen, Keir Starmer, Ed Miliband

The UK and the International Energy Agency (IEA) hosted a conference in London late April to discuss energy security. Chaired by IEA CEO Fatih Birol, speakers included the president of the European Commission Ursula von der Leyen, UK prime minister Keir Starmer and his Secretary of State for Energy Security and Net Zero, Ed Miliband (*see picture above, courtesy IEA*).

Mr Starmer told the conference: "Energy security is national security," and it is therefore a fundamental duty of government.

Mr Miliband, a proponent of renewable energy generated within the UK, said that the weaponisation of energy was a threat to UK citizens. Countries need to collaborate to secure uninterrupted supplies of affordable energy, he said. He has said that prices will fall as the UK lowers its dependence on imports.

The EC has published a timetable for phasing out Russian gas imports to reduce Russia's ability to finance the war. Flows through pipelines under Ukraine have stopped but much still arrives as LNG; and a pipeline still carries some gas under the Black Sea into the Balkans via Turkey. However the gas from Russia is replaced, much of it will be more expensive and come with greater carbon emissions embedded in the transport.

Also present were OEUK director of HSE & Operations Mark Wilson and Ukraine's energy minister German Galushchenko.

The UK has set up a Joint Maritime Operations Co-ordination Centre (JMSC) which employs cutting-edge technology to provide 24/7 monitoring of UK waters. Using personnel from across government it can swiftly identify maritime security incidents and enable the effective co-ordination of the UK's aerial and at-sea assets to respond – ensuring the safety and security of all using our seas.

JMSC offers government departments and agencies a central point of UK maritime expertise and understanding to assist policy and decision making. JMSC works internationally - with states and with key international organisations.

OPEC welcomes IEA's 'new approach'

In a statement published on its website April 23 – a few days before the London event – the Secretary-General of the Organisation of Petroleum Exporting Countries (Opec) Haitham Al-Ghais said it was "positive to see the IEA refocusing on energy security after veering away from this fundamental goal."

Take away secure energy supplies, he said, and a lot of things we take for granted would "come to a standstill. Millions of jobs would also be lost. Economic growth would quickly go into reverse. It would create havoc to our everyday lives."

He said the IEA has pushed for "ideologically driven net zero goals, ones that have often been accompanied by targets or timelines that lack a grasp of what meeting them truly involves. In 2021, the IEA published its 'Net Zero by 2050 – A Roadmap for the Global Energy Sector' report. It created uncertainty for governments, businesses and investors." He cited an interview with Fatih Birol in *Deutsche Welle* where Mr Birol said its net zero scenario was used as a "Bible of the energy world, the finance world and many, but not all, governments." Several US senators have also talked about defunding the IEA (#57)

Initial net zero policies were also often accompanied by calls to stop investing in oil, gas and coal, with the IEA stating in its 'Net Zero by 2050' that "there is no need for investment in new fossil fuel supply."

Today the world uses more oil, coal, gas, in fact, all energies, than ever before. So the "negative impact of shifting into policy based on wishful thinking, and not driven by actual data and trends, is a disservice to consumers and can have far-reaching consequences," said Opec's spokesman.

Opec believes that energy security must go hand-in-hand with reducing emissions while ensuring sustainable development of all energies, technologies and understanding of the needs of all.

Energy Security Conference

Unpredictable, lethal but often imprecise, today's threats to offshore platforms and infrastructure demand a different kind of response and hence heightened vigilance

Offshore Energies UK took the decision to develop a security and resilience conference in 2025 based upon the evolving security landscape, both physical and cyber, against the backdrop of global geopolitical instability. This first conference, titled 'securing the future energy supply of the UK', was held in Aberdeen April 30.

Energy infrastructure is vulnerable to enemy attack as it presents a large and immovable target and its destruction quickly 'softens up' the host country.

The conference was designed to underline why energy security is national security. Speakers and delegates shared their experiences of offshore threats and vulnerabilities with a view to building in further resilience into their security and resilience arrangements. This included a focus on organisational and personal control measures.

OEUK is extremely grateful to the sponsors of the conference – Dardan Security, Restrata and F24 – and the excellent line-up of exhibitors/presenters. They included leading energy industry security experts, defence policy-makers, politicians and academic experts.

The speeches addressed the need for solutions to the wide range of current and emerging threats that face the UK, directly or indirectly. These threats include: disinformation/misinformation/ malinformation; hostage taking; the use of drones for unapproved activity; illegal vessel activity; climate activism; sabotage; and espionage, the latter including insider attacks, data breaches and cyber crime.

There was a strong media interest through the build-up and during the conference with the key messages being that the industry has a pragmatic and proportionate approach to security and resilience arrangements via a planned and well exercised approach.

However, vigilance remains important as the political and technological situation evolves – Kiiv's daring series of drone raids on airfields far from Ukraine demonstrated this, with its psychological impact also shaking Moscow's confidence and reminding the US that Kiiv still holds a strong hand.

Wider use of machine learning and artificial intelligence to build situational awareness will also become more important.

The final key message before the event was that industry and government are working together, as evidenced by such groups as the OEUK industry resilience and security committee.

In brief, the conference found that:

Security and resilience challenges are complex and complicated with a wide range of threats and vulnerabilities that we should be evaluating as the situation changes. Complacency must not be allowed to undermine our security arrangements and our control measures should be assessed via robust testing. Recommendations included:

- Engage competent people with the capacity to bring in divergent and conceptual thinking
- Ensure that organisations have an appropriate security mindset that is curious and aware of the main threats and vulnerabilities
- Include stakeholders who can provide resilience support across the lifecycle of an event – preparedness, response, recovery – to generate greater understanding
- Communication that provides clarity and focus via a common language.
- Response plans need to be comprehensively tested to ensure that preparedness is at the optimal level. The time to fail is during the training, not when responding to an incident itself.

Based upon feedback there is a drive to repeat the conference and in 2026 the security and resilience conference will be held again in May in Aberdeen. If you are interested in sponsoring, exhibiting or presenting please contact Mark Wilson (mwilson@oeuk.org.uk).

Offshore Aviation conference

Drones – and how to define and deliver competence and capability – were the dominant themes at this year's Aviation conference.

Held at the Union Kirk, Aberdeen on May 7 and chaired by Offshore Energy UK's health and safety manager, Graham Skinner, the event brought experts from across the sector together to reflect on what more can be done to support safe offshore aviation operations.

In an opening address, Chris Cooper, Flight Operations Inspector for the UK Civil Aviation Authority, noted the increasing presence of drones in the industry airspace, with 500,000 in the UK alone.

Coupled with the increasing complexity of offshore aircraft, the challenge they pose is how to ensure that everyone keeps themselves informed of the rapid pace of change and how that impacts operations.

Human factors and operational safety came under the spotlight in a fascinating talk by Chris Stirling, the managing director of safety training organisation, Enhancing Excellence. Applying years of aviation training experience to daily activities, Mr Stirling explained how to build operational resilience through training on the often-unpredictabld human factors in a session about coaching for capability.

He emphasised that – in addition to excellent technical skills – safe operations require a focus on resilience, capacity and culture through coaching.

Human resilience, he explained is about always being alert so that when things do go 'off script' there is an acceptable alternative.

His focus is on building a culture where everyone on the operation is equipped to intervene to mitigate and handle risk.

Effective coaching of aviation crews must encourage people to speak up, challenge norms, share new ideas and ask for help when needed. With air crews often changing in a fast-moving industry, Mr Stirling emphasised the value of a culture that enables rapid team building, promotes trust and sets the tone for de-briefing sessions that encourage all participants to dig deep when examining where potential risks might lie. Done in this way, these sessions become a highly effective tool rather than a formality while creating a culture that builds lasting capacity and capability across teams to support safe offshore operations.

Keith Chalmers, the search and rescue manager at Offshore Helicopter Services UK, presented an update on ongoing operational challenges for pilots transporting casualties to hospitals. Efforts are going on to upgrade Aberdeen Royal Infirmary's (ARI) helipad to comply with safety standards but for the time being, casualties have to be flown to the international airport and then transported by ambulance to the ARI.

Noting that constructive discussions with regulators continue in terms of ensuring patients get to urgently needed treatment on time, he hoped the situation would be resolved soon.

OEUK's aviation conference attracts delegates in a variety of roles in the sector including pilots, engineers, safety teams and group crew. Cadetships and apprenticeships are vital routes to gaining skills in the aviation sector and Adesola Arunah, HR manager UK Bristow Helicopters focused on long-established initiatives to address the talent shortage and build a highly motivated skilled workforce.

Session 3 focused on programmes being NHV focusing on aviation safety technology in a presentation by Sean Newlands, deputy continuing airworthiness manager. Eion Marshall, Helicopter Pilot Instructor at Leonardo Helicopter Training Academy outline how training sessions now comprise real-time assessments of students using a range of simulations geared up to customer requirements which facilitate highly effective de-briefing sessions.

The full-day event continued with an update on optimising safe and effective installation-based drone operations presented by Grant Blackaby from Ithaca Energy with input from Christopher Wilson, TEXO in a lively double act.

Annual conference

We welcomed over 300 delegates to 'The Future of Our North Sea' at the P&J Live in Aberdeen.

We were delighted to see so many people at OEUK's Future of the North Sea Conference 2025. The event drew considerable political and media interest, and invaluable contributions from our member companies helped us deliver an excellent event.

It was a week in which energy remained at the centre of national conversation and OEUK was out in force to make the case for our industry and bring its strategic national importance to life.

The week began with the publication of our independent report from Westwood Global Energy Group which provided ample opportunity to discuss its findings. Released ahead of the conference, the report provides compelling evidence that the UK can meet half of its oil and gas needs from domestic production through to 2050. It shows that with the right policy environment, we can unlock an additional £165 billion in economic value, protect 200,000 jobs, and meet our climate goals.

The report received widespread media coverage across national, trade and regional outlets including The Scotsman, Energy Voice, Yorkshire Post, Bloomberg, The FT, STV, BBC, The Daily Mail, and The Independent. Our message to government is clear: back pragmatic, homegrown production to secure our energy future.

We welcomed over 300 attendees from across industry, regulators and the media. The event was covered by major outlets and included a live interview that David Whitehouse gave to BBC Radio's Good Morning Scotland before delivering his keynote speech to delegates. The broadcast provided OEUK with a valuable opportunity to reiterate the key points that homegrown energy has a lower carbon footprint and is good for the workforce and good for the economy.

With a focus on present day challenges and opportunities, our conference provided the ideal platform for repeating the crucial message that this is not about oil and gas versus wind—it's about whether we prioritise homegrown production over imports. The UK is now importing 40% of its energy, a record high, and it is policy decisions—not geology—that are driving the accelerated decline in North Sea output.

One of the keynote speakers was Dan McGrail, who since the conference has been appointed permanent chief executive of GB Energy. He stated his belief that to set up a publicly-owned energy company, there must be a technology focus at its core. He told conference delegates, "I don't want GB Energy to be an investment vehicle. Our ambition is to be an energy company."

All in all, this was a week during which we were pleased to see strong engagement on the findings of the Westwood report and wider recognition of the strategic role of the North Sea in the UK economy.

Flotation, Aberdeen Port host Offshore Energies UK press visit

Offshore Energies UK member companies Flotation Energy and the Port of Aberdeen joined OEUK's media team to host a party of 11 senior journalists on a trip to the world's first offshore floating windfarm at Kincardine 15 km off the coast. There was also the prospect of a trip to the new £420mn South Harbour which is already helping to boost Port of Aberdeen profits.

The group included business and energy specialists from the BBC and STV, Politico, the Daily Mail and The Herald, as well as trade media and Radio France International, the equivalent of the BBC World Service.

The trip coincided with the launch of OEUK's 2025 Wind Insight report which sets out the challenges facing the industry, the prospects for the government's Clean Power 2030 goals, and the UK's expectation of becoming a major wind energy exporter.

Journalists were able to have relaxed conversations with senior executives from both organisations and explore the prospects for Kincardine's successor floating wind farms, Green Volt and Cenos.

While Kincardine's seven turbines have a capacity of 50 MW, Green Volt being developed jointly by Flotation Energy and Vårgrønn, will produce 560 MW from 35 turbines. It will be 80 km offshore, far out of sight of any protesters and will cost around £3bn.

It is expected to become Europe's largest commercial-scale floating wind farm, contributing significantly to the UK's renewable energy targets and supporting the decarbonisation of nearby oil and gas platforms.

The Cenos Wind Farm also being developed by Flotation and Vargronn is even further offshore, 20 km northeast of Scotland. Its 70-100 floating turbines will be anchored in waters more than 90 m deep with a combined capacity of up to 1.4 GW.

Meanwhile Aberdeen Port is aiming to become the UK's first net-zero port, offering innovations such as hybrid tugboats and shoreside electricity connections so ships can shut down engines while they are in dock.

The Port handles 43% of all Scotland's marine traffic, supports 12,000 jobs and generates £1.5bn in economic value to the country.

Representatives from a variety of other OEUK member and non-member companies joined the journalists for a dinner in the evening to discuss the wider issues affecting the North Sea oil and gas industry, carbon capture and hydrogen.

The journalists all said the experience had significantly increased their understanding of the basics of energy production, the complex economic dependencies of its different elements and organisations, and the challenges of educating policymakers.

Detailed and well-informed broadcast, online and print reports were published by the various outlets afterwards, well reflecting what the teams wanted to convey.

We were also able to combine this messaging with publication the following day of two opinion pieces by our CEO David Whitehouse writing for The Times, and Mike Tholen our policy director whose commentary appeared in the Sun.

We are keen to extend the opportunity to host such highly productive media visits to our member companies. Any interested organisation with a news story to tell and a production or supply chain facility to be demonstrated, is invited to contact media@oeuk.org.uk.

Cenos Offshore Windfarm

Read our latest Offshore Wind Insight here

OEUK Events

Offshore Safety Awards

Indsutry coming together to share best practice and learnings at this free to attend leading awards celbration day.

Members of the offshore energy sector gathered from far and wide (and near) on Tuesday July 1, to recognise safety excellence across the industry. Held at the Aberdeen Beach Ballroom, befittingly located in the operational heart of Britain's energy sector. Sponsored by Torus, the award was a joint initiative by Step Change in Safety and Offshore Energies UK (OEUK) to celebrate individuals, teams and organisations sustaining and enhancing safety standards across offshore operations.

Award for Major Hazard Awareness
Sponsored by CNOOC International
Colin Deddis, Anasuria Operating Company
Recognising an individual, people or team that has enhanced and refined a major accident hazard system in risk management, system efficiency, reliability or operability.

Award for Wellbeing
Sponsored by IntrospeXion
Andrew Beckley, TotalEnergies & Steve McIntosh, Healthoutfit
Recognising an individual or team that has driven improvement in company wellbeing initiatives and/or their working environment, spanning both mental and physical health.

Award for Safety Representative of the Year
Sponsored by OPITO
Doug Walker, PBS
Recognising a committed Elected Safety Representative who has influenced the safety agenda, culture or behaviours at their worksite.

Award for Workforce Engagement
Sponsored by Salos Sunesis Limited
Adam Mason, PBS
Celebrating an individual, multiple people or a team that has actively engaged with co-workers in safety matters, contributing improvement in work safety culture and worksite performance.

Award for Sharing and Learning
Sponsored by Spirit Energy
Brian Innes, Stena Drilling Ltd
For an individual or team who have shown active collaboration, influenced or elevated learning and sharing culture within the realm of safety at work, or within OEUK or Step Change in Safety.

Award for Aviation Safety
Sponsored by Swire Energy Services
Andrew Cowx, Offshore Helicopter Services
Celebrating an individual or team who have demonstrated their passion for safety in the aviation sphere. This has been done by leading by example and continuously striving to better existing safety cultures, behaviours and performance in the aviation environment.

Award for Decommissioning Safety

Brent Charlie Decommissioning Team – Prep of Topsides Removal, Shell UK Limited

Recognising individuals or a team who have shown a passion for upholding and elevating safety operations, positively influencing safety culture.

Award for Maritime Safety

Bryan Irvine, Anasuria Operating Company

Celebrating an individual(s) or team who uphold exemplary safety standards in the maritime environment, but also actively challenge standards by continuously trying to elevate safety culture.

Outstanding Contribution to Safety

Darren Sutherland, Borr Drilling

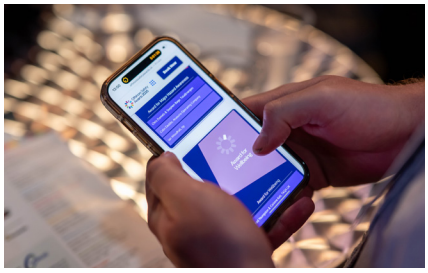
Spotlighting an individual who has made ongoing positive contributions to the energy industry and serves as a role model that inspires others.

Award for Site Leader

David Meade, Harbour Energy

Celebrating an enthusiastic and committed Site Leader who has demonstrated positive influence on the safety agenda, culture and behaviours.

And a special shoutout to all nominees and our members who also continuously work hard to ensure optimal safety and excellent industry standards.



MEMBER NEWS IN BRIEF

Contracts and corprate.

Helifuel deal for OEG

OEG Group has landed a multi-year contract, managing offshore helifuel systems in the North Sea and providing helifuel tanks on a serviced rental basis for a major UK operator. It will also offer refuelling training at its Portlethen facility in Aberdeenshire.

UK logistics manager Clive Hoskisson (*below*) said: "This contract award highlights the value that we deliver for our customers as well as our ongoing commitment to safety and reliability in our equipment and service delivery." He added that the helifuel training enhanced offshore safety as it adheres "to the highest industry standards in the North Sea and other regions.

ASCO wins major contract

ASCO has secured a landmark five-year contract with a major North Sea energy operator, reinforcing its position as the leading logistics provider to the energy industry, it said June 13.

Worth about £150mn, it starts next month and is one of the most comprehensive logistics contracts in its recent history. ASCO said the contract "underscores industry confidence in ASCO's proven ability to deliver mission-critical support for complex offshore operations in one of the world's most demanding energy environments."

ASCO's approach combines digital innovation with a sustainability-led model which "has proven effective in helping operators manage complex offshore supply chains," it said.

Wood lands 3 extensions

Engineering consultancy Wood has secured three offshore contract extensions worth a combined $118mn for Shell UK, Dana Petroleum and CNOOC International's UK business, it said May 7. Among the assets are some big names: Shearwater, Nelson and Penguins for Shell; Golden Eagle and Scott for CNOOC; and the Triton and Western Isles floating production, storage and offtake vessels for Dana.

Operations head Steve Nicol said that last year Wood secured all its contract renewal and extension options in the UK North Sea. So "continuing this success reinforces our position as a trusted long-term partner for operations solutions in the region."

He also said Wood had "an unmatched legacy in operating and maintaining North Sea energy infrastructure. Our long-standing clients continue to partner with us… to ensure a reliable, safe and sustainable energy supply."

The contracts will continue to be supported by around 500 Wood employees in Aberdeen.

Bilfinger works on LDZ

Bilfinger UK has this year secured a multi-million-pound contract with Cadent to update critical elements of the UK's largest gas distribution network. The 12-month project includes civil, mechanical and electrical elements and the pipelines will be designed to allow for hydrogen transport when that becomes necessary.

The contract covers four sites: two in the northwest, one in the Midlands and one near Cambridge.

Bilfinger said its partnership with Cadent reflected its "commitment to innovation, efficiency, and sustainability, and we look forward to continuing our collaboration to meet the challenges of net zero and securing the UK's energy supply."

...and acquires specialist clean gases company

Industrial services provider Bilfinger has acquired UK-based nZero, with effect from May 12. The deal includes subsidiaries Orbital Gas Systems and Thyson Technology and it allows Bilfinger to expand its footprint in the gas and hydrogen sectors and help its customers to work on their net-sero targets. nZero specialises in gas measurement, analysis and control systems and offers proprietary solutions in clean energy,

The transaction comprises nZero offices in Ellesmere Port and other premises in Staffordshire and Bristol. With around 240 employees, The bolt-on acquisition successfully continues Bilfinger's strategic course, it said: "Integrating nZero's complementary expertise puts us at the forefront as solution provider of choice."

Contracts and corprate.

Juran marks 30 years

Juran Benchmarking this year celebrates its 30th anniversary – three decades of innovation, growth, and continued commitment to quality and performance excellence through benchmarking in the energy industry, it said.

Founded in 1995, Juran Benchmarking has become a trusted name in the benchmarking and performance improvement space.

it said it was "proud of how far we've come and grateful to our dedicated team, loyal clients and partners who have been part of our journey. This milestone reflects our shared success and continued drive toward excellence through benchmarking in the energy industry. the company has celebrated numerous milestones and evolved alongside an ever-changing global business landscape, always focused on delivering value to clients through data-driven insights and proven benchmarking methodologies.

Port sees strong earnings

Port of Aberdeen reported strong results for 2024, reinforcing its role as a catalyst for sustainable economic growth and a key driver of energy transition, it said May 15.

It was its first full year of operations since opening the £420mn Aberdeen South Harbour and it said strong revenue performance and careful cost management drove revenue growth.

Turnover rose by 11.5%, vessel arrivals rose 2.6%, vessel and cargo tonnage rose 4.3% and ferry passenger numbers rose 2.8%, Scope 1 and 2 emissions, a metric for decarbonisation, were down, and Scope 3 emissions will drop from Q2.

CEO Bob Sanguinetti said the success was due to meticulous planning and commitment but warned of uncertainty ahead unless there was political support. Oil and gas activity accounts for two thirds of its revenue and the Energy Profit Levy has slashed the sector's investment plans.

Brimmond's away-day

Northeast Scotland-based engineering firm Brimmond welcomed around 140 guests – partners, clients and suppliers – to its Kintore headquarters late May for an open day.

Guests were given a behind-the-scenes look at the custom-built facilities and a selection of the firm's high-end equipment.

Brimmond has the UK's largest cranes and guests were given the chance to try to manoeuvre the exhibits and to examine Brimmond's pioneering aquaculture net cleaning solution – the NetJetTM – which is already making waves.

Brimmond said its team was "justifiably proud of the work they do and the equipment that we design, manufacture and supply to customers around the world."

Port of Aberdeen

SRCN enters nuclear sector with contract at NRS Dounreay

SRCN, experts in creating work management systems and operational performance with roots in the oil and gas sector, has secured its first contract in the nuclear industry. The company has been engaged by Nuclear Restoration Services (NRS) at Dounreay to deliver a comprehensive work management current state assessment, taking a step into strategic diversification into new high-reliability sectors.

This manoeuvre also signifies the clear and easily transferable nature of industry pivoting – methodologies, services, skills, safety principles, regulatory compliance, process discipline and performance optimisation needed for oil and gas operations are directly transferable to nuclear operations.

"This is a major milestone for SRCN. Our experience in managing risk, improving asset integrity, realising significant cost savings and delivering operational excellence in oil and gas is directly applicable to nuclear decommissioning and, indeed, to any sector where safety, complexity, and precision are non-negotiable." - Colin Wilson, SRCN Managing Director

Leveraging its oil and gas expertise, SRCN is well-equipped to support organisations in other high-hazard industries where structured work management, planning, and performance assurance are crucial.

People of Energy.

Neale Stidolph is the Head of Strategic Development *in Sword's Energy Sector team. Sword provides IT support services, cyber and operational technology security, digitalisation and data management for critical national infrastructure from Oil & Gas, to Renewable Energy and Transmission. Neale's background is 35 years in the energy sector supporting IT-related business improvement, risk reduction, operations, major capital projects and M&A asset transfers. His role includes working closely with OEUK's contractor council, working groups and forums.*

My interest in technology blossomed from school days, suiting my inquisitive nature and enjoyment of solving problems. In my early twenties I had the chance to apply this in the oil & gas sector which led to a temporary move from London to Aberdeen, and I am still here as it felt like the place I was supposed to be. Combining endless technology and service opportunities with the natural and cultural benefits of the Northeast, with frequent work overseas was too good to miss.

Steep learning curves in oil & gas with fast-paced changes in technology have been very rewarding. Any work pressures that have arisen were very much offset by spending time outdoors in the hills and on the rivers, learning and applying new skills in many hobbies.

My career quickly evolved from being a hands-on technologist to sales and business development roles. Having completed hundreds of tenders and proposals with supermajors, independents and supply chain it has never been boring. One of the things I have taken from this journey is the need to truly understand the problems. This does not always suit tendering processes and is why I have placed so much emphasis on strategic development. Yes, many things can be considered as commodity services, but there are more fundamental or complex challenges that need a different approach. This is why I love the strategic development role. It is based on early engagement to really get to know the client, their situation and benefits they are seeking, and their appetite to consider options and innovations.

An example of this is a company who wishes to replace a large, complex and mission critical system. It is common to see that positions as like-for-like replacement with a more modern system, usually at the lowest cost with minimal changes in scope. There is likely to be a large list of requirements to be assessed and scored. What is less common is challenging how the business operates, and whether its processes could and should be changed, and whether the data in such a system is in a good state. Avoid buying a major system with years of commitment if there are only marginal gains in business efficiency with poor underlying data. There is a wider than ever range of options, often working smarter, more fit for purpose and benefitting from reduced manual effort. Even with older systems, it may not be necessary to replace when greater insight and process automation can be unlocked using new techniques.

This approach has led to many of our largest deals and longest client

relationships, and works best when trust is built up on a personal level. Isn't this how things are supposed to be? It mirrors life. The boots I wear on a hike, or the skis I use suit me well after years of trying various ones, and it probably wouldn't work quite the same if I used your boots or skis. Walk a mile in someone else's shoes is an old saying and very true. Recommending a solution to someone really needs to take into account what works for them, and demonstrating years of experience.

Having watched oil & gas facilities such as FPSOs or platforms being built, to construction yards and their journeys through to decommissioning really bring home the cycles of energy and the passage of time. Companies have to navigate this, from boom times, to downturns, riches to hardship all driving very different behaviours and needs. Taking photos in Nigg and Ardesier in the McDermott days and then seeing rebirth and supporting Haventus as the Port of Ardesier comes back to life, ready to support floating offshore wind shows the tenacity of the people and businesses who will keep the lights on.

Having spent the last 18 years with Sword in its various stages of evolution and growth has never been dull and the journey continues. The opportunity to work on global projects and deeper involvement in the energy industry provides many rewards and shows that experience, adaptability, and inquisitive problem solving skills change but continue to be of great value. Spending time in the Northwest of Saudi Arabia, Europe, and various parts of the USA led me to reflect that there are amazing opportunities, cultural understanding, testing oneself in many ways and highlighting the need to help others on this journey. Passing on experience, encouraging and developing others is key. There is much satisfaction from seeing new people find their path, learning, expanding their horizons, growing and overcoming problems.

"The energy sector is a fantastic place to work. Its dynamic nature, big challenges, evolving landscape, and personal opportunities can provide a great career. All of this has a very tangible benefit to everyone in the UK, we all need energy in all its forms"

The main part of my role is exploring new business relationships, keeping a close eye on developing markets, navigating the energy transition and relating that to Sword's business activities. This recently led to our focus on renewable energy generation, transmission and distribution. That transition within our business has helped transfer people and their valuable skills as workloads shift from oil and gas, increasing their career options.

Having been involved in two decades of M&A work, especially asset transfers, has really helped support the changing Operator landscape and never more so than now. The players may change but the energy needs remain and bring in new ideas, investment, extension of asset and field life in order to support UK energy security.

My message is to always take the long view, have faith in yourself and be as adaptable as the energy sector itself. Also consider that specific topics such as digital twins, AI, energy technologies, etc. are important, but in my view it is more important to understand problems. Learn how people and companies make decisions, what information they need to do so, and how to mitigate risks. Be inquisitive and open minded so that you can relate to such challenges and construct solutions. Technologies can be learned but this critical thinking attitude is more of a personal attribute – so if you think and act this way then your success will be greatly increased and open up a great career path. Sure, learn some tech skills but when looking at a problem keep asking why, and seek out mentors. Do that well and it won't drive people nuts, it will show that you will challenge assumptions until everything becomes much clearer and puzzles will be solved.

Low-carbon technology.

CCS spending to take off: DNV

Cumulative investment in carbon capture and storage (CCS) is expected to reach $80bn over the next five years as capacity quadruples, according to a new report by Norwegian energy expert and assurance provider DNV. In its Energy Transition Outlook: CCS to 2050 it says that so far growth has mostly come from pilot projects.

Europe's strong price incentives will lead it to overtake North America in CCS deployment, the report finds, as the industry is reliant on policy support. But use of the technology has grown slowly so far and must increase dramatically, says DNV, which also considers other technologies such as direct air capture of CO2 and CO2 removal.

Peterson scores on neutrality

Global supply chain company Peterson Energy Logistics (PEL) has become the first company to be awarded the new ISO 14068 standard for carbon neutrality from the National Quality Assurance (NQA) certification body.

The ISO standard replaces the previous PAS 2060 accreditation scheme that PEL was awarded in 2022.

PEL said: "We are extremely proud to have completed this programme… The standard provides a rigorous, transparent framework for measuring, reducing and offsetting carbon emissions.

Penspen wins H2 contract

International energy consultancy Penspen has won a multi-million-pound contract from United Living Infrastructure Services to develop the engineering design for the HyNet CO2 onshore transportation system at Liverpool Bay, it said May 19. The project will shape the region's low-carbon future for decades, using a mix of new and repurposed infrastructure.

Industries in Stanlow will see their emissions injected into Eni's Liverpool Bay storage facility at Point of Ayr.

Penspen said the HyNet North West project would transform the UK's energy network and it was "proud to be working with United Living to deliver this first-of-its kind project at Liverpool Bay." It said its experience of detailed engineering for long pipelines would be critical to the success of Hynet. The government committed to funding it in October 2024.

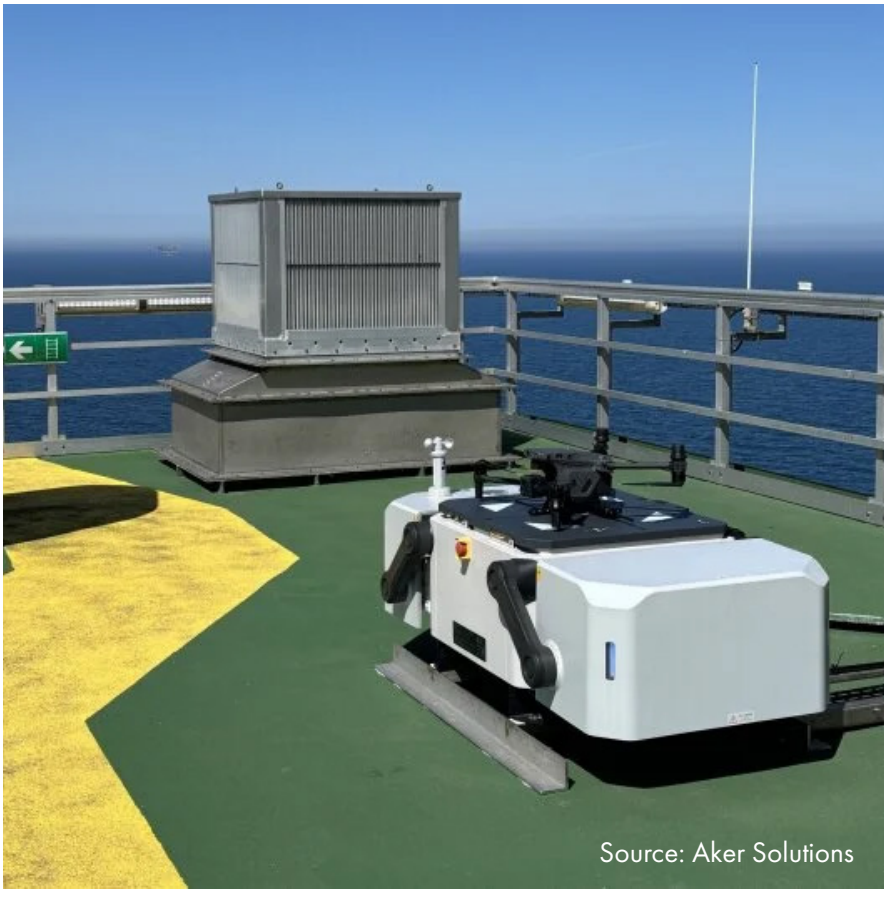
North Star names vessel

North Star officially named its first commissioning service operation vessel (CSOV), the *Grampian Kestrel*, at a ceremony in Norway May 6.

With hotel quality accommodation and logistics, she is destined for use in the offshore wind sector. Her first contract is with the German utility EnBW and precedes the decade-long minimum charter contract the firm signed in 2024.

The VARD 4 22 design has been developed in close collaboration with Vard Design in Ålesund, Norway. It also includes a high-performance daughter craft with space for a second.

It is the world's first to achieve Lloyd's Register's Cyber Resilience classification, underscoring North Star's "commitment to being a safe and reliable partner – for our employees, our clients, and the broader offshore wind industry," the company said.



Source: Aker Solutions

Aker Solutions installs drone offshore

Norwegian Aker Solutions has installed an autonomous drone system on Aker bp's Edvard Grieg platform in the Norwegian sector of the North Sea, it said June 2. Piloted from its control centre at Stavanger, the drone saves time, money and emissions by enabling frequent, remote inspections from shore.

"We estimate that autonomous drones can reduce inspection costs by up to 70% and deliver detailed insights within hours – a process that traditionally takes days with manual drone operations," Aker Solutions said.

The drone is equipped with autonomous navigation capabilities and advanced sensors, collecting high-resolution imagery and data during its inspection rounds. The flight marks a major step toward fully autonomous offshore inspections.

The drone takes consistent, precisely positioned images and videos, allowing for regular monitoring of equipment over time, identifying problems before they escalate.

Low-carbon technology.

Draeger Marine & Offshore supports the UK's first offshore CO2 injection

Draeger Marine & Offshore (DMO), an international leader in safety technology, headquartered in Rotterdam with a sister base in Aberdeen, provided equipment to support the UK's first CO2 injection test for carbon capture and storage (CCS). This follows Perenco's recent announcement of the successful completion of tests at the Leman natural gas reservoir, using Petrodec's ERDA rig situated in the southern North Sea.

Alongside being a key development in the larger Poseidon CCS project, a joint venture between Perenco UK, Harbour Energy and Carbon Catalyst Ltd – this goes down in history as the first time CO2 has been injected for carbon storage in the UK.

"At Draeger Marine & Offshore we are proud to have supported the Poseidon joint venture partners in this landmark project for the UK's burgeoning CCS industry… Our commitment to state-of-the-art safety technology is reflected in every facet of our work".– Jesper de Jong, DMO Sales Manager

15 injection cycles were conducted into the Leman gas field with 11 CO2 offshore batch refills being mobilised. Perenco has stated that the operational programme was done in a safe and timely fashion without any issues. These tests further demonstrated the viability of leveraging existing oil and gas infrastructure to enable cost-efficient CCS deployment across the sector.

Inch Cape offshore wind farm construction

OEG to Support Inch Cape Offshore Wind Farm Construction until 2027

OEG, a leading energy solutions business, has won a multi-million-pound contract to support the construction phase of the Inch Cape Offshore Wind Farm until operational in 2027. Over 100 OEG personnel will support the delivery of this contract, which includes the recent addition of six new appointments. As one of Scotland's largest offshore wind developments, Inch Cape will play a pivotal role in meeting the Scottish and UK government's 2030 green energy targets.

The 1.1 GW project is in the North Sea, 15 km from the Angus coast on a site covering 150 km2. Once completed, it will feature up to 72 wind turbines and an offshore substation and generate enough clean energy to power the equivalent of more than half the homes in Scotland.

"Securing the Inch Cape Wind Farm construction support contract is a milestone for the business, demonstrating the strength of our integrated service offering and the trust placed in us to support a project of this scale and national importance. By delivering all the required equipment, services and capabilities in-house, we provide a seamless, efficient solution that reduces complexity and cost for our new client." – John Heiton, OEG CEO

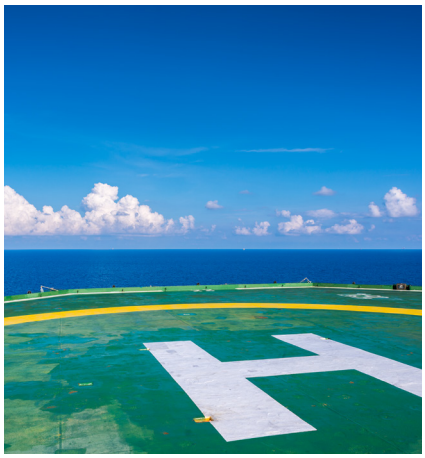
Training.

OEG wins OPITO approval

OPITO has accredited OEG's helicopter refuelling training (HRT) course, OEG said May 13. The OPITO HRT Standard 9255 was introduced in collaboration with OEUK's Aviation Services Task Group.

OEG's HRT course is held at its state-of-the-art helifuel training academy in Portlethen, Aberdeenshire. Practical onsite training facilities, including a bespoke fuelling system designed and built by OEG that uses JET A-1 fuel, provide realistic experience of aviation fuel handling and sample analysis techniques, as well as quality control and safe storage. This ensures compliance with the UK Civil Aviation Authority's CAP 437 standard for Offshore Helicopter Landing Areas.

OEG called the accreditation "a significant achievement" that has taken a tremendous amount of hard work and dedication" and saidit "looks forward to extending this value adding service to customers."



COMET launches new safety podcast – The Risk Factor

Working within the energy triad of oil, gas and renewables, COMET provides tailored root cause analysis and risk intelligence solutions; May saw the company expand its outreach, using podcasting as a new platform to share safety knowledge. The podcast, befittingly titled The Risk Factor, channels many safety training lessons and themes into beyond surface-level discussions to expose gaps in safety culture, challenge outdated thinking, and explores the very real impact of risk management decisions. While high-hazard industries are subjected to more stringent regulatory requirements and safety training protocols, the podcast takes a lot of what we cover in training and stews on it in a more conversational and thoughtful manner – it serves as a great expansion on safety skillsets and knowledge beyond required staff training.

With currently 2 episodes out, the first features former Detective Superintendent Alan Smith who draws on 30 years of law enforcement experience in leading major crime investigations, including investigating serious crimes and offshore tragedies. Upon transitioning into industrial arenas, he shares recurring safety mishap patterns and sheds light on key warning signs that companies often fail to register – proving to be detrimental. The second episode features COMET's Head of Operations & L&D, Craig Smith and Jim Grimmer, ex-cop, oil and gas veteran and founder of P3 Business Care – the two explore mental health programmes and its effectiveness to employees.

Comet has provided a range of information sources and a suite of safety tools to diversify content and enhance accessibility for those operating within the energy sector, complementing broader training requirements to drive continuous safety improvement across the industry. COMET's podcast is available on their website and on Spotify.

Maersk Training opens in La

Maersk Training has opened a maritime safety training facility at Fletcher Technical Community College in Houma, Louisiana, it said June 4. This marks "a significant milestone in Maersk Training's commitment to enhancing workforce development, safety and operational performance in key industries across the Gulf Coast, it said.

Louisiana plays a critical role in the nation's oil and gas – the biggest gas trading hub, Henry Hub, is based there – and maritime industries.

Fletcher hosts OPITO and STCW-certified courses, including emergency training and tropical helicopter underwater escape training.

Maersk Training said that it planned to expand its portfolio and courses and combined with Fletcher it would "provide high-quality training that meets industry needs and strengthens the region."

OEUK members abroad.

ModuSpec wins Black Sea deals

Rig intake and inspection specialist ModuSpec has won a contract involving a deepwater drillship in the Black Sea, it said May 28. It expects it to add £250,000 to its revenues. The drillship will be engaged by an international oil company for about eight months starting this year.

ModuSpec will check that the drilling, mud, electrical, electronic controls, subsea well control and dynamic positioning systems are in a state of readiness and fit for purpose following recertification in southeast Asia. Acceptance will involve subsea deployment and testing the blow-out preventer.

Turkey and Romania both have substantial gas reserves in the Black Sea under development while Ukraine's are off limits owing to enemy action.

ModuSpec wins Egypt contracts

ModuSpec has also won three contracts to support its existing and new clients in Egypt, it said June 12. Their value exceeds $175,000 in revenue and comprises jack-up and land drilling rigs.

ModuSpec will provide independent third-party assurance for the offshore rig, including a health and safety audit. A separate ModuSpec team will provide support during the start-up of a land drilling rig, from the point of raising the mast to being accepted on to contract in the Western Desert. A further team is in country to carry out an inspection of another rig for another operator.

OEG wins US first in cryogenics

OEG has bought its first-ever fleet of cryogenic ISO tanks and transferred them to its Houston, Texas facility. This strengthens its ability to meet rising demand for safe, efficient transport of liquefied gases across the US and beyond, it said May 15.

The fleet enables the efficient and safe transport of LNG, liquid oxygen, nitrogen, and argon by sea, road and rail. They will service OEG's operations along the Gulf Coast and into key inland markets.

This will give Gulf South industries the flexibility, safety, and reliability they need to move critical resources, OEG said. OEG's expanded offering supports resilient and scalable logistics.

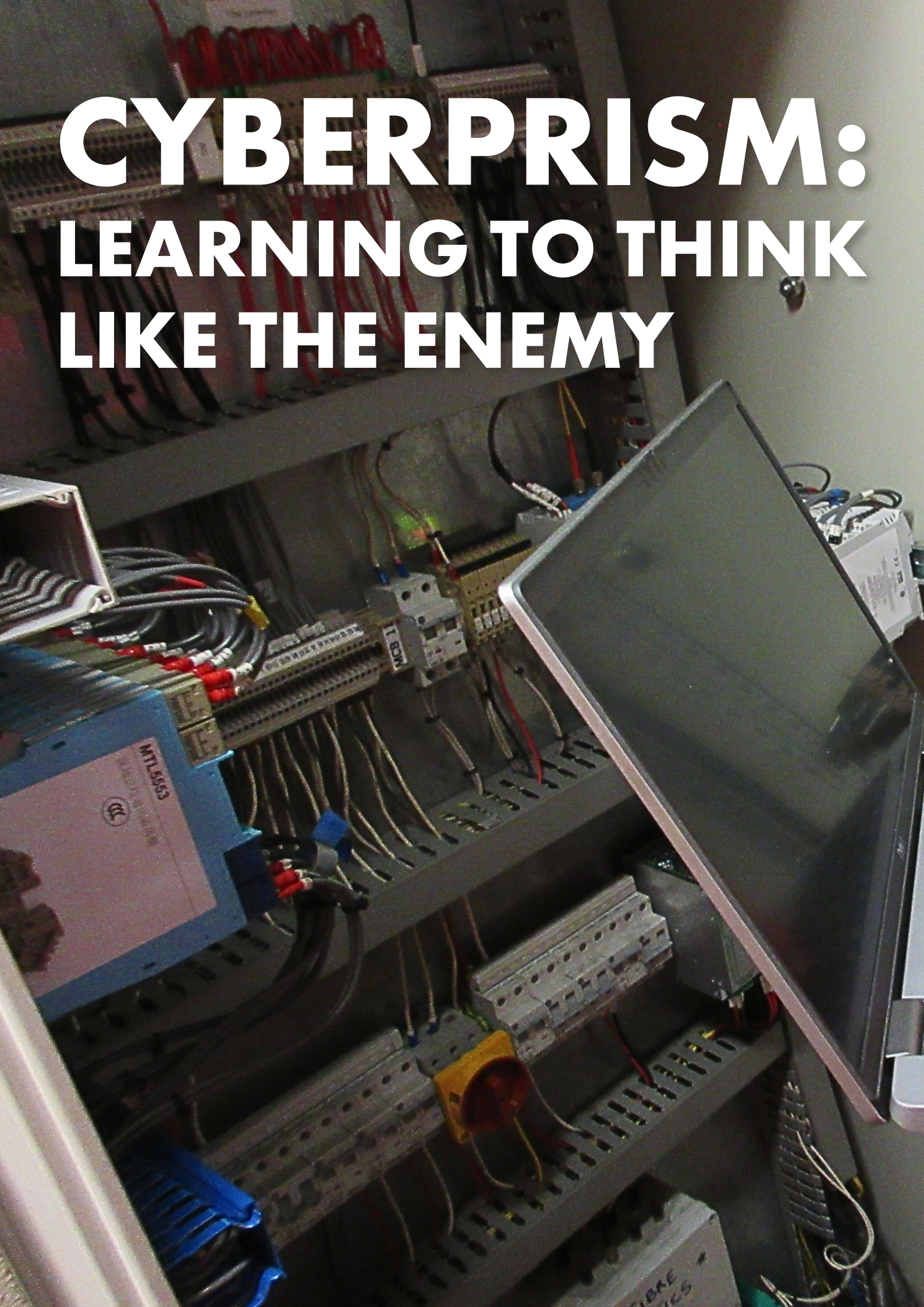
Verlume hires Canada agent

Subsea batteries and power management systems maker Verlume has appointed Valor Ocean Technologies (VOT) as its first business development agent in Canada. It follows the successful deployment of three Verlume Charge systems offshore Canada and signals a strategic expansion, Verlume said in a June 10 statement.

Headquartered in Halifax, Nova Scotia and with an additional office in Ontario, VOT supports operations from the Atlantic to the west coast. With its access to world-class capabilities in ocean science, robotics and offshore energy, VOT will lead efforts to grow Verlume's presence and customer base across key markets, said Verlume.

Jake Carine, founder, Valor & Graceann Robertson, Verlume

CYBERPRISM:
LEARNING TO THINK LIKE THE ENEMY



CYBER
PRISM


David Fisher-Holt

Pen testing – and why it matters

Put simply, penetration testing involves firms like ours taking on the role – and mindset – of hackers looking for ways to breach the technical infrastructure of our clients. It helps to demonstrate where security is working and, more important, where any vulnerabilities might lie.

But pen testing itself comes with challenges and organisations need to plan well, adopt the most appropriate methodologies and strive to achieve testing in the most authentic conditions possible without compromising operational integrity.

Automated systems have inherent risks

The widespread adoption of automated pen testing has served to expose challenges which can undermine its value and effectiveness. Depending solely on automated systems, to the exclusion of manual processes, can give rise to an excess of false positive results, while an understandable reluctance to perform testing which requires operational shutdowns can also compromise the process.

Pen testing needs to replicate the production or function (such as power generation) environment to the greatest possible extent if it is to deliver the value that organisations are seeking. But they do not always find it easy to replicate that environment when they opt to use a test bed instead of the live process itself.

Effective pen testing

There are various other practical considerations: effective testing entails using multiple accounts with different privilege levels, for example, and it must evaluate all connected devices across the network as some may well not possess adequate security.

A blog post by the ISA Global Cybersecurity Alliance (ISA GCA) identified specific challenges in OT cybersecurity associated with legacy systems, safety concerns and continuous system availability.

These are seen as significant issues within the energy sector. The ISA GCA blog notes that the appeal of OT to prospective hackers adds to the challenges, as the security infrastructure needs to be constantly reviewed and refined to defend against ever more sophisticated attacks. Given this and the current threat landscape facing the energy sector, pen testing represents a clear opportunity to find your weaknesses before someone else does.

Operational technology penetration testing – or OT pen testing – has become common practice as organisations check the strength, or otherwise, of their OT security.

CyberPrism's principal engineer David Fisher-Holt offers an overview of the challenges involved when businesses want to check their systems and keep hackers at bay.

Safe pen testing

The ISA Global Cybersecurity Alliance blog defines 'safe' pen testing in terms of maintaining complete control throughout the testing process to ensure that a plant or a facility's OT systems remain available during testing in the target environment such as in the energy sector. It also establishes pen testing execution standards (PTES) for OT environments through specific tactics, including risk management, control testing environment, control manual testing methodologies, attack selection and avoidance of remote testing team selection.

Testing in live environments

Consistently, much of the focus is on the pros and cons of pen testing in live environments: the value of authentic insights against, for example, the risks posed to ISA/OT availability and data integrity.

There are other factors to bear in mind, ranging from potential legal issues associated with data privacy to the risk of the pen testing process camouflaging an actual attack on a live system.

Best approach

The optimum solution perhaps lies in the running of pen testing in a staging set-up that closely mirrors energy sector functions, while targeted testing is performed on function-specific variations or aspects of the target environment.

However, the efficacy of pen testing first of all depends on understanding the big picture. It relies on comprehensive planning, a complete understanding of the test environment and the selection of the most appropriate tools, tactics, techniques and procedures.

You can find out more about OT pen testing by contacting CyberPrism to see how we can help your organisation test your OT security – and introduce improvements wherever they are needed.

David Fisher-Holt – principal OT cybersecurity engineer – has over 30 years' experience in industrial control systems and operational technology, functional safety and obsolescence management. He is a member of industry bodies such as IET, MCIISec and MInstMC.

elementz

'CLOUD FIRST, WEB FIRST.'

Elementz CEO, Jason Brown

"Bringing deep domain knowledge and a focus on software and product development that is unique within the marketplace" – the premise of Aberdeen-based Elementz was always to do things differently and, a year in, the strategy is opening the door to growth at home and abroad.

A subsidiary of Norwegian company Aize and of Aker parentage, the year-old subsea asset integrity management software company offers Software as a Service (Saas) and works closely with clients to find solutions that endeavour to sit ahead of the curve in terms of identifying key trends, technological break-throughs and challenges that will shape the future of subsea asset integrity software.

'Cloud first, web first' is the company's motto: "We prioritise cloud-based and web-based solutions to ensure scalability, accessibility and flexibility. This approach facilitates easier updates, integration with other systems, and access from anywhere, promoting a seamless user experience," says CEO Jason Brown.

Elementz has proved the need for its approach in a world that is becoming increasingly competitive: launched in 2024 in Aberdeen, Elementz won more than £500,000 of annual recurring revenue during its first quarter of trading alone.

Then, in the first quarter of 2025, the company's most successful three-month period to date saw work worth more than £1mn come in thanks to exponential growth in key domestic and international markets. All the while, the headcount has risen steadily as business ramps up. The company now reaches around the globe including Australia, Africa, Canada and Europe - and it has set its sights on further overseas expansion in the likes of Asia Pacific and South America.

Focusing on subsea integrity and inspection management, Elementz works with customers to build End-to-End (E2E) integrity frameworks for subsea assets that suit their individual purposes and embed Elementz' structures into clients' own workflows, regardless of the age difference.

Thanks to Elementz, the client can see everything connected to its asset below the waterline, from subsea production systems, all the way up to the large transmission pipelines that land gas at the beach terminals. The technology can also be applied to fixed and floating wind turbines; anchoring and mooring and tidal technology; and electricity interconnectors.

Beyond their individual day-to-day pressures, Elementz' clients also must solve shared challenges which make it hard to shift from reactive approaches to data-driven decisions. These can be broadly categorised into three areas: data quality and management; integrating applications so data can move freely; and standardising clear guidelines, tools and procedures. These can be difficult to inspect owing to physical marine conditions and interpreting the images captured offshore is inherently difficult and expensive, says Mr Brown.

Subsea power, including interconnectors, and telecoms cables are also vulnerable to attacks or apparently accidental anchor snags – which might also have very serious state security consequences or implications.

"It is a very tangible prize: corporations and governments know that a dependable subsea industry is at the heart of a resilient future," continues Mr Brown. "In a perfect world we would be looking for signs of wear and tear, fatigue and so on. But we look also for evidence of sabotage in the UK North Sea which is one of our more important geographic areas of operation. There is a lot to consider under the surface of the North Sea, including the fishing industry and the safety of what's moving through pipe and cables. All of this means that integrity is very important, and we are mission-critical: even if we are just a smaller part of a larger puzzle, we try to be a good partner in the wider digital ecosystem.

"Drawing on 35+ years of experience working with key global majors, our software solutions are created by industry professionals who have a sound knowledge and perspective of subsea asset integrity and inspection management.

"The prize in terms of cost savings is big, if we can remove a lot of the support vessels and crews from routine operations and rely instead on remote operations and next-generation ROVs. We apply a modern, transformative way of working that can save 40% or more on operating costs compared to the traditional way. We are always looking to do each stage faster, always seeking to optimise," he says.

"Operators need to work to a standard, in a repeatable way and have the tools to interpret the data. We are one component of a spread connected to the ROV, overlaying data as it is fed in and always looking to optimise where we can. Once that campaign is complete the data is transferred for analysis.

"The global spread of our activity means that it's always campaign season somewhere in the world and that is crucial in realising sustainable growth. Most of our customers are

"We prioritise cloud- and web-based solutions to ensure scalability, accessibility and flexibility. This approach facilitates easier updates, integration with other systems."

in Asia-Pacific and Europe so we start gearing up a lot at this time of the year, but we also have clients in the US.

"Our depth and reach have enabled us to hit the ground running and achieve a lot in a short time. So far, our main physical presence remains in Aberdeen but that's reviewed all the time, and we'll always flex where and when we need to.

"In planning ahead and setting out ambitious growth targets, the biggest concern is that the UK's energy resilience is on a cliff edge: there's no switch turning us from oil and gas to renewables. It is glaringly obvious that the digital and the technology worlds have a lot in common. Collaboration is what is needed to keep energy production steady and future focused.

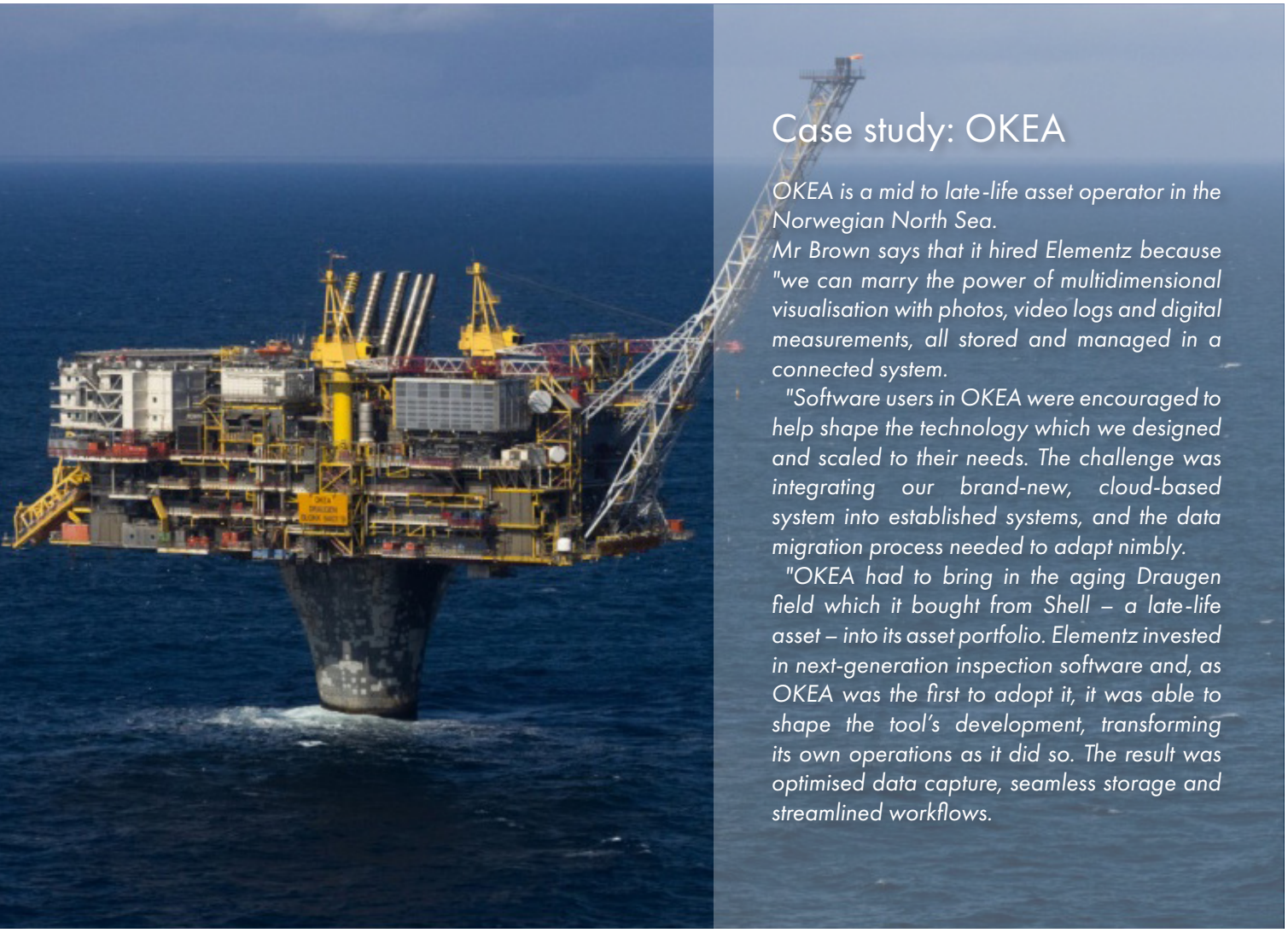
"The Elementz name is new, but we really started in the late 1980s, so we have over 35 years' experience. Our objective is to double down and try to be the best at one thing by being hyper focused. We understand our core competency and where we fit into the bigger picture so we're not spreading too far as a result. Despite our motto, we're often working in places without Wi-Fi or other communication methods so how we collect and transfer valuable data from offshore to onshore is important. Then we make sure it is contextualised and reusable.

"We have plans to expand so that, once the data is visualisable, we can design AI-powered inspection campaigns that learn from historical patterns and past anomalies. Once the AI understands what constitutes an anomaly based on past cases, it can help us prioritise inspections and alert us proactively. We already have the clients, and they bring a wealth of historical data we can use to train and refine the AI. This will be an exciting next phase in our journey."

"We are open; focused on one thing and willing to work with customers, share data to move the whole industry forward and shape the future of subsea asset integrity software. We are across all industries offshore.

"We do interpret data, but we let the client configure it for their workflow. We have also set up a new group of people under the rubric of 'Compass' to get people to think what we do: and some of our major customers help us to design things such as plug-ins. This will be a big topic for us this year and going forward.

"As a part of Aize, we have plenty of experience. If you mix grey hairs with fresh talent, that is where the magic happens. We might not take over the world, but we do sit in the workflow, and you find us when you look for us: usually we're sitting just ahead of the curve," says Mr Brown.



Case study: OKEA

OKEA is a mid to late-life asset operator in the Norwegian North Sea.

Mr Brown says that it hired Elementz because "we can marry the power of multidimensional visualisation with photos, video logs and digital measurements, all stored and managed in a connected system.

"Software users in OKEA were encouraged to help shape the technology which we designed and scaled to their needs. The challenge was integrating our brand-new, cloud-based system into established systems, and the data migration process needed to adapt nimbly.

"OKEA had to bring in the aging Draugen field which it bought from Shell – a late-life asset – into its asset portfolio. Elementz invested in next-generation inspection software and, as OKEA was the first to adopt it, it was able to shape the tool's development, transforming its own operations as it did so. The result was optimised data capture, seamless storage and streamlined workflows.

OEUK Offshore Decommissioning Conference 2025

24 – 26 November
Fairmont Hotel, St Andrews

A Journey To Decommissioning Excellence

The Offshore Decommissioning Conference 2025, hosted by OEUK, is a key date in the industry's calendar, offering a comprehensive platform for specialists to meet, discuss, and learn from completed projects, address current issues, and shape the future of decommissioning.

For more information, visit:
offshoredecommissioningconference.co.uk

kent

Principal sponsor

OSSO: FROM OIL & GAS TO GEOTHERMAL

Privately backed fluid purification and heat transfer firm OSSO is taking advantage of the commercial opportunities that the energy transition has enabled.

The sector's new priorities – decarbonisation, efficiency, and diversification – align closely with OSSO's existing capabilities. Originally an oil and gas service provider, the company is now applying its skills and equipment across new sectors. Its entry into geothermal energy, for example, reflects how OSSO is evolving to meet low-carbon demands.

That expansion has gone hand in hand with a growing presence in the Middle East and a move into the construction sector – part of a broader strategy to diversify both geographically and operationally.

And in the short time since Linton Investments bought into the business, then called Centrifuges Unlimited (CU), in 2019, its workforce globally has trebled from 15 to 50.

The investment in the business became more pressing in the wake of the 2020 Covid-19 pandemic. The inescapable consequences of minimising the spread of Covid-19 and the low oil price led to a general slump in exploration or other non-essential drilling for large portions of the world for most of 2020. The company turned the crisis into an opportunity by expanding its revenue streams by finding new markets for its equipment. "It [CU] had been very focused on oil and gas drilling," explains CEO James Scullion "Our vision was to diversify OSSO's activities - expanding internationally, broadening our reach across upstream, midstream, and downstream operations, and extending into new sectors."

OSSO continues to hire and operate separation and fluid management systems – capabilities that are easily transferable across manufacturing and industrial settings. One future focus is water treatment and desalination, increasingly critical in arid but high-growth regions such as the Persian Gulf.

Since 2023, OSSO has invested more than £5mn in fleet expansion and equipment, which has enabled its mud-cooling capabilities to address the operational challenges of geothermal projects. These began with high-pressure, high-temperature (HPHT) wells in the United Arab Emirates and Saudi Arabia.

"HPHT wells continue to be a major focus for OSSO, and after successfully redeploying into a new sector we are now delivering results for customers in both oil and gas and geothermal.

"We've also expanded our offering with advanced cooling solutions - not only enhancing performance in drilling environments but opening up opportunities in other high-demand areas like data centres," he says.

These advances led to the award of three individual contracts in Europe, representing a combined seven-figure sum. OSSO has opened an office in the Netherlands to support its ongoing expansion into continental Europe. Its other offices are in Warwickshire, Aberdeen, and Abu Dhabi but staff are rotated depending on the requirements of the contracts and the demands of business development. A key part of OSSO's offering comes from its engineers and technical staff whose local knowledge helps navigate the regulations, permitting, and site-specific challenges wherever a project is based.

Europe shows promise for geothermal activity, though suitable sites are unevenly distributed and not always aligned with historic oil and gas regions – which can affect project economics, making local understanding essential.

OSSO sees southern Germany, Austria and Hungary as particularly promising regions for this, which is helpful as eastern Europe is short on affordable energy. Being far from international waters, it also suffered most from the sharp reduction of Russian gas that started even before the February 2022 invasion of Ukraine.

Renewable district heating projects would be a blessing there, as although the infrastructure is costly to build and install, the running costs are low.

There are several ways to commercialise the freely available, renewing sources of heat deep underground. At over 100 °C, steam can be used to generate electricity at source, or it can be piped and used for space heating. This is especially efficient and minimises the impact on the environment in structures like modern blocks of flats with high population density and good insulation. At the end of its journey, the now-cool water re-enters the system for revaporising and recirculation.

OSSO's construction unit has also scaled rapidly, growing its fleet by more than fivefold and establishing a diverse customer base. This division has been involved in a variety of infrastructure projects across the UK and is on track to double its revenue by the end of the financial year.

OSSO has seen significant growth in its Plate Heat Exchanger (PHE) service offering, tailored to meet the needs of industries such as distilleries, food and beverage, oil and gas, and other industrial sectors. Using the same equipment – mechanical or chemical – and people enables it to capture additional value with little new investment.

The company also continues to support the North Sea industry with specialised decommissioning solutions, applying advanced separation technologies to enable efficient waste stream management across both upstream and downstream operations.

OSSO's regional strategy in the Middle East has been strengthened by the establishment of a dedicated entity, enabling enhanced localised support. A key leadership development includes the promotion of Daniel Burbridge to its general manager for the Middle East, reinforcing its presence and operations there.

OSSO CEO
James Scullion


NOBLE
NOBLE

AI PREDICTIVE SAFETY IS NO LONGER BLUE-SKY THINKING – IT IS RESHAPING GLOBAL SAFETY RIGHT NOW

Fennex CEO, Adrian Brown

AI is no longer a vision for the future: it's delivering real impact today. In a global industry where safety and assurance are non-negotiable, the offshore sector must move beyond hesitation and start harnessing the powerful tools now within their reach," says the managing director of award-winning artificial intelligence company, Fennex, Adrian Brown.

There was time when the futuristic movie Minority Report was considered pure science fiction – no-one could really predict detailed events and intervene to stop them from happening. Today the technology portrayed by the film has proven more prescient than we might have thought.

In a notable first for managing safety risks, Noble Corporation – one of the world's largest offshore drilling contractors – has partnered with technology trailblazer Fennex to deploy their innovative AI-powered predictive safety solution across all 38 of Noble's offshore assets worldwide. This is not a concept or trial: it is a powerful, proven, real-world system that is reshaping how offshore operators identify and manage risk.

"Instead of reacting to incidents, we now anticipate them," said Noble Corporation's health, safety and environment director Dustin Stringer. "AI gives us the visibility and confidence to act earlier and more effectively."

What if your safety observation programmes could predict risks, not just record them?

After five years of research and development, worldwide operational trials and academic collaboration, digital innovator Fennex has launched the offshore industry's first operational AI-powered predictive safety platform. This solution transforms vast volumes of reported risks, hazards, and behavioural observations into predictive intelligence, enabling operators to identify and mitigate emerging threats before incidents occur.

From lagging to leading: making the necessary shift

The offshore energy industry is built on a strong safety culture, underpinned by behaviour-based programmes, rigorous procedures and decades of accumulated experience. Yet, a critical weakness has persisted: an over-reliance on lagging indicators: data that is gathered after incidents occur.

Fennex' AI platform introduces a fundamental shift: by digitalising and structuring leading indicators – such as safety observations – and applying machine learning, it provides real-time visibility of behavioural trends and forecasts potential risks.

Predictive safety engines

At the core of this breakthrough is the Behaviour-Based Safety System (BBSS™), a multilingual, mobile-enabled solution developed by Fennex and deployed by Noble. It collects structured, real-time safety data from frontline crews operating worldwide. With over 3.5mn observation data captured, it is now one of the most extensive behaviour-based safety datasets in the sector.

But what makes it transformative is how this data is used. Through supervised and unsupervised AI models, trained using Fennex's proprietary data science framework, the platform surfaces hidden patterns, correlates human behaviour with safety outcomes, and generates actionable risk predictions.

"Safety observations are not just checklists—they're behavioural signals," explains Mr Brown. "AI helps us filter the noise and uncover what truly matters."

Evidence, not assumptions

Fennex' data scientists, working with Noble's HSE experts and academic partners at University College London and Robert Gordon University, applied a six-step data science methodology to transform safety assumptions into evidence-based insights.

Among the key findings are:

- Crew stability: core crews offshore who experienced minimal changes to key personnel measurably improved their safety performance, with significantly fewer incidents.
- Leadership engagement: Regular, balanced interventions by supervisors strongly correlated with positive safety outcomes.
- Corrective action clarity: teams that documented clear, specific corrective actions achieved far better performance than those with vague reporting.

These are some of the insights that underpin a predictive model that not only forecasts risk but also clarifies why certain behaviours lead to specific outcomes – enabling more effective interventions and stronger safety cultures. Managers can spend more time working with their teams and improving safe operations – and less time reading reports and analysing data.

Real-time risk intelligence

At the core of the system is a dynamic, predictive dashboard that provides:

- A 30-day forecast of potential incidents for each asset
- Risk rankings across the fleet
- Real-time insight into the behavioural and operational factors driving trends

This tool does not just visualise performance: it forecasts where next incidents are likely to occur. That level of insight is a game-changer for decision-makers and frontline teams alike.

Blueprint for industry

While the initial deployment was focused on Noble's global fleet, the implications extend far beyond oil and gas. This technology – and the data-driven methodology behind it – is equally applicable to offshore wind and other high-hazard sectors. Fennex has shown that with the right digital foundation, and a disciplined AI strategy, it is possible to:

- Uncover invisible risks before they escalate.
- Quantify leadership impact on safety outcomes.
- Predict potential future incidents and direct interventions accordingly.

Important to note is that this transformation is not about removing human decision-making: rather, it is about how to empower it with better data and sharper foresight.

Fennex CEO, Adrian Brown

Why now?

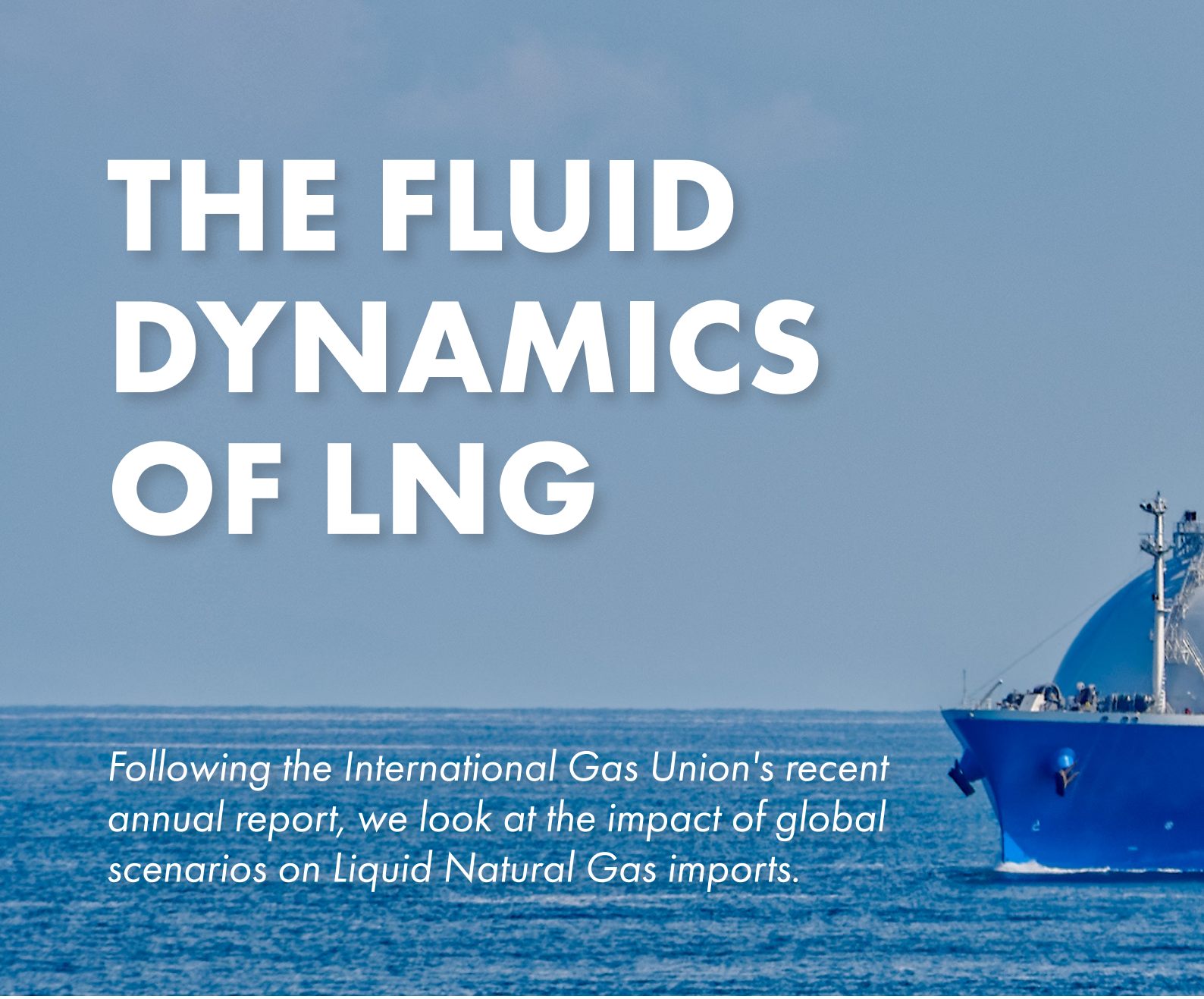
Fennex is focused on scaling these capabilities, refining the models, and expanding partnerships with operators and contractors who are ready to lead. The company has been recognised for its efforts in this space not only in the UK but globally having received the prestigious King's Award for Enterprise in the International Trade 2025 category.

Mr Brown concludes: "AI adoption is a journey, one that begins with data, progresses through digitalisation and culminates in practical predictive capabilities. And while this path is not always linear or easy, the impact is profound. The time has come for the offshore industry to stop viewing AI as a future investment and start embracing it as a present imperative. Safety is too important – and the tools are now too powerful – to wait."

Multi-award winning, Aberdeen based Fennex operates in over 20 countries, has 42,000 end-users and its solutions are deployed on more than 70 offshore assets. Building on an impressive global client base, Fennex is challenging traditional thinking, transforming safety performance and accelerating the adoption of cloud-based computing through the introduction of bespoke AI systems to high-risk offshore operations. By expanding its portfolio and developing new platforms for renewables, it is rapidly emerging as a potential major player in the digitisation of the energy industry.

"Important to note is that this transformation is not about removing human decision-making: rather, it is about how to empower it with better data and sharper foresight."

THE FLUID DYNAMICS OF LNG



Following the International Gas Union's recent annual report, we look at the impact of global scenarios on Liquid Natural Gas imports.

Europe's LNG deliveries drop

UK imported less LNG directly last year than in 2023, according to the International Gas Union's annual report. Deliveries were down from 14.51mn metric tonnes (about 18.9bn m^3) to 8.03mn mt, which the IGU attributed to wind generation and healthy pipeline flows.

Norwegian gas production hit a record high of 124bn m^3 in 2024, surpassing the record 122.8bn m^3 set in 2022. According to the UK government, the UK imported 3.4bn m^3 less gas last year than in 2023 as pipeline imports rose year on year and LNG imports fell. It received 31.6bn m^3 directly from Norway (2023: 25.7bn m^3), mostly from Langeled; and 10.3bn m^3 of LNG, of which 7bn m^3 came from the US (2023: 11.9bn m^3).

Donald Trump's second presidency has imposed – or threatened to impose – tariffs on many of its trading partners. In extremis, this could ultimately slowdown global economic growth particularly slowing down industrial activity in China or India with knock-on impact on LNG demand.

Conversely, the report says that lifting trade restrictions on Russia, for instance as part of a US-brokered ceasefire agreement or peace deal with Ukraine, could result in the return of limited volumes of Russian pipeline gas to Europe, through Ukraine or alternative routes. This could reduce European LNG demand for an extended period and alter the global market. However this is looking very unlikely, and the European Union aims to be free from Russian energy by the end of 2027 (see page 6).

The Suez Canal is the preferred route for LNG deliveries from Qatar to Europe. Following the Middle East conflict, vessels now transit the Red Sea and the Bab-El-Mandeb Strait and this has seen vessels rerouted around the Cape of Good Hope. A ceasefire agreement in the region could pave the way towards an end of hostilities but uncertainties remain regarding an agreement, especially since the Iran-Israel hostilities escalated.

The Strait of Hormuz separates seaborne LNG travelling from Qatar and the UAE to global markets. Iran has sporadically seized vessels. The Panama Canal is the preferred route for US LNG exports to Asia but a drought in 2023 limited its throughput. In addition, the US administration has said it wants to regain control of the Panama Canal, which the IGU says could add uncertainty. Though rainfall improved Panama Canal operations by early 2024, most LNG carriers still opted for other routes. Adding to complications were the tensions which escalated around the Red Sea, as Houthi attacks on vessels prompted LNG ships to avoid the Suez Canal. Swaps and optimised routing strategies avoided

some of the problems but as the vessel tonnage grew faster than liquefaction plant build-out, trade route disruptions had little impact on charter rates.

While pipeline connections with continental Europe make it impossible to separate LNG from other flows through the national transmissions system, there is also more LNG import capacity now in Germany and Belgium so depending on capacity costs and available slots, more LNG can go straight to northwest Europe avoiding the UK and the Interconnector with Belgium, which had been important until last winter when exports to the EU dropped.

Regulations

The EU's methane regulation affects european gas production as well as imports, threatening fines in cases of non-compliance. And while not explicitly targeting methane, another EU directive, EU's Corporate Sustainability Due Diligence Directive (CSDDD) mandates the measurement of environmental impact and the adoption of a climate action plan in line with the Paris Agreement and European Climate Law for companies above a certain size and turnover. Another regulation designed to cut emissions in the energy sector requires transparency on methane in imports.

US methane regulations that were passed in the previous

"The EU's methane regulation affects european gas production as well as imports, threatening fines in cases of non-compliance."

administration, including a methane waste emissions charge and a mandate to monitor wells and stop flaring, are being rolled back as the new government is taking a different approach. So uncertainty over rapidly changing or misaligned methane regulations could disrupt global LNG trade flows.

LNG-linked carbon capture and storage (CCS) mitigates emissions, either by extracting CO2 from upstream operations or capturing post-combustion CO2 from the liquefaction process. Norway' Hammerfest LNG has 1mn tonnes/yr of CCS and it pioneered CCS in 2008, while Gorgon LNG1 (4mn tonnes/yr of CCS) and Qatar's Ras Lafan Complex (2mn tonnes/yr of CCS) have been operating since 2019. Santos' Moomba facility (2mn tonnes/yr of CCS) started operations in Australia's Cooper Basin in 2024.

The LNG-linked CCS project pipeline indicates over 35mn tonnes/yr of CCS capacity by 2030 thanks to projects in Australia, Qatar and southeast Asia. The pipeline could expand if projects at earlier stages of development decide to pursue this emission reduction option to secure financing and ensure project longevity through the energy transition. The cost of not doing so could be exclusion from markets depending on the strength of the political will prevailing in the importing country.

US operators Venture Global, Sempra and Commonwealth LNG have plans to include CCS in their liquefaction plans but so did Rio Grande before dropping them. Witb the new government's different agenda, these plans might also not materialise. The rising Henry Hub price however might act as a more urgent brake on the relentless rise in US exports.

Tokyo Gas and Mitsui in 2024 delivered 40,000 m³ of bio-LNG manufactured from landfill gas in the US through the Cameron LNG terminal to Japan. Santos, Tokyo Gas, Toho Gas and Osaka Gas started production at their e-methane pilot project and launched a pre-Feed study on a project to produce 0.3mn tonnes/yr of e-methane in Australia and export it to Japan. Further, a global 'e-NG' coalition of companies including TotalEnergies, Shell, and Inpex exists to support e-methane but price competitiveness will be important, says the IGU.

Europe goes for floating LNG

Europe has been working hard building import infrastructure, particularly the floating projects which are cheaper and faster. In the northwest of the continent, Germany added three FSRU startups totalling 13.6mn tonnes/yr and Belgium added 4.7mn tonnes/yr of onshore LNG at Zeebrugge. Much more is planned – Europe is expected to add 55.9mn tonnes/yr – but mild weather and strong renewable output can limit their use and so cut their profitability.

The LNG shipping market has seen a substantial increase in vessel supply. A total of 7,065 LNG trade voyages were recorded during the year, up just 0.9% from 2023 – broadly in line with stagnant LNG production. By contrast, the active LNG carrier feet expanded signifcantly, reaching 742 vessels by the end of 2024, including 48 FSRUs and 10 FSUs. This was a 7.5% year-on-year rise, with 64 vessels delivered in 2024. The fleet expansion outpaced trade growth, contributing to an oversupplied market and pushing down freight rates across the board.

"Europe has been working hard building import infrastructure, particularly the floating projects which are cheaper and faster"

Politically, LNG enjoys support in many key markets and has become a bargaining chip in trade negotiations, which brings both risks and opportunities. Armed conflicts continue to affect not only global LNG trade routes but also the availability of competing pipeline gas.

The LNG industry is contributing to global decarbonisation by replacing more emissions-intensive fuels with LNG and newer LNG projects and carrier vessels implement innovative technologies to reduce emissions across the full LNG supply chain. This should further cement LNG as a long-term solution to sustainability as well as energy security, says the IGY.

After seven consecutive years of single-digit global liquefaction capacity growth, the next major capacity wave is scheduled for next year, with 53.mn tonnes/yr arriving mostly from North America (31.1mn tonnes/yr) and the Middle East (15.6mn tonnes/yr). Between 2026 and 2028, global liquefaction capacity could grow significantly and spark a surge in LNG demand, particularly from price-sensitive buyers in the Asia Pacific such as China and India.

One of US President Donald Trump's first actions in office was to restart issuing LNG export permits to non-free trade agreement (FTA) markets, which his predecessor Joe Biden had halted. The first project was Commonwealth LNG (8.4mn tonnes/yr). There could be 70mn tonnes/yr of capacity which the permitting pause had held up.

Europe saw pipeline gas flows climb 6.1% in 2024, adding 11.5bn m³ to 200.1bn m³. Consequently, LNG imports declined. France, the sixth-largest global LNG importer, saw imports fall 3.75mn tonnes to 18.04mn tonnes as nuclear electricity output returned. LNG inflow into the Netherlands fell 2.98mn tonnes while Germany, despite adding nearly 10mn tonnes/yr of annual regasification capacity at the Mukran LNG terminal, imported 0.25mn tonnes less year on year than in 2024: just 4.85mn tonnes.

Overall, LNG markets continue to see further developments, with competition between Europe and Asia for LNG volumes intensifying, as Europe's reliance on LNG for its gas supply persists. This has become a significant shift in market dynamics following the end of Russian gas flows via Ukraine and Europe's plan to ban all Russian gas imports within just a few years.

Nominations open
Deadline 28 July

OEUK OFFSHORE ENERGIES UK

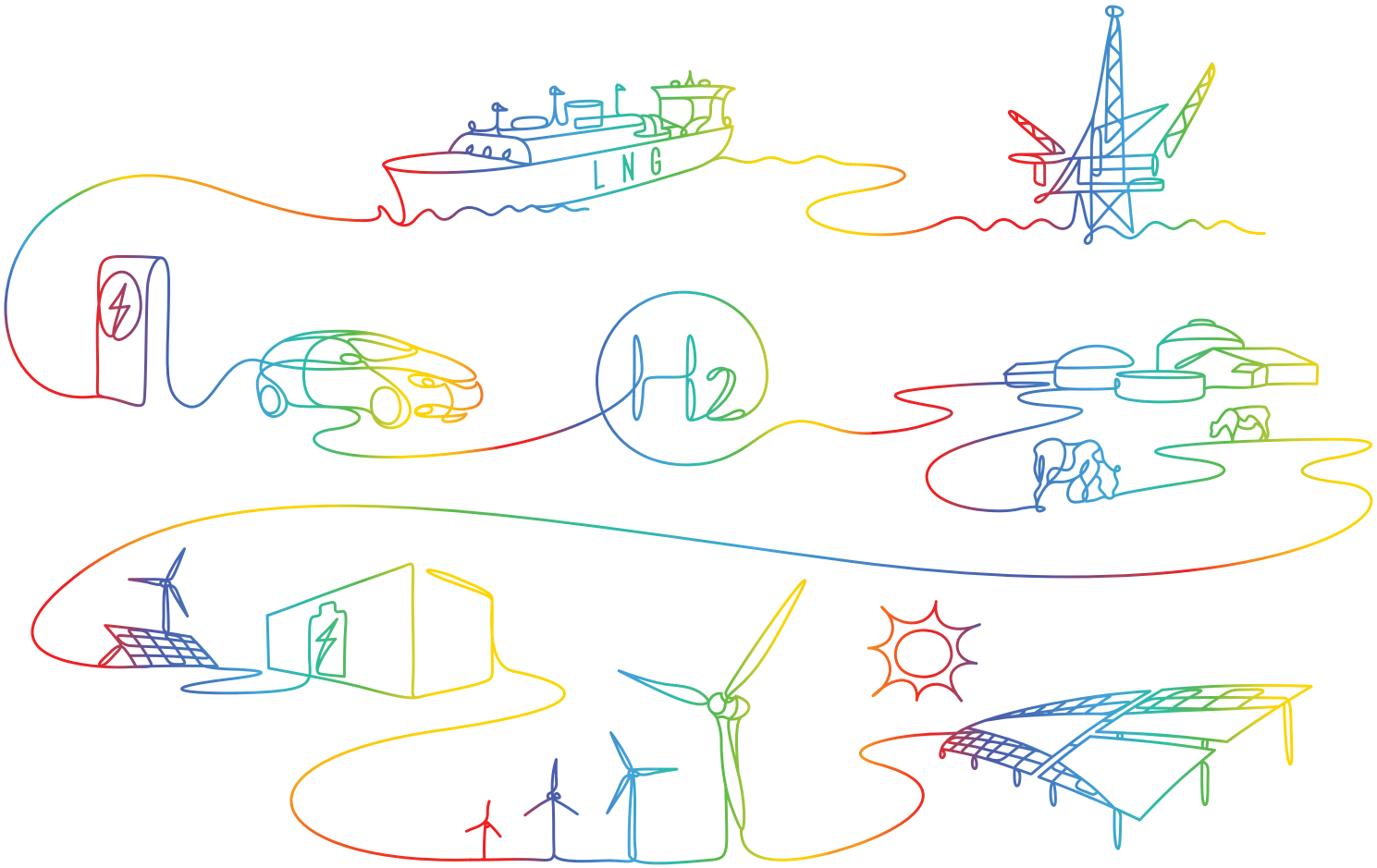
Awards 2025

20 November
P&J Live, Aberdeen

The OEUK Awards recognises and celebrates the outstanding achievements and contributions within the UK energy industry.

for all categories and further info, visit **oeukawards.co.uk**

Principal sponsor



TotalEnergies is progressing on the path of energy transition.

TotalEnergies is a global integrated energy company that produces and markets energies (oil and biofuels, natural gas, biogas and low-carbon hydrogen, renewables and electricity) and is staying the course of its transition strategy. Learn more: **totalenergies.com/energy-transition**

TotalEnergies